

ALTERING COURSE

A Report to the Minister of
Fisheries and Oceans on

INTERSECTORAL ALLOCATIONS OF SALMON IN BRITISH COLUMBIA

A.W. May

December, 1996

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Foreword and Acknowledgements

The task of providing advice on Intersectoral Allocation of Pacific Salmon in the British Columbia fisheries was undertaken in response to a recommendation of the Pacific Policy Roundtable to the Minister of Fisheries and Oceans. The process involved a series of consultations with stakeholders in the fisheries, many of whom provided formal briefs. The material in these briefs is summarized in a Discussion Paper prepared by three consultants based in BC, namely Dr. E. Blewett and Messrs. P. Meyer and T. Taylor, who drew from the briefs a wide range of approaches to the intersectoral allocation issues which need resolution. I am indebted to these individuals for a very thorough and professional analysis. The Discussion Paper which resulted is available separately from this report.

The analysis and advice in the following pages was developed independently and at some distance from the Department of Fisheries and Oceans. That being said, I am pleased to acknowledge the cooperation of the Department in providing for the logistics of the process and for ready access to material. I would particularly like to acknowledge the support of Louis Tousignant and Mary Hobbs. My colleague, Dr. J. Feehan at Memorial University, provided substantial assistance as both an analyst and sounding board.

I took very seriously the remit that this analysis was to be one that was truly independent of all vested interests. The advice that is offered is therefore independent of any association with any sector of the fisheries, or of those responsible for managing them. It is directional rather than specific, since detailed application cannot be envisaged without the involvement and assistance of those individuals affected.

If the directions are accepted, the character of the fisheries will alter over time; hence the title of the report.

A.W. May

December, 1996

*Summary Letter to the Minister
of Fisheries and Oceans*

December 12, 1996

Hon. Fred Mifflin
Minister of Fisheries and Oceans
200 Kent St.
Ottawa, ON
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Dear Minister:

- (1) **In January of 1996 I was asked to undertake the task of providing to you advice on (i) An Intersectoral Allocation Policy Framework, including initial shares for each sector, and (ii) A process to allow adjustments in shares between sectors.** The initiative to appoint an Independent Advisor on Intersectoral Allocation was the first recommendation from a Pacific Policy Roundtable Report which was forwarded to your predecessor in late 1995.
- (2) The task which I agreed to undertake was engaged within policy principles already accepted and enunciated by Government, namely (i) the paramountcy of conservation, (ii) the priority, immediately after conservation needs, of allocations to aboriginal fisheries for food, social and ceremonial purposes, (iii) the exclusion from this study of existing arrangements employed by DFO and First Nations for determining such allocations, and (iv) consistency with Canada's obligations with respect to the Pacific Salmon Treaty.
- (3) I was made aware that additional allocations to First Nations could result from land claim negotiations. Further, I was informed that "fair compensation" would be provided with respect to any reallocations from the commercial sector to the aboriginal sector. You will be aware that some representatives at least of First Nations are opposed to such a policy on the premise that this reduces the resources available for programs directed to their needs. My mandate does not extend to formal advice on these matters, but perhaps I may be permitted to comment in passing that this is just one example of the polarization which has developed on Pacific salmon policy issues generally.
- (4) **The principles which were enunciated by the Department as part of my Terms of Reference were (i) that allocation decisions should be marked by impartiality and conform to transparent rules and principles, (ii) that catch-sharing arrangements must be manageable and implementable**

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without increasing costs to Government, (iii) that the fundamental differences in the approaches to managing aboriginal, commercial and sport fisheries should be recognized and provided for and, (iv) a long-term catch-sharing plan should enhance security of allocation at the sector level and at the individual participant level.

- (5) While it quickly became clear that not all participants in the fisheries agreed with or accepted all of the above, these were the objectives, existing policies, and guiding principles provided to me, and I take them to be the base from which Intersectoral Allocation Policy should evolve. In other words, all of the foregoing is taken as given.
- (6) The task was to be undertaken in a short time frame, and advice was requested before the end of the calendar year so that it could be considered in context of other consultative processes. The fairly short time frame, together with the fact that the fishing season occurred within this time frame, necessarily constrained the form and logistics of consultations which I was able to undertake. The consultative process was begun by meeting with each of the major sectors in Vancouver, and inviting all interested parties to submit briefs on the issues. More than 50 submissions were received in response to this initial call for advice.
- (7) In order to provide a complete summary of all the suggestions received, and further to package all the possible approaches in a coherent framework, three BC based consultants were engaged to consolidate the material in the various briefs into a single discussion paper. This was circulated to all who had prepared briefs, and to all other interested parties and was followed by additional meetings in Vancouver. Throughout this process, care was taken to ensure that the consultative process was as inclusive as it could be, given the time frame and the nature of the process. I was not able to accept invitations to visit individual groups or communities without enlarging both the scope and the time frame well beyond what was envisaged by the Terms of Reference, and several such invitations were declined. I do not believe that this interfered with my ability to provide advice, given pre-existing familiarity with the circumstances of the British Columbia salmon fisheries and the wealth of material, and personal representations, provided during the process.
- (8) **I concluded at a fairly early stage that my advice to you should focus on principles and directions rather than specific detail.** The nature and time frame of the process was such that although the broad implications of adopting certain policy directions could be described, the specific impact on communities, fleet sectors and sub-sectors, and individuals would depend on how far and how fast you wanted to go in certain directions, if you accepted those directions at all. There would obviously be no point in going to a lot of time and expense to flesh out in detail the impact of a policy direction which

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wasn't accepted in the first place. The process must be iterative, and the people affected involved every step of the way. This is the appropriate business of your Department.

- (9) **There is no possibility of building consensus among all interested parties on principles or policy frameworks to guide the conservation and utilization of Canada's Pacific salmon fisheries.** While some may find this conclusion disappointing, it is very real, and will surprise none of the participants in the fisheries or any knowledgeable person involved in their management.
- (10) The three major sectors involved in utilization of Pacific fisheries have fundamentally different interests, and deeply held views about the "rightness" or otherwise of allocation policies, implicit or explicit, already practised by the Department of Fisheries and Oceans in exercising its mandate on behalf of the people of Canada. There is no realistic possibility of reaching broadly acceptable compromises between aboriginal fisheries interests, commercial interests or recreational interests, with the single exception of a general commitment to resource conservation. Likewise, in my view, it is unlikely that consensus on allocation issues can be achieved with the other levels of government, whether provincial or municipal. This is by no means a pejorative conclusion but simply a statement of reality. The nature of the allocation debate, and the consequences on local and regional economies, are such that communities and provincial ministries (given that they have no jurisdictional mandate in management of the fisheries) inevitably tend to become proponents for one or another sector and one or another set of policies, depending on their particular circumstances and mandates. They cannot agree with policies which cause negative economic consequences at the community level, reductions in overall employment, and negative impact on individual enterprises and individual people. **Yet, given the existing balance between resource availability and capacity to exploit, there is no set of policies that can avoid negative consequences somewhere.**
- (11) I have taken the view that the allocation policies that should be recommended to you are those which build on policies already in place and which have the best chance of standing the test of time in the medium to long term. Negative consequences in the short to medium term should be recognized and mitigated but cannot be avoided. They are, in any case, likely to be greater in a "do nothing" scenario than in any situation which at least clarifies future expectations, whether positive or negative.
- (12) A number of representations have been received from communities. Unless the management of the fishery were to be devolved entirely to communities, an improbability given the nature of the resource, **there is no set of allocation policies that can have a consistent impact on communities since their interests differ depending on the nature of the fishery, as well as the stock**

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and species on which that fishery is based. While it was not appropriate to this process to become deeply involved in the possible impacts on communities of adopting one or another set of policies, this is an area of fundamental importance, culturally, economically and politically, and to which much sensitive attention will have to be addressed as Intersectoral Allocation Policies evolve and are implemented, irrespective of what they are.

- (13) The Province of British Columbia obviously has a crucial interest in these matters. Consultations were held on two occasions with senior officials of the Provincial Government in order to keep them fully informed of the representations being made to me, and the logistics and timetable of the process. We did not consult on the substance of my advice to you, partly because I was asked to give independent advice as opposed to attempting to build a consensus, and partly because my advice was formulated only after the conclusion of the consultative process, and reflection on what had been written and said. No briefs were submitted by Provincial Ministries.
- (14) In my opinion a *de facto* establishment of allocation policy is already in place. Events over the past five to ten years at least, convince me that **allocations of chinook and coho salmon have tended to favour the recreational sector more often than not** whenever there is a conflict between commercial and recreational use. Individuals and groups have long memories on such allocation decisions and there is a widely-held feeling that people are "owed" something by way of future allocations for losses incurred in the past. I do not believe that it is productive to continue these debates. History cannot be changed and old grudges are tending to prevent productive solutions to current problems. I believe that it is necessary to define a new destination on the horizon of Pacific fisheries and that it is now time to set the initial course and speed, with the objective that the destination shall be attained sooner or later. To that end, the accompanying report spells out my advice, the thrust of which is summarized in the following paragraphs.
- (15) Conservation should be defined using the language which has evolved for sustainable development generally, i.e. to the effect that **nothing we do should foreclose the options of future generations to decide for themselves**. We should not foreclose future options on species and stock mix. We should be concerned about maintenance of gene pools. **We should therefore favour selective fisheries, wherever this is practically possible**. We should never compromise on conservation. **Everybody has a stake in conservation and everybody must invest in it**. As a matter of principle, there should be no special compensation to anybody for the consequences of practising good conservation beyond those social safety net provisions available to the Canadian population at large. **Conservation must be paramount and be seen to be paramount; otherwise the risk of losing important components of the resource will become unacceptably high**.

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- (16) The largest user of Pacific salmon resources is the commercial fishery. It is the sector which is under the greatest stress and which has the most to lose. Its share of the world market for salmon products is declining due, in my view, mainly to the development of cultured salmon in Canada and elsewhere. I believe that the industry will be increasingly hard-pressed to maintain real prices or to achieve productivity gains unless the fleet becomes substantially smaller while its share does not decline in proportion. I am aware that a fleet reduction program is underway and that assurances have been given, at least for the immediate future, that the reduction in fleet will not be accompanied by a reduction in allocations. **Reduction in allocations to the commercial sector should not occur outside a new allocations policy framework, whether or not it is the specific framework suggested here.**
- (17) **The first priority in allocation is and will continue to be allocations for food, social and ceremonial purposes under Section 35 of the *Constitution Act*. It will also be necessary to set out certain requirements as a consequence of treaties and other agreements with First Nations.** These are reflections of existing policy, and any further commentary on this issue would be beyond the Terms of Reference of this exercise.
- (18) **Initial shares for each of the commercial and recreational sectors should be based on the most recent historical period which provides for greatest fairness to the greatest number of participants.** This is very much a judgement call, but **I would suggest the years 1991 through 1994 inclusive.** The catch figures for 1995 and 1996 contain serious departures from normal patterns for various reasons. Going back much further than 1991 simply reopens historical grievances that are not going to be satisfactorily settled in any case. The allocations must be broken down at least to the level of species and major fishery, and into smaller areas as necessary where there are ongoing disputes that hinder proper management. Allocations, expressed as a percentage of TAC in each fishery, should serve as benchmarks from which change may take place.
- (19) Percentage allocations of a Total Allowable Catch will be problematical in both the commercial and recreational sectors, but more so in that part of the recreational fishery which is pursued by anglers using the facilities and expertise available from commercial establishments (sport fishing lodges). The individual angler using his/her own resources may choose to forego the opportunity for recreational fishing if the balance of expectation/opportunity is not favourable. A similar lack of appropriate balance in the expectation/opportunity equation can cause a catastrophic effect on recreational fisheries associated with commercial operations (fishing lodges).
- (20) **On balance, I am persuaded that a fish caught in the recreational fishery, whether by individuals acting in their own capacities or using commercial lodges, is worth more to the British Columbia economy than the same fish caught commercially. I am also persuaded that allocation policies within**

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the last ten years have implicitly favoured the recreational fishery more often than not. Under the circumstances, my advice is that the implicit policy be now made explicit and transparent to all concerned. Therefore **the recreational fisheries should take priority in allocations over directed commercial fisheries for chinook and coho at times of low abundance, conditional on the losses incurred by commercial licence holders in any allocations transfer being compensated by revenues raised in the recreational sector. Negative consequences on other stakeholders should be dealt with through those adjustment programs generally available to Canadian society.**

- (21) Although the detail of how such allocations transfers might be accomplished and managed should be worked out in consultation with the participants, if such a policy change were implemented, it is perhaps worth clarifying the intent by way of hypothetical example. If, for example, a recreational fishery for chinook were allocated a share of the available fish consistent with the 1991-1994 benchmark, and if this provided for the appropriate expectation/opportunity balance, then intersectoral reallocation would not be necessary. In a year of low abundance, however, if a further X% of the available fish were transferred to the recreational sector so it could be "last on the water", my suggestion is that the commercial licence holders who lose should receive compensation, and the recreational sector, which gains, should pay for this compensation through a fund established for that purpose.
- (22) Much is made of the common property nature of the salmon fisheries, and in particular the fact that **the resource is owned by the people of Canada**. The resource is indeed managed as common property and is indeed the property of the people of Canada **who have the constitutional authority, through their government, to decide who has access and under what conditions**. In particular, **common property ownership in no way implies universal access**. Indeed, the owners of the resource, through their elected representatives, may devise whatever means of access they wish from wide open unfettered access through to privately-owned shares which would trade in a market. Examples from both ends of the spectrum may be found within the Canadian fisheries and internationally.
- (23) **I believe very strongly that the time has come to place more responsibility for access to the resource, and its utilization, with the people who enjoy such access**. The time has long passed when the Minister of Fisheries, or any public official, provincial or federal, should be called upon to solve the problems of individuals and groups by reallocating fish from one to the other "on demand". As long as the possibility exists for this to happen, the participants will take very little responsibility for their own fortunes. Indeed it is impossible for them to do so.
- (24) **The allocations which would result to commercial and recreational sectors through a formula based on catches in the 1991-1994 period should be**

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regarded as the base allocations for the sector, which can change only by transfers between them. These should always be “compensated transfers”, whether voluntary or involuntary. In practice, it is assumed that such transfers will always be from the commercial sector to the recreational sector.

- (25) If the reductions were to take place from the commercial sector in order to provide fish for First Nations for treaties or land claims, it would be expected that such reallocations would flow as a consequence of Government policy, and therefore the commercial licence holders should receive fair compensation from Government.
- (26) If fish in the recreational sector are worth more than those in the commercial sector, then that worth should be reflected in the price of access. Since it is problematical to contemplate, at least for the immediate future, that anybody in the recreational sector would actually “own” a piece of the resource, the mechanism would be an increase in sports fish licence fees. **My specific advice, therefore, is that recreational licence fees be adjusted to reflect their true worth and that any transfers from the commercial sector to the recreational sector be accompanied by fair compensation to the commercial licence holders using a portion of revenues from sport fish licences as required.** Given that the compensation would take place up front, a fund to facilitate payments should be established. A designated portion of increased sport fish licence revenues would go to such a fund.
- (27) It is worth noting that the cost of a sport fish licence is trivial relative to other costs of access to the recreational opportunity it provides, and relative to other recreational opportunities available from public or private operators, e.g. a ticket to a hockey game or a round of golf, or a day skiing. As a first step in bringing licence fees closer to their true value, recreational licence fees should be doubled. The annual fee would still be less than \$50, (plus a \$6.42 salmon conservation fee); a bargain by any standard. Non-resident fees should be five times the Canadian fee. In a situation where there are no limits on access to the recreational fishery and access is privileged in terms of priority in allocations, why should the beneficiaries of such access pay such a trivial entry fee to the owners of the resource when the other costs of access are very much more significant? Why should those citizens who have made substantial private investments in boats and gear in order to gain access to commercial fisheries, and which in light of their commercial licences they had every right to expect would not be arbitrarily or summarily removed, not expect to receive compensation if reduction of access occurs? Why should not the recipients of the benefits compensate those who are giving them up, whether voluntarily or otherwise?
- (28) I believe that the foregoing suggestions, if translated into policy, would respond to the directive that I provide advice which would allow allocation decisions to

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be impartial and transparent, and implementable without increasing costs to Government, while recognizing the fundamental differences in the approaches to managing the various fisheries, and the wish to enhance security of allocation at the sector level.

- (29) I have also been asked to give advice which would enhance security of allocation at the individual participant level. In the recreational sector this would be provided by the priority in allocation, at times of low abundance, of chinook and coho salmon to recreational fisheries. While some have suggested that commercial operations in the recreational sector (fishing lodges) might receive specific allocations which could be "owned" by them, and while this is a concept which could be workable, I don't think that it is implementable in the medium term. We would need to have an Intersectoral Allocation Policy firmly in place and working reasonably well before the possibilities of recreational "ownership" could be considered.
- (30) Meanwhile, there is nothing to prevent such a principle being established in the commercial sector and indeed, I believe it is the only means by which security of allocation at the individual participant level in the commercial sector could be attained. To be precise, **the best way of providing for security of allocation of individual participants in the commercial fishery is to institute a system of individual transferable quotas (ITQs) or similar "rights-based allocations"**. The allocations would have to have most, if not all, the characteristics of private property. In particular, individuals would be able to buy, sell, lease, or trade such allocations so that a market mechanism would be established. This already exists, *de facto*, for fishing licences. The establishment of such a means of allocating resources in commercial fisheries is beyond the scope of this report, but is well worth serious exploration by the participants. Notwithstanding the difficulties inherent in rights-based allocations in a variable and migratory resource, I do not believe that these difficulties are insurmountable in all circumstances, and I do believe that rights-based fisheries can exist side by side with fisheries which do not have that characteristic. There is no reason that individuals cannot participate in different fisheries under different management regimes.
- (31) The advantages of rights-based fisheries are many and a good deal of experience now exists worldwide, as well as in the British Columbia coastal fisheries. The advantages would almost certainly include a reduction in management costs by Government, a reduction in regulatory burden, a greater commitment to conservation by those whose participation now includes the sense of ownership, and a means by which reallocations may take place voluntarily. Although allocations from the commercial sector to First Nations or to the recreational sector would invariably require governmental input for reasons already outlined, transfers within the commercial sector could take

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place, within the boundaries of such policies as the government may wish to enunciate, e.g. regarding concentration of ownership, but otherwise voluntarily.

- (32) **The implementation and day-to-day management of Intersectoral Allocation Policies will be impractical, if not impossible, in the current management structure** which puts the public servants in the Department of Fisheries and Oceans in the centre of a tangled web of committees and consultative processes, where decisions must be made in specific time frames, and where those decisions are then open to criticism by the participants, the public at large and other levels of government. The supposed conclusion of the process is often followed by lobbying at the political level both provincially and nationally. **Important compromises, hammered out in charged atmospheres by committed people, may be adjusted after the fact through interventions in other places.** While this is democracy at work, the transparency of decision making is not always apparent. The perception that compromises hammered out locally are adjusted by intervention at higher levels is responsible for much antipathy and strong emotion in the various sectors. For this reason these **allocation processes, within the boundaries of policy established by the Department, should take place at arm's length. The tribunals envisaged in Bill C-62, An Act respecting fisheries, which is now before Parliament, could be the appropriate mechanism. I believe that there must also be an increasingly visible and viable means of accommodating the concerns and aspirations of communities in allocation decisions which have the potential to affect their very existence, and these interests need to be brought to the fore and accommodated within the decision-making process. The development of annual fishing plans should be done by a Tribunal, or Allocation Boards responsible to it, in concert with the Department of Fisheries and Oceans, and should provide for input from communities. Decisions of the Tribunal should not be subject to review by the Minister or Department.**
- (33) In closing, I again emphasize that I was asked to provide advice whereby **allocation decisions would be marked by impartiality and transparency, that they would be manageable without increasing costs to Government, that the fundamental differences in managing aboriginal, commercial and sport fisheries should be recognized and provided for and that security of allocation should be enhanced both at the sector level and the individual participant level.** This is quite a balancing act, and there are a variety of approaches to achieving it, though the balances may be different depending on the approaches. As part of the process of formulating this advice, an extensive discussion paper was prepared by three BC based consultants and circulated in the public domain. The paper represented the summary views of those who presented briefs, and as well an analysis of options and approaches to the overall management of the British Columbia fisheries. Copies of that discussion paper were circulated to stakeholders as part of the consultative process. For that reason and for reasons of economy, not to mention the fact that not all

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readers of this volume would be interested in receiving well over a hundred additional pages of text, the discussion paper has been produced by more economical means and in a more limited number of copies. It is available on request from DFO Vancouver under the title "Altering Course - A Report to the Minister of Fisheries and Oceans on Intersectoral Allocations of Salmon in British Columbia - Background Discussion Paper by Edwin Blewett, Philip Meyer and Timothy Taylor".

- (34) **Any move toward the principles enunciated within my Terms of Reference, whether by the means I have advised or any other means, would in any case result in a significant alteration in course in Pacific Salmon Fisheries Management. Hence the title of this brief report.** I believe it would be safe to say that if these principles were to be pursued, the course must be altered since they could not be achieved in the current *modus operandi*. In particular, the ongoing burden of responsibility vested in the Minister and the Department of Fisheries and Oceans for all the details and complexity of Pacific fisheries management and which was sustainable in the 19th century when it was designed, is not now sustainable, and will certainly not be so in the 21st century.
- (35) Finally, Minister, permit me to pay a compliment to the people on the ground who are responsible for the day-to-day management of the fisheries, and who support you in the responsibility you exercise on behalf of the Canadian people. They are working against long odds in maintaining a resource for future generations and keeping open the options of future generations to decide for themselves how the resource should be utilized. **The odds will be increasingly stacked against them if the participants in the various fisheries are not allocated much more responsibility for their own participation. That is the fundamental underlying principle of my advice to you.**
- (36) I have enjoyed the opportunity to renew acquaintances with the people and the issues in the Pacific fisheries, after an absence of ten years, and I wish you and your Department well in pursuing such elements of this advice as you may find appropriate and useful.

Sincerely yours,



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President and Vice-Chancellor
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1

Introduction

This advisory report was prepared on the request of the Minister of Fisheries and Oceans. That request came in January of 1996, and the impetus for it came from the Pacific Policy Roundtable. In December 1995, in its "Report to the Minister of Fisheries and Oceans on the Renewal of the Commercial Pacific Salmon Fishery", the roundtable's first recommendation was that:

The Minister appoint an independent advisor to provide him with recommendations on the very complex and difficult issue of intersectoral allocations; the independent advisor should be asked to review, consult, evaluate and recommend a policy framework for establishing initial shares and a process based on clear, understandable and transparent rules, by which these shares might change over time; the advisor should start work and report as soon as possible.

The fact that this recommendation came from the commercial sector is not surprising. That sector, which is the largest user of the resource, believes that its access to the resource will likely diminish over time. At present, there are no explicit share entitlements across the three major sectors: First Nations, commercial and sport. At the same time, the resource is fully subscribed and each sector wants either more access or more security. The imperative of conservation means that all cannot have more and some may have to do with less.

The objective of this study is twofold. First, to provide advice to the Minister on an intersectoral allocation policy framework and describe a process to allow adjustments in shares between sectors; second, among other things, to consider options to accommodate those displaced or disrupted by future changes to allocations that involve no incremental cost to Government to implement and are consistent with policies and approaches that already exist.

The Terms of Reference state that these tasks be carried out in a manner consistent with established policy guidelines which are:

- the paramountcy of conservation;
- the constitutional priority, immediately after conservation needs are met, of aboriginal fisheries for food, social and ceremonial purposes;
- the existing arrangements employed by DFO and First Nations for determining such allocations and establishing fishing plans; and
- the Canada-US Pacific Salmon Treaty.

Any advice to the Minister must recognize that additional allocations to First Nations may follow from the settlement of land claims and treaty negotiations. Therefore, the allocation policy framework, while not to determine First Nations' allocations, must be sufficiently flexible to accommodate these events.

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The Terms of Reference also laid out four guiding principles that should be reflected in any advice to the Minister. These were that: (i) allocation decisions should be marked by impartiality and conform to transparent rules and principles, (ii) catch-sharing arrangements must be manageable and implementable without increasing costs to Government, (iii) the fundamental differences in the approaches to managing aboriginal, commercial and sport fisheries should be recognized and provided for, and (iv) a long-term catch-sharing plan should enhance security of allocation at the sector level and at the individual participant level.

Overview of the Problems of BC Salmon

It may be useful to briefly review the history of the problems of the BC salmon fishery to provide both a starting point and context for this report's recommendations.

At the heart of the problem is scarcity. The resource cannot satisfy all the potential demands placed on it by the three domestic harvesters of the resources - First Nations, sport fishers including a growing commercial component, and the commercial sector. Further complicating the problem are indirect users, namely the communities, individuals and industry who use habitat and thereby reduce salmon abundance. In addition to this environmental challenge, the migratory movements of salmon give US harvesters in Alaska and Washington access to the resource. Also, many coastal communities' economies depend on commercial fisheries, the sport fishery or both; any shift in salmon allocations among First Nations, commercial and sport would hurt some communities and benefit others.

Closely associated with the problem of excessive pressure on the salmon resource is the past practice of allowing open access to it. Before the introduction of a total allowable catch (TAC), anyone who wanted to fish for salmon, commercially or otherwise, could do so. This practice had unfortunate consequences, particularly for First Nations and the resource. Many First Nations' people were squeezed out of the fishery due to new entrants and historical inequities. The resource was put under greater pressure not only from an increasing number of entrants but, more so, from the huge technological advances that led to a vastly greater capacity of the commercial fleets to locate and catch salmon.

The second of these unfortunate consequences is often referred to as the "tragedy of the commons." The logic behind this notion is straightforward. The tragedy can occur when there is open access to common property resource. In that situation an increase in the number of users or an increase in the users' capacity to harvest the resource can overtax the resource and lead to a wasteful race to harvest before other users do. With open access, users of the resource understand that to obtain more of the resource for their benefit it is necessary to harvest as much as possible as soon as possible. In extreme cases, this results in commercial extinction/depletion of a resource.

It is worth emphasizing here that the tragedy of the commons occurs because of open access, not because the resource is common property. The tragedy can be avoided by sufficiently restricting access, in terms of numbers and effort. Sometimes, the users of the resource can, among themselves, negotiate harvesting arrangements that protect and share the resource; examples can be cited of grazing rights for cattle in the Swiss Alps, lobster

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fishing in some areas of Maine, and traditional Sri Lankan village fisheries. However, these may be special cases. More often, government intervention may be required. This is obvious with west coast salmon because of the competing claims to access, and because it is owned by the people of Canada, not by the individuals who harvest it.

To solve the problem of resource over-exploitation of a common property resource an overall limit or quota on the harvest is needed. Applied to BC salmon, this implies a sharing arrangement of that overall quota among First Nations and other users, with due recognition of First Nations' priority rights as described earlier.

While limiting the catch in this way does ensure that the resource is not over-exploited, there could still be wasteful exploitation. This occurs in the commercial sector; incentives do not change as a result of imposing an overall catch limit on that sector. It does not eliminate the commercial race for the resource and the waste associated with it. Controls on effort and number of participants must come into play as well. The Davis plan of 1969 was a substantial attempt to do this by introducing restrictive vessel licensing and by purchasing licensed vessels in the existing fleet. Unfortunately, as discussed by Professor Peter Pearse (1982) in his important Royal Commission Report, these measures proved inadequate; technological improvements allowed the fewer remaining vessels to substantially increase catching capacity. Thus, more measures to control effort, including vessel buy-backs, remain in use almost 30 years after the Davis plan. As an alternative to direct controls on effort, many analysts suggest assigning property rights to harvesters in the form of individual quotas, IQs, or individual transferrable quotas, ITQs. These quotas give a harvester the right to catch up to a specified amount of fish over some time period. This largely eliminates the race for the fish and creates an incentive for the harvester to choose the most economical means of harvesting. When transferability is permitted, a market can develop for the sale or lease of individual quotas. ITQs have been introduced into the west coast halibut fishery with considerable success in terms of resource manageability and eliminating excess capacity. They may yet prove useful as a management tool in the commercial salmon fishery.

Unfortunately, the commercial salmon fishery is also facing a more serious challenge, namely worsening market conditions. Increased supply on world markets, due primarily to the success of cultured salmon, has squeezed BC wild salmon to a lower share of the world market and put downward pressure on prices. This is not a temporary phenomenon. The commercial fleet will face long-term competition as a result of salmon farming.

The sport sector does not possess the catching capacity of the commercial fleets but there are times when effort may have to be limited, for example, to protect a small stock under pressure from a large number of fishers or to protect the resource in years of unusually low abundance. Possible measures include: reducing daily catch and possession limits, closures, raising fees to reduce the number of people fishing, or limiting the number of licences. The first two of these measures are used in BC. Unfortunately, these measures can have very negative long-term consequences for the commercialized sport fishery. Many users of the commercialized sport sector plan their trips well in advance; closures can induce them to consider alternative destinations, such as Alaska, or to cancel their bookings. The success of the commercial sports sector is dependent on security of

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opportunity. The results of the 1996 sport season are ample evidence of the disastrous effects of closures and the perception of possible closures.

Intertwined with all these challenges is the difficulty of assessing the state of and managing the resource. The salmon population is highly variable and is made up of different species and diverse stocks. Unanticipated changes in freshwater or marine environment and their potential impacts make it hard to accurately forecast abundance. As well there are substantial data collection requirements necessary for assessing the health and size of the stocks.

Managing the fishery is also difficult. There are many participants to monitor and rules to enforce. Difficulties with the Canada-US Pacific Salmon Treaty, especially in terms of enlisting cooperation from Alaska regarding the catch of migratory salmon constrains our ability to manage our own resources.

In summary, the interrelated challenges of the BC fisheries involve the following issues:

- Conservation,
- Re-allocation to meet First Nations' constitutional, treaty and other entitlements,
- Excess capacity in the commercial fleet,
- Growing competition on the world market due to cultured salmon,
- Conflict between commercial and sport fisheries over access,
- The impact of re-allocations on dependent communities,
- The growing importance of the commercial sport fishery,
- Resource management, monitoring and enforcement challenges, and
- The Canada-US Pacific Salmon Treaty.

The problems are deep-rooted. Reports by Pearse (1982) and as far back as 1960 by Dr. Sol Sinclair have helped to point in the right direction. And policy has been moving that way. Contributions by fisheries economists, including prominent BC economists, on the possible gains from relying on market-based solutions, including individual quotas as elements of management policy, where practical, have also had a significant impact on policy debates. Yet, the problems persist. If anything, the disastrous results for both the sports and commercial sectors in 1996 have further heightened the tensions and conflicts associated with these problems.

Scope

Having laid out this summary of the complex and interrelated issues surrounding the salmon resource in BC, it is important to state that this report is not an attempt to solve all of them. Addressing regional and community development issues is also beyond the mandate of this report. Moreover, community and regional development involves much more than salmon allocation and is most appropriately addressed by the Provincial Government and the communities themselves. Equally so, the problems within the commercial fleet of excess capacity and intra-sectoral allocation are not part of the mandate. The latter issue is the subject matter of another enquiry which Mr. Stephen Kelleher is currently undertaking.

Introduction

Having established what this report is not about, it is useful to repeat what it is intended to address. The purpose of this report is to provide independent advice on intersectoral allocation of salmon. To that end, it focuses on initial shares for the sectors, a framework for adjusting sector shares, and options to accommodate those displaced or disrupted as a result of changing shares. This is a limited but important mandate. The primary purpose of having described the broader problems in the preceding section is to emphasize that the report was prepared with an eye to the wider context. Indeed, at times this report does make observations and suggestions that pertain to those other related matters, with the exception of determination of First Nations' allocations.

Before proceeding further, it seems appropriate to indicate the nature as opposed to the contents of the advice in this report. The advice focuses on principles and direction rather than details. The nature and scope of the process was such that although the broad implications of adopting certain policy directions could be described, the specific impact on communities, fleet sectors, and sub-sectors, and individuals would depend on how far and how fast the advice might be enacted, if at all. There would be little point in going to a lot of time and expense to flesh out in detail the impact of a policy direction which was not accepted in the first place. Therefore, the intent of this report is to establish a clear direction and a process to follow. If the advice is acted upon, it would have to be done in close consultation with those affected. Such consultations will determine the optimal speed and the development of the details of implementation.

Organization

While the preceding section provides a broad appreciation of the challenge, it was essential to develop a more detailed understanding of the circumstances in BC and to explore the feasibility and acceptability of various options. That required primarily, but not exclusively, consultations with those British Columbians who are the key stakeholders. Chapter 2 discusses the input received from stakeholder consultations and other sources, and, as well, highlights the observations that resulted. Chapter 3 describes the advice on allocation, on transfers of allocations, and on how to accommodate those that may be displaced. This report ends with Chapter 4, which makes suggestions on the implementation through an arm's-length allocation tribunal.

2

Consultations

This chapter provides an overview of the information and input received which formed the background and context for recommendations. The chapter starts with a brief review of how some other countries deal with fisheries allocation and is followed by a lengthier review of the input from British Columbia. The chapter ends with general conclusions based on input.

International Experience

Conflicts over who ought to harvest a fishery and the problem of over-exploitation of a fish resource are not unique to Canada. Many countries face these problems. In recognition of this, and in context of the Terms of Reference for this report, a survey of the recent experiences and policy developments in several other countries was carried out by DFO.

Seven were examined in some detail: Norway, Iceland, Germany, Denmark, Mexico, New Zealand and the United States (Washington, Oregon and California). These particular countries were chosen according to the availability of information and the significance of their fisheries. Interestingly, two of these countries, have introduced ITQs - Iceland and New Zealand - into their major commercial fisheries as one of the major components of their fisheries management policies. Norway has non-transferrable individual quotas and there is some likelihood that transferability may be introduced there. As with Canada and Pacific salmon, Norway must cooperate internationally to share stocks due to their migratory movements. Denmark and Germany operate their fisheries policies within the ambit of the European Union's Common Fisheries Policy; both do not appear to rely on ITQs (Germany does use individual quotas where the overall quota for a stock is too low to allow unlimited fishing) but use more traditional management approaches involving controls on fishing effort. Mexico also uses many of the traditional methods in its fisheries management policy, which is aimed at commercial exploitation of the resources.

Perhaps New Zealand and the United States come closest to the BC situation in regard to the competing interests for a fisheries resource. In both New Zealand and on the US Pacific coast, aboriginal people, sport fishers and commercial fleets are significant users of the resources. In New Zealand, under recent practice the total allowable commercial catch (TACC) was defined as the difference between the TAC and an estimate of the amount needed for customary Maori use and recreational use. The resulting TACC was shared between the commercial fleet's Maori and non-Maori participants on a 23-77% basis; this followed as a result of legal decisions regarding Maori rights and was accomplished by a

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government purchase and transfer of the non-Maori commercial quotas sufficient to achieve that target. Since the early 1990s, Maori commercial interests have increased as a result of their own direct purchases of commercial quotas from non-Maori interests. In accordance with recent agreements with the Maori, the Government of New Zealand undertook to develop more precise policies to address non-commercial Maori fishing rights.

Turning to the United States, on the Pacific coasts of Washington, Oregon and California, the Pacific Fishery Management Council designs the management plans for salmon fisheries. Before allocating quotas for commercial and recreational users, the Council must make allowances for the entitlements to aboriginal peoples in accordance with their treaty rights. In 1981, sector quotas for trollers and recreational users were introduced into the management system. As part of that approach the commercial and sports sectors negotiated a schedule which altered allocation according to relative abundance. A larger percentage share of coho goes to sport at low abundance but the commercial percentage share for trollers increases as abundance rises; there is no post-season analysis and no consideration of catch-up, make-up. There is also allowance for sector trades of chinook for coho and vice versa, according to an agreed ratio based on price comparisons. The Council makes decisions on pre-season trades following a joint recommendation from the two groups.

These international experiences show that Canada is not alone in facing the challenges posed by fisheries allocation. Yet, at the earliest stages of developing this report, it was apparent that while there is something to learn from others, solutions must come first and foremost from within. The specific characteristics of the BC salmon fishery, the input from British Columbia stakeholders, the legal and constitutional framework, and the broad interest of the Canadian public which owns the resource, must be the driving forces.

Input from Stakeholders

In looking to British Columbia for solutions, a series of consultations took place. Appendix 3 presents a chronology of events. In February 1996, meetings were held with selected representatives of First Nations, commercial and recreational sectors. During these meetings invitations were extended to submit briefs outlining their views on initial shares, on transfers of allocations and on options for compensation mechanisms. Invitations to submit briefs were subsequently sent to a much broader group including more than 50 First Nations' umbrella organizations and independent bands; over 100 communities and environmental groups; all organizations that are members of the Commercial Fishing Industry Council (CFIC); and additional sport-fishing organizations.

During the following four months (March through to June of 1996) a total of 53 briefs were received (See Appendix 4 for list). Invitations were extended to those who submitted briefs to attend meetings on May 29 and 30, 1996. The purpose of these meetings was to provide them with an opportunity to clarify and elaborate on the information in the briefs. Twenty-seven individuals representing First Nations, commercial, recreational and environmental interests attended the meetings. Those meetings were multi-stakeholder. The intent of organizing them on that basis was to allow each sector to hear what the other

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was saying and to permit some dialogue across sectors. Participants articulated their positions very well but the divisions and fundamentally different views became apparent at times. On occasion, tempers were tested. The intensity of feelings and the importance of the resource to the various groups cannot be underestimated.

Three West Coast consultants, Edwin Blewett, Philip Meyer and Timothy Taylor, appointed to support the study and who had attended the meetings, were asked to write a discussion paper to summarize the views presented in the briefs and outline a comprehensive series of possible approaches to the key issues. The discussion paper, entitled, "Policy Options for the Intersectoral Allocation of Salmon in British Columbia," was mailed out on July 31, 1996, to all interested stakeholders. Copies were also sent to the Provincial Government. Additional copies in limited numbers have been produced under separate cover and are available on request from DFO-Pacific Region.

Of the nine chapters that comprise the text of that document, the first five chapters of the discussion paper summarize the input and highlight the key positions of main stakeholder sectors: First Nations, communities, the recreational sector, the commercial sector and environmental groups. While there was no shortage of proposals to deal with intersectoral allocation issues, proposals did not converge. Many of the ideas and proposed directions are mutually exclusive and have a tendency to create "winners" and "losers". The remaining four chapters of the report identify a comprehensive suite of approaches to the intersectoral issues. Some of the approaches could be blended to form an overall approach while others are appropriate for specific species or areas. Many were mutually exclusive. Consequently, recipients were asked to read the report and present their views on what mix of options could work and what in their opinion could not work and why not.

A final series of sector workshops was held in early October 1996 to provide individuals and organizations with a forum for presenting their views on the discussion paper. In all, five workshops were held over those two days. Unlike the meetings held in May, each of these meetings corresponded to different stakeholder interests: communities, environmental, First Nations, commercial and sport. These workshops were attended by 110 representatives and observers; some participant's interests included more than a single sector and they chose to participate in more than one workshop. All were free to do so, and all were free to sit as observers in other workshops in which they were not presenting briefs. As with the previous consultative sessions, speakers were articulate and passionate. An official from the Provincial Government also attended the workshops. As a result of this second series of meetings, an additional 22 briefs were submitted. (Details on briefs submitted and on attendance at these meetings and workshops are presented in Appendices 5 and 6.)

Throughout this process, care was taken to ensure that the consultation was as inclusive as it could be, given the time frame and the nature of the process. The task was to be undertaken in a short time frame, and advice was requested before the end of the calendar year so that it could be considered in context of other consultative processes. The fairly short time frame, together with the fact that the fishing season occurred within this time frame, necessarily constrained the form and logistics of consultations undertaken. Therefore, several invitations to visit individual groups or communities were declined. It is

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unlikely that this interfered with the ability to provide advice, given pre-existing familiarity with the circumstances of the British Columbia salmon fisheries and the wealth of material, and personal representations, provided during the process.

In addition to the stakeholders' meetings, two meetings were held with senior provincial government officials. The purpose of those meetings was to keep the Province fully informed of the representations being made by the stakeholders, and the logistics and timetable of the process. The meetings did not deal with the substance of advice for two reasons. First, the purpose of the task was to provide independent advice rather than to seek consensus, and second, the consultative process was still underway. No briefs were received from provincial government ministries.

Input from Other Sources

A request was made to DFO for an assessment of the long-term status of the stocks on the Pacific Coast. Information was provided on biological stock outlook for the next several years. This information, which had been sent to all commercial licence holders on March 29, 1996, as part of the Minister's mail-out on Pacific Policy Roundtable implementation, is presented in Appendix 7 of this report. It is useful to highlight its main points:

1. Annual salmon production is highly variable. This variability is caused by natural cycles in abundance for some species and changes in the freshwater and marine environments for all species. Superimposed on the long-term changes are periodic events like El Nino and periodic flooding of spawning grounds.
2. Uncertainty in forecasting returns is caused by unanticipated changes in the freshwater or marine environment and by the unanswered scientific questions about the effect of these changes on salmon production. Uncertainty about other variables such as spawning escapement and smolt production also contributes to the complexity of forecasting expected returning runs.
3. We are currently in a period of rapidly changing conditions in the marine environment and the effect of these changing conditions on production is very uncertain. However, initial indications are that the changing conditions may enhance coho and chinook production but lead to declines in the productions of sockeye, pink and chum.

In addition to this and other information provided by DFO, two timely and comprehensive studies particularly relevant to the mandate became available. Both reports were produced by The ARA Consulting Group Inc., a BC based consultancy. One of the reports, entitled "The Economic Value of Salmon: Chinook and Coho in British Columbia" was prepared jointly for three provincial ministries and DFO, and released in February 1996. It was often cited in the consultative discussions, both critically and as supporting evidence, varying with stakeholder groups. Consideration has been given to that report's analytical rigour, its stated assumptions and the criticisms and support for it as voiced by the various stakeholders.

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The other ARA report, dated September 30, 1996, was entitled "Fishing for Answers: Coastal Communities and the BC Salmon Industry." It was prepared for the BC Job Protection Commission. That report presents an analysis of the impacts on coastal communities of the anomalous 1996 commercial and recreational fisheries and of the 1996 Salmon Revitalization Strategy's fleet rationalization, i.e., the Mifflin Plan. Among its many findings, that report makes clear how diverse the communities are in terms of their dependence on salmon fisheries; some have mixes of both sport and commercial sectors, some depend almost exclusively on commercial and others on commercial sport operations. Moreover, the degree of reliance varies across communities depending on location, with many communities that are predominantly aboriginal being especially dependent on salmon fishing.

Early Observations

In the course of discussions with the key sectors, there was one clear issue on which there is a wide consensus. All appeared to accept, and indeed many strongly advocated, the need for conservation and the appropriateness of it taking priority over other considerations.

While this paramountcy of conservation is a given in the Terms of Reference, it is comforting to know that no one questions that priority. It is also important to have a strong definition of conservation. Conservation should be defined using the language which has evolved for sustainable development generally, i.e., to the effect that nothing we do should foreclose the options of future generations to decide for themselves. We should not foreclose future options on species and stock mix. We should be concerned about maintenance of gene pools. We should favour selective fisheries, wherever this is practically possible. We should never compromise on conservation. Everybody has a stake in conservation and everybody must invest in it. As a matter of principle, there should be no special compensation to anybody for the consequences of practising good conservation beyond those social safety net provisions available to the Canadian population at large. Conservation must be paramount and be seen to be paramount; otherwise the risk of losing important components of the resource will become unacceptably high.

The "risk-averse" management regime that the Department has adopted should better conserve stocks that are the basis of allocation conflicts. That management regime must be buffered by supportive federal, provincial and the municipal environment policy; by sound harvesting techniques of the three sectors; by habitat protection and rehabilitation; and by a growing awareness by all Canadians of the importance of adapting our behaviour to being more ecologically friendly.

Unfortunately, the general consensus on conservation did not extend to those matters dealing with intersectoral allocations: advising on initial allocations, on a framework to facilitate changes in allocation over time, and on options for accommodating those that may be disrupted. The discussion paper by Blewett, Meyer and Taylor provides an excellent synopsis of those opinions that were expressed up to June 1996.

Divisions about how to set "initial allocations," and even about the interpretation of that term, were widespread and sharp. Some First Nations' groups were concerned that any

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...this principle of protecting the historic equity base of the commercial sector, must be acknowledged in a clear and precise fashion.

Dennis Brown, The United Fishermen and Allied Workers' Union, March 1996

History is bunk.

Fisheries Council of British Columbia, May 1996

Recent historical catches reflect an imposed management regime by DFO that was not consistent with our needs or our Aboriginal Rights.

Chief Simon Lucas and Chief Ken Malloway, BC Aboriginal Fisheries Commission, March 1996

statement regarding initial allocations could prejudice their land claims and treaty negotiations. Recreational groups generally argued that allocation priority, after conservation and Section 35 fish, should be accorded to the highest economic value. Citing a variety of sources, including the February 1996 ARA report, the recreational representatives argued that recreational use of the salmon should take priority over the commercial sector. Commercial harvesters were largely of the opinion that historical catch shares should be the starting point for initial allocations. Within the commercial harvesting group there were a variety of suggestions for what the actual historical period should be. On the other hand, the processing sector placed emphasis

on their future requirements as opposed to history. Communities expressed opinions that the setting of initial shares should take into account the implications for their economies and the degree to which they were dependent on that resource.

There was no common first-choice approach to setting initial allocations. It is fair to say there was no common second choice either. Often, one group's opinion on its preferred method was combined with rejections of other groups' choices.

When it came to dealing with possible frameworks for changing shares over time and any associated compensation and adjustment assistance, opinions were as equally divided. First Nations' representatives objected to any compensation being paid to

Allocations should not be based on historic catch averages... Chinook, coho, and steelhead should no longer be allocated to the market sector.

Bruce Hill, President, Steelhead Society of British Columbia, September 1996

The highest return to the people of Canada for a common property resource should be the basis for making catch share decisions... The exclusive use of historic catch data to determine catch shares will be flawed and inconclusive...

Sport Fishing Institute of British Columbia, June 1996

There is no legal precedent for one sector to compensate another sector in decisions about common property resources.

Sport Fishing Institute of British Columbia, June 1996

... full compensation is due to those whose tenure is reduced as a result of policy decisions or the Land Claim treaty negotiations.

Fisheries Council of British Columbia, May 1996

If for some unknown reason there is to be a transfer of shares, which we believe would only be to the detriment of the commercial salmon fishermen, there must be some form of financial compensation for those fishermen (ie. crew members) who are displaced.

Peter Haugan, President, B.C. Deep Sea Fishermans Guild, May 1996

We feel that the Intersectoral Allocation will require compensation to commercial and sport fishers once treaties are settled, which is not acceptable.

Musgamagw Tsawataineuk Tribal Council, October 1996

anyone adversely affected by any allocation to First Nations resulting from land claims and treaty settlements. They argued that the payment of compensation could increase the perceived cost of settlements to the Canadian taxpayer and, as a consequence, could act as a barrier to reaching settlements. Sport representatives strongly rejected the

idea of any assistance going to commercial harvesters and other stakeholders in the commercial sector for any increased access to sport fishing. On the other hand, commercial stakeholders believe quite strongly that they should be assisted if, as a result of Government policy to change shares, they were to suffer economic losses.

General Conclusions

Three general conclusions can be drawn from discussions with stakeholders. The first of these general conclusions is that, while the *status quo* is undesirable, not all stakeholder groups can be satisfied no matter what direction from the *status quo* we move. This polarization means that there is no possibility of building consensus among all interested parties on principles or policy frameworks to guide the conservation and utilization of Canada's Pacific salmon fisheries. While some may find this conclusion disappointing, it is very real, and will surprise none of the participants in the

Crew members have been badly mistreated over the last few years when new changes have come about in the fishing plans and new licence systems.

Peter Haugan, President, B.C. Deep Sea Fishermans Guild, May 1996

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fisheries or any knowledgeable person involved in their management. The three major sectors involved in the Pacific fisheries have fundamentally different interests, and deeply held views about the "rightness" or otherwise of allocation policies, implicit or explicit, already

practised by the Department of Fisheries and Oceans in exercising its mandate on behalf of the people of Canada. There is no realistic possibility of reaching broadly acceptable compromises between aboriginal fisheries interests, commercial interests or recreational

***...it's time to lock up the
commercial salmon
fishing fleet...***

Bruce Hill, President, Steelhead Society of
British Columbia, September 1996

***We would suggest that the allocation
remain, in order of priority, conservation,
aboriginal food fishery, commercial
fishery and recreational fishery.***

Masset Community Adjustment Committee, March 1996

***Please ensure that in your decision, you
consider the economic returns that the
sport fishery provides coastal
communities.***

Village of Gold River, March 1996

***The economic base of our regional
district's fisheries is, and has been
historically, a healthy mix of sport,
commercial and aboriginal. We would not
like to see any one sector sacrificed to feed
the other.***

Rose Davison, Chair, Economic Fisheries Committee
Alberni-Clayoquot Regional District, March 1996

interests, with the single exception of a general commitment to resource conservation. Likewise, it is unlikely that consensus on allocation issues can be achieved with the other levels of government, whether provincial or municipal.

This is by no means a pejorative conclusion but simply a statement of reality. The nature of the allocation debate, and the consequences on local and regional economies, are such that communities and provincial ministries (given that they have no jurisdictional mandate in management of the salmon fisheries) inevitably tend to become proponents for one or another sector and one or another set of policies, depending on their particular circumstances and mandates.

They cannot agree with

policies which cause negative economic consequences at the community level, reductions in overall employment, and negative impact on individual enterprises and individual people. Yet, given the existing balance between resource availability and capacity to exploit, there is no set of policies that can avoid negative consequences somewhere.

The second general conclusion was that there is a great deal of merit in relying more on market mechanisms for determining shifts in allocation among harvesters. The advantages of rights-based fisheries are many and a good deal of experience now exists worldwide, as

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well as in the British Columbia coastal fisheries. However, the fundamentally different natures of the sectors makes it unlikely that ITQs or other similar rights-based allocations will be workable across sectors for all conceivable trades. While some have suggested that commercial operations in the recreational sector (fishing lodges) might receive specific allocations which could be "owned" by them, and while this is a concept which could be workable, it is not implementable in the medium term. Intersectoral Allocation Policy needs to be in place and working reasonably well before the possibilities of recreational "ownership" could be considered.

Security of allocation at the individual participant level in the commercial sector could be attained through the use of market mechanisms. The best way of providing for security of allocation of individual participants in the commercial fishery is to institute a system of ITQs or similar rights-based allocations. The allocations would have to have most, if not all, the characteristics of private property. In particular, individuals would be able to buy, sell, lease, or trade such allocations so that a market mechanism would be established. This already exists, *de facto*, for fishing licences. Notwithstanding the difficulties inherent in rights-based allocations in a variable and migratory resource, the difficulties do not seem insurmountable in all circumstances, and it is possible for rights-based fisheries to exist side by side with fisheries which do not have that characteristic. There is no reason that individuals cannot participate in different fisheries under different management regimes. Perhaps, if ITQs are implemented in the commercial sector, it would be possible to extend their use to intersectoral exchanges in the future. However, as with the recreational sector this is unlikely to happen within the immediate future. Once allocation policies are in place, and once fleet rationalization is under control then government and industry should review and evaluate the implementation issues associated with ITQs.

The third general conclusion follows from the second. In the absence of an ITQ market arrangement, there is a need for an arm's-length board or tribunal to manage transfers across the sectors. Without such an institution, pressures on DFO public servants from stakeholders would be intense. Combined with the kind of lobbying at the political level, provincially and federally, that is now the norm, fair outcomes are problematical. The time is overdue for a decision-making mechanism that is at arm's length from government, and much closer to the stakeholders themselves.

3

Policy Advice

Salmon on the Pacific Coast is a finite resource that is currently fully subscribed. At the same time, there are unsatisfied demands; all user groups want more, either in terms of quantity or security of access. Within those difficult constraints, and considering the overall context, the following advice was devised.

Initial Shares

The various sectors have fundamentally different opinions as to how initial allocations should be set. Clearly, the First Nations' shares will be determined by a different process than this one. Therefore, even the notion of "initial allocations" must be clarified. As far as this report is concerned, initial allocations have to be benchmarks from which change can and will take place. As treaty and land claims are settled, the benchmark shares will change automatically. They cannot be seen as an "ideal" allocation. They are not and cannot be rigid.

Another reason for flexibility is the desirability of accommodating the recreational sector at times of low abundance. If every year were a "normal" year for abundance then assigning a percentage share of the catch to the recreational sector might be sensible. However, volatility in

We feel that the share arrangements should definitely be based on 'historical averages'.

Dan B. Sundvick, Director Pacific
Gillnetters Association, May 1996

... until we have come to some kind of agreement with the government the discussion or development of any plans to decide on how to share the salmon resource is not on the table as far as I and many others in the Sto:lo area are concerned.

June Quipp, May 1996

It is our suggestion that this Inquiry set history aside. What is important to business planning is not what share someone might have had, but what will be the share in the future, and under what conditions might changes be made to those shares.

Fisheries Council of British Columbia, May 1996

It is simply not realistic to allocate some fixed overall quota or percentage of the TAC for each species to the sport fishery.

John Brockley, Chairman, Sport Fish Advisory Board, June 1996

abundance is a well-known feature of the salmon stocks. In years of low abundance, a fixed share can translate in to very poor "expectation and opportunity" for that sector; the resulting impact on the sport industry can be devastating. Similarly, in years of high abundance, a fixed share could mean more fish than the sports sector could either catch or even want to catch.

Harvesters in the commercial sector have argued strongly for an initial allocation across the sectors expressed in percentages and using history to calculate those percentages. That group believes the portion of the TAC which it catches is under downward pressure. Understandably, the commercial sector wants to preserve its place.

Typically, the commercial harvesters suggested reference to the past 10 to 25 years. However, the use of more recent historical shares is more attractive. Each sector is familiar with recent history, making it a widely understandable starting point. In recent times, shares were the outcome of implementing policies, which included conservation measures, First Nations' rights, and the many other aspects of salmon management policy. Those shares, despite some wide local variations, have been fairly stable across the sectors when measured on a coast-wide basis annually. As a result, a degree of reasonable expectation or notion has developed among sector participants as to what their share will be in a given year under current practice. This expectation is not supported by law or by formal ownership; rather, it has developed as a by-product of the way the fishery has been managed. Thus, the use of historical shares accommodates the expectations that have arisen due to the way the stocks have been managed and apportioned over time, and it acknowledges that public, business and other decisions have been made based on these expectations.

While there are many arguments for and against this recent-history approach, the strongest argument in support is the commitment made by the Minister to the commercial fishermen regarding the current fleet reduction program; assurances have been given, at least for the immediate future, that the reduction in fleet will not be accompanied by a reduction in allocations. This principle, to which DFO has committed at various points in

Last 16 years at least.

Robert Ostrom, May 1996

We feel that the guidelines for historical catches should be a minimum of 20 years and no more than 25 years.

Richard Haugan, Prince Rupert Fishing Vessels Association, May 1996

We suggest the last three cycles, or fifteen years, excluding 1995 and years of anomalies.

Pacific Trollers Association, October 1996

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writing and in public statements, is intended to re-assure commercial fishermen that the difficult and controversial fleet-reduction process will not merely result in a reduction of allocation of the same amount, but will generate efficiencies and benefits for those who stay in the industry. That requires reference to recent historical catch.

The choice of years is very much a judgement call. It seems most reasonable to choose the shares in existence during the most recent time period; that is what participants can most closely relate to, whether or not they were satisfied with them. However, both 1995 and 1996 were extremely low return years and are considered to be anomalous. Going back much earlier than 1991 simply reopens historical grievances and deviates from the reality of the situation in which we are today. Therefore, the 1991-1994 period should define the initial allocations. These 1991-1994 sectoral catches should be applied to the TAC after first deducting Section 35 and international commitments.

To be practical, in using 1991-1994 catch shares as the benchmarks, shares must distinguish among species: sockeye, pink, chum, coho, chinook. Sectors have different interests in salmon species; they are put to different uses; serve different purposes; are found in different markets and have different values in the market place. They have life cycles of different lengths, different behaviours, and different levels of abundance.

Also, shares of the salmon resources should be defined by harvest area. The number of harvest areas varies by sector and species. This approach allows different stock groupings to be combined with a focus on the users of the fish. In summary, defining allocations by species, broad production areas, and harvest areas is the most useful way to start. Over time the system can be refined.

In establishing a benchmark set of shares and living with a system that facilitates changes in sector shares it will be important for decisions to be guided by a set of principles. Some suggested principles are listed below:

1. Allocation decisions must account for all fish caught in a sector, including by-catch, catch and release mortalities, in-river sports fishery, etc.
2. It should be recognized that allocated shares are notional. The fish associated with those shares are not owned by a sector. Unless caught, they cannot be bought, sold, traded, leased or otherwise alienated from DFO (because until they are caught they are not private property under current practice). A share of the TAC is only a right to catch up to a maximum amount. It is not a guarantee that all the associated fish will be caught. If a particular sector does not catch the full amount of its allocated share of the TAC there will be no adjustments made in subsequent years. In other words, catch-up, make-up adjustments should not be considered in this process.
3. Sectors and clients must be responsible for designing fishing plans that will ensure their harvest remains within the established annual amounts. They must be accountable for the results. In order to provide incentives for accountability they must be affected by repercussions.

As stated earlier, the initial shares should be treated as benchmarks. Changes in First Nations' share due to treaty and land claim negotiations, which will be determined outside this process, will require automatic redefinition of the benchmarks. Also, the benchmarks

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must have some built-in flexibility across the recreational and commercial sectors in order to accommodate the recreational sector in years of low abundance and to recognize that this sector's benchmark share could be excessive in years of high abundance.

Chum, pink and sockeye are not the focus of the recreational fishery. Therefore, the relative shares of each for the commercial and sport sectors, by area, should be as implied by the respective 1991-1994 benchmarks. The fisheries should therefore be directed to achieve those shares.

Dividing available chinook and coho between commercial and recreational sectors should be handled differently. That issue is taken up in the next section which describes a new approach to the recreational sector.

A Policy Shift for the Recreational Sector

The needs, circumstances and nature of the three sectors are very different. A common approach will not fit all. When it comes to the recreational sector, several factors must be

The opportunities for Canada in sport fishing are enormous. We have not even started to tap the tremendous potential of our Pacific Rim neighbours as sport fishermen.

The Honourable Judd Buchanan, Canadian
Tourism Commission, August, 1996

recognized: the importance of the perception of expectation and opportunity; its growing commercialized component; the absence of any cap on the number of sport licences; the devastating economic consequences of closures; tourism potential; and the value of the chinook and coho species to that sector, which of course includes the business of tourism, BC's second most important economic activity.

Taking these and other factors into account, the time has come to establish a new policy for the treatment of the recreational fishing sector. That policy would be comprised of three key elements: minimization of the risk and extent of closures; explicit priority regarding chinook and coho allocations conditional on appropriate compensation to commercial licence holders as needed; and increases in sports licence fees to reflect the true value of access to the resource.

Closures

Many of the briefs from the recreational sector provided convincing evidence of the crushing economic impact of the 1996 season. The perception of widespread closures that had spread throughout BC and beyond, combined with the delays in publication of the season's regulations, caused extreme hardship on the commercial enterprises in this sector. The ARA report for the BC Job Protection Commission confirms that those losses were extensive. This was a true loss to the BC economy. It is not as if the commercial fleet gained anything from the recreational sector's loss in this case.

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Closures, and those events that give rise to rumours of closures, must be minimized. For conservation reasons, closure cannot be ruled out as a management tool. However, by providing timely information on the season's fishing regulations and other information, the misperceptions of closures, and even of low expectation and opportunity, can and should be addressed.

Priority Access

The second element in the new policy for the recreational sector is "priority access" to chinook and coho. This is not a radical departure for recent practice. Allocation policies within the last ten years have implicitly favoured the recreational fishery more often than not. Under the circumstances this implicit policy should be now made explicit and transparent to all concerned.

Other than making explicit what has been implicit, there is good reason to provide some degree of priority access to the recreational sector for chinook and coho. The most compelling reason is that sector's convincing claim that a percentage share of the catch is not sufficient in times of low abundance. According to the ARA report, "The Economic Value of Salmon", both sectors would clearly receive significant additional value from having one more chinook or coho allocated to them. Yet, both sectors cannot have the same fish. Further, ARA states that "it would appear from the analysis that the value of an extra salmon is worth more in the hands of recreational fishermen than commercial fishermen." It seems logical then to provide the recreational sector with long-term stability and room to expand and follow demographic growth.

Using 1991-1994 catches as initial allocations for chinook and coho cannot work in isolation from considerations of numerical abundance. Priority access should be given to the recreational sector over directed commercial fisheries for chinook and coho species when abundance levels are low. This approach not only reflects the decreasing catch and diminishing value of these species in the commercial sector. It also encourages the continued contribution of economic benefits and impacts generated by the sport industry, recognizing that the recreational fishery generates large benefits from a relatively small catch.

*...in 1990 when 42,000
Chinook were reallocated to
the commercial sports on the
north coast without so much
as a thank-you very much.*

Rick Nordstrom, President, Pacific
Trollers Association, April 1996

*A policy statement giving priority
to the sport fishery for chinook
and coho in years of low
abundance will ensure economic
viability for sport fishing from year
to year, provide greater certainty,
stabilize a highly sensitive market,
and ensure resource rents
continue to flow to governments.*

Sport Fishing Institute of British Columbia,
October 1996

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In practical terms, this means that the combination of the 1991-1994 benchmarks and priority access would determine recreational access. In years of normal abundance, that sector's allocation would be determined by the 1991-1994 percentage. But in low-abundance years, that percentage would have to be adjusted upward (and come from the commercial share) so as to be consistent with the expectation and opportunity imperative. That imperative could be defined in terms of daily and bag limits, which would presumably vary along the coast depending on various stock sizes and the demands being placed on them.

The priority access afforded to the recreational fishery for chinook and coho is not absolute. There are important qualifications. First, priority access will always be subject to the availability of TAC. The TAC is determined on an annual basis and reflects an amount surplus to requirements for conservation, First Nations and international commitments. Secondly, priority access means priority over directed commercial fisheries on those stocks. There will continue to be a provision for by-catch of chinook and coho that are taken in the sockeye, pink and chum fisheries. This recommendation is made on the understanding that those by-catches do not increase over time and that a long-term objective of DFO is to minimize and eliminate that by-catch. Thirdly, any commercial licence holders adversely affected (relative to the 1991-1994 benchmarks) by the priority policy should be compensated; where the source of the funding is a portion of sport licence fee revenues.

Precedents for giving higher priority to the recreational fishery exist. In 1992, DFO imposed a moratorium on the commercial salmon fishery around the island of Newfoundland. Yet the recreational salmon fishery allocations were only slightly reduced. The rationale for the difference in treatment was that the recreational sector generates the greater benefit to the economy. Along similar lines, in Washington, Oregon and California commercial and sport fishermen negotiated a schedule which established an allocation on the basis of variances in relative abundance. It was renegotiated more recently. The outcome gives a larger share of coho to the sport fishery at low-abundance levels but as abundance increases the commercial share increases. For chinook at low abundance levels shares are split 50/50, and as abundance increases the troll share increases. There is no post season analysis and no consideration of catch-up, make-up.

By granting conditional priority access to the recreational sector, the security of the individual participant will be enhanced. This not only benefits the individual but will stabilize the commercial aspects of the recreational sector and therefore improve its overall profitability.

Pricing of Sports Access

The recommendation that the sport fishery receive priority access to the chinook and coho is based primarily on the fact that there is substantial evidence that, especially at lower levels of abundance and under current market circumstances, the economic benefit to the sport sector of chinook and coho is greater than that to the commercial sector.

A logical consequence of this higher sectoral valuation of chinook and coho is that the price of access should reflect their true worth to sport fishers. By not charging prices that reflect the true value of sports access, the owners of the resource, the people of Canada, are in effect subsidizing the sport fishers. There is no good social rationale for such a subsidy. Therefore, priority access to chinook and coho should be tied to the condition that fees for access accord with the apparently high value of the benefits as claimed

It is, in our opinion, ludicrous to argue that a coho or chinook yielding perhaps \$1.00 per pound to commercial harvesters...should be withheld from the recreational sector... where it yields \$100's of dollars solely because of some historic allocation level.

Wayne Harling and Dave Narver, B.C. Wildlife Federation, October 1996

by sport sector representatives and as found by the February 1996 ARA economic study, "The Economic Value of Salmon." Despite increases in the fees for 1996, the present system of fees, as given in the table below, does not meet this criterion.

...the new fees are not onerous.

ARA, "Fishing for Answers", September 1996

Take, for instance the annual fee for a resident. At \$22.47, it is little different from the cost of a single fast-food meal for a family. For any annual sports licence holder who

fishes regularly, the cost of the licence per fishing trip or per fish caught is trivial. It pales in comparison to payments for fishing gear, boats, travel to the fishing areas and other related expenses. The fee is also trivial when compared to other recreational activities, e.g. a ticket to a hockey game, a round of golf or a day skiing. The non-resident fees are higher but, considering that foreign tourists coming to BC to fish typically must pay for travel and accommodation, their fees are unrealistically low as well.

It is beyond the scope of and not the purpose of this report to engage in a detailed market analysis of the demands for sports licences by the various users. However, it is clear that such an analysis ought to be carried out. Accordingly, fees should be set for the various users and licence durations that reflect those demand conditions

Recreational Fees (as of 1996)

	Canadian Resident	Nonresident
Regular Annual	\$22.47	\$108.07
Senior Annual	\$11.77	\$108.07
Juvenile Annual	\$0.00	\$ 0.00
Five day	\$17.12	\$ 38.52
Three day	\$11.77	\$ 20.33
One day	\$ 5.62	\$ 7.49

All pay a \$6.42 salmon conservation fee with the purchase of a licence.

GST is included in all these prices.

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as well as supply availability. Doing so may entail using more or fewer classifications given in the table; e.g., adding a two-week fee, or eliminating the one-day fee or adding a two-day fee. Even varying the fees by areas, which is probably practical for a few large areas, could be useful as a management tool if demand and abundance conditions are very different regionally. Such details will require comprehensive economic analysis but the objective is clear; pricing should be based on demand and abundance conditions with the aim of ensuring that the owners of the resources, the Canadian people receive more of the value of the natural resource rents due to sport salmon fishing.

Current DFO licence fee revenues are fully dedicated to meet planned departmental revenue requirements. There should be an immediate increase in fees in order to bring the fees closer to their true values and to permit a build-up in the fund that can be used to finance compensation to commercial licence holders. Recreational licence fees should be doubled. The annual fee would still be less than \$50, (plus a \$6.42 salmon conservation fee); a bargain by any standard. Non-resident fees should be five times these recommended resident fees.

Transfers and Compensation

In principle there should be no restriction on voluntary transfers within sectors or across sectors from benchmark positions. However, in practice, that is difficult to accomplish when the rights of a group or of individuals are not sufficient to allow this. These rights do vary by sector and individual. It may be straightforward for a First Nation, if it wished, to charge a fee to individuals to fish for salmon in a river to which the First Nation has well defined rights. Similarly, within the commercial sector, ITQs, if ever implemented, would allow voluntary intrasectoral trades. On the other hand, an individual sport licence holder cannot sell access to salmon to the commercial fleet, nor is there an existing mechanism for the commercial sector and sports sector to engage in direct market trades in access with one another.

Perhaps mechanisms can be developed for all such conceivable trading directions but, practically speaking, current circumstances are such that major intersectoral transfers will be away from the commercial sector and as a result of policy imperatives rather than voluntary trading among the sectors. Therefore, for those circumstances, the focus of the following advice is on how those policy-directed transfers can be accomplished, on compensation, and on the financing of any compensation to commercial licence holders.

We also support the inclusion of a mechanism for intersectoral transfer of fish, so that one sector may buy fish from another sector. That is, a free market transaction between a willing seller and buyer. I see a quota system as the best mechanism.

Ken Erikson, President, Pacific Coast Fishing Vessels Owners Guild, October 1996

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Transfers from the Commercial Sector

The policy-directed transfer to the other sectors from the commercial could be either temporary or permanent. Temporary measures would be needed when lower than normal abundance required the commercial fleet to accept lower than benchmark shares in order to implement priority recreational access. If the change in abundance were expected to be short lived, then a permanent reduction in the number of commercial licence holders would hardly seem necessary. In other circumstances, such as a sustained growth in the number of sport licence holders, or a treaty settlement, permanent measures would be needed.

To accomplish these policy-directed transfers from the commercial sector, some commercial operators would have to stop fishing temporarily and sometimes some would have to stop permanently. The only currently available mechanism for permanent transfer is buybacks of commercial licences and transfer of associated catch.

A variety of options may be considered when temporary transfers are needed. These could include: payments to stop fishing; leasing of commercial licences over a specific period, or allowing greater catch of one species to compensate for reduced catch of another species.

Decision on these options, whether temporary or permanent, should be dealt with by independent tribunals as proposed and discussed in the next chapter.

Accommodating those Disrupted

Policy-directed transfers would affect many other stakeholders in the commercial sector: crew members, shore workers, the processing sector and communities in particular, but also other ancillary industries. Also, to the extent that transfers from the recreational sector might be required to meet some First Nations' requirements in areas, sport fishers would be inconvenienced and some commercial lodges and other related businesses and communities could suffer. This cost to those stakeholders is real and unavoidable.

As a general principle, those stakeholders who are displaced, especially those who may lose their employment, should be assisted to adjust. There are existing social programs, e.g. Employment Insurance and HRD programs, which should be accessed for this purpose. The Minister, together with the Minister of Human Resources Development, gave commitments in this regard in November 1996 in response to the interim recommendations of the federal/ provincial panel reviewing the impact of the Pacific Salmon Revitalization Strategy on individuals and communities. The ARA report, "Fishing for Answers," offers several excellent suggestions

Compensation in our view cannot be limited only to those who happen to hold licences. In this regard there are thousands of industry stakeholders - crews, shoreworkers, tendermen, ancillary workers, etc. - who will be affected by an overall public policy objective to settle land claims.

Dennis Brown, The United Fishermen and Allied Workers' Union, March 1996

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to deal with community adjustment. The feasibility of those suggestions should be explored and acted on where practical.

Adjustment assistance should be considered to be distinct from compensation. Government has a moral obligation to those who hold commercial licences that goes beyond adjustment programs. It is that long-standing practice of providing, at a price,

People have their life earnings invested in their boats and gear, and if this is taken away and not compensated, you would see total collapse of communities and families who have relied on the resource for generations.

Richard Haugan, Prince Rupert Fishing Vessel Owners Association, May 1996

Compensation for what? If the government wants to remove certain licenses from the commercial fishery and compensate the holders, that is the government's prerogative...we see no need to compensate one sector of the industry for reallocation of fish to another.

Wayne Harling and Dave Narver, B.C. Wildlife Federation, October 1996

licences to the commercial sector that distinguishes commercial licence holders from other stakeholders. The ongoing provision of commercial licences to an individual leads understandably to an expectation that the resource is to be made available, subject to conservation, for the purpose of earning a livelihood. That creates at least a moral obligation to compensate the licence holder for removal of the licence where the holder has not violated any of the conditions of the licence.

As has been suggested, in practice, policy-directed transfers among sectors will in all likelihood amount to removal of salmon from the commercial sector in order to go to the other two. It is conceivable that the recreational sector, in some localities, could also lose, depending on what may be needed to meet First Nations' current and future entitlements. There is not a case for offering compensation to recreational licence

holders or other stakeholders in the recreational sector. The licence holders would typically be able to fish elsewhere in BC and would suffer no loss of livelihood. Some commercial operators in the recreational sector could possibly suffer but that may be regarded as a normal risk of a sport-fishing business. And Government has not given

We believe that, for the Canadian government to reallocate a resource we have been harvesting exclusively for almost a century, without compensation, and to have that resource go to a "preferred" group of businessmen, is not right.....

Ken Erikson, President, Pacific Coast Fishing Vessels Owners Guild, October 1996

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them the expectation, through the repeated sales of licences for access to the resource, that the resource would always be available to them and their clients in their areas.

When allocations as defined by the benchmarks are removed from the commercial sector for the use of other sectors, by government policy, the commercial licence holders should be compensated. For temporary disruption this could be accomplished by granting access to other salmon where available, through leasing of commercial licences, or by payments to not fish for a time. Permanent re-allocations would be effected by buybacks. This does not mean that the commercial licence holders should be compensated for other risks such as swings in stock abundance, changes in interest rates, low prices and other developments that are part of usual business risk. The amount offered to buy back commercial licences must depend on circumstances at the time. As a basic principle, the amount should reflect the expected future earnings that would result from holding the licence. That amount will surely vary with market circumstances.

When the transfer is from the commercial sector to the recreational sector then the compensation to the commercial licence holders should be from the beneficiaries. There is no market mechanism by which the recreational sector can pay the commercial sector. As recommended earlier in this chapter, the sports licence holders should pay fees consistent with the benefits that the resource provides to them. A portion of the revenue collected in that manner should be paid into a fund. That fund would then be used to finance buybacks from the commercial sector in order to allow growing recreational opportunities (GRO). This GRO Fund would be designated a share of sport licence revenues sufficient to finance the required buybacks. If in any year the Fund's revenues are inadequate, the gap in revenues could be provided by the Government of Canada, which would recoup its

Any compensation that results from future transfer of salmon from sport and commercial sectors to the aboriginal sector should not be attributed as a treaty settlement cost.

Nuu-chah-nulth Tribal Council, May 1996

contribution from future Fund surpluses. Additionally, the portion of sport licence revenues going into the Fund would be subject to periodic review to avoid unnecessarily large surpluses or deficits.

When the transfer is from the commercial sector to First Nations, compensation should

be paid from general government revenues. Some First Nations' groups believe that such compensation could act as a barrier to treaty and land claim negotiations. On the other hand, public opinion could become resistant to settlements if commercial licence holders are seen to be unfairly deprived of their livelihoods without compensation.

Canada should be paying that bill, not the commercial fishery.

Ron Parke, President, Gulf Trollers' Association, May 1996

4

Managing Intersectoral Allocations

The policy advice given in the preceding chapter sets direction. It could not possibly anticipate and deal with all the conflicts, contingencies and difficulties that could arise. Good management, informed debate, and fairness in decision making must accompany implementation of this policy. This chapter offers some suggestions in this regard.

Tribunal

Managing and implementing the Intersectoral Allocation Policies within the current management structure is impractical if not impossible. Disputes over access to the resource will continue and, in fact, may worsen over time as fluctuations in resource abundance continue, and pressures on the resource intensify.

Under the current DFO management system there is a myriad of committees and consultative arrangements in place designed to deal with commercial and recreational interests. Many of these committees are geographic and or gear based. Undesirable outcomes often result in lobbying at the Federal and/or Provincial level.

Such an approach is inconsistent with the guiding principle - that "Allocations should be fair and equitable. Allocation decisions, should be marked by impartiality and conform to transparent rules and principles." The best way to ensure that allocation decisions are impartial is to have these decisions made by an independent arm's-length institution.

The Intersectoral Allocation Policy could be managed by the Tribunal identified in Bill C-62, An Act respecting fisheries, which is now before Parliament. This would be a logical extension of the role defined for them in the Fisheries Act.

By definition this Tribunal would be at arm's length from DFO. Furthermore, it would be empowered to make binding decisions. This decision-making function ensures closure on issues and removes the recourse of lobbying elsewhere. Membership would be by appointment. It is likely that the Tribunal would have to be supported by a small technical staff.

...there needs to be an advisory body installed that can comment and make recommendations on all allocation shifts.

Dan B. Sundvick, Director, Pacific Gillnetters Association, May 1996

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This Tribunal could be linked with a series of small local boards (LB). Membership on the local boards would be broad, including representatives from all stakeholders. This concept of local boards and an overarching board was proposed and endorsed by several groups throughout the consultative process.

Communities, in particular, wanted a voice in decisions that affect their lives. They do not share a unanimous view on intersectoral allocation issues because of their diverse economies. Many of their local economies are tied to the fisheries resource with some relying more heavily on the commercial fishery, and others relying more heavily on the recreational fishery. There are a large number of coastal communities that have significant interests in all three sectors of the Pacific salmon fishery.

The local boards could operate under specific Terms of Reference which clearly laid out the membership, geographic authority, objectives, constraints, and tasks. Generally,

The WCSA supports the concept of building an allocation board to deal on an ongoing basis with the process of allocation and reallocation. This board must be supported at the regional level by Regional Fisheries Management Boards to ensure that the decisions of the overarching board are accountable to the regions, communities, First Nations and sectoral interests that are affected....

West Coast Sustainability Association,
October 1996

We recommend the establishment of a permanent Fisheries Allocation and Management Policy Board to not only verify shares, but to develop and monitor management plans....

Roy Alexander, Pacific Seafood
Council, March 1996

local boards could be the first level of multi-stakeholder involvement in fishing planning. They could receive and coordinate fishing plans from different sector groups. DFO's role would be to provide technical advice and ensure conservation goals and Government costs are not compromised. The role of the local boards could be to bring together the respective fishing plans of each sector and ensure that conservation and allocation objectives are met for that particular geographic area of responsibility. In the event that the objectives would not be met it would be the Board's responsibility to modify the plans to achieve the objective. Disputes would be directed to the Tribunal for resolution.

The mandate of the Tribunal would be to manage the intersectoral allocations.

Specific decision-making responsibilities would include but not be restricted to:

- (i) making binding decisions on all allocation issues;
- (ii) approving all request for transfer of shares from one sector to another;
(This will require that they balance the broad geographical and sectoral interests in all decisions.)

Managing Intersectoral Allocations

- (iii) managing the Fund set aside for transfer purposes; (The fund might be held by Government. Responsibilities should include advice on the magnitude of funds required in the short term and long term to transfer shares from one sector to another.)
- (iv) deciding whether transfer is temporary or permanent and determining appropriate compensatory mechanism;
- (v) accepting applications from commercial fishermen who are interested in either temporarily not fishing, leasing their licence or retiring their licences;
- (vi) running a buyback program for commercial licences according to established rules as required; and
- (vii) developing an accounting framework to keep track of transferred shares.

A broad framework has been outlined above. Within this structure, there is a number of elements that need to be addressed. To ensure that the process results in decisions that conform to transparent rules and decisions, the Tribunal will need:

- (i) clear Terms of Reference;
- (ii) an Evaluation Framework that will help assess the magnitude of financial, economic and social impacts on individuals, sectors, businesses, communities and regions of each potential transfer; and
- (iii) a set of principles and rules to guide allocation. (For example, one principle should ensure that commercial licences retired should be to the extent possible tied to the species and area where the demand exists.)

The above three specific elements are necessary to operationalize the Tribunal and should be negotiated with the Province and stakeholders prior to implementation.

Policy Implementation

There are over 20 different sport fisheries on the BC Coast and at least that many areas where specific commercial fisheries involving one or all three gears are prosecuted. Conflicts do not occur in all areas. Therefore, the outcome of this policy should not be a series of calculations that identify base shares in each and every fishery/area. Rather, this policy is intended as the start of a process - a process that will lead to resolution of resource access conflicts where they arise. The discussion below describes an approach that the Tribunal could apply in implementing the policy as defined in the previous chapter. In general a management process is required that will enable shares to be transferred from one sector to another over time.

This policy could be implemented and managed as follows:

1. Calculate the base shares to the commercial and recreational sectors (measured as a percentage of TAC after First Nations and international obligations have been met) during the 1991-1994 time period. These shares represent the benchmark shares.
2. In times of medium and high abundance it is assumed that these base percentage shares will be adequate to meet the needs and objectives of both the commercial and recreational fisheries.

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3. At times of low abundance this may not be the case. However, in spite of this, for sockeye, pink and chum the benchmark shares in place during 1991-1994, (measured as percentage of TAC) should guide allocation arrangements during those times. The implication of such an approach will be that although each sector's percentage shares will remain unchanged from 1991-1994, the absolute number of fish each sector will be able to harvest will be lower.
4. For chinook and coho, at times of low abundance, applying a base percentage to available TAC will not meet the sport fishery objectives. This occurs because percentage allocations applied to a low allowable catch will not provide adequate numbers of fish to meet opportunity and expectation needs of the recreational fishery. Therefore, in order to implement the policy to allow sports fishers to be "last on the water" it will be necessary to increase the recreational fishery share above their 1991-1994 benchmark.
5. In addition to shares that change due to low abundance, shares will also change in response to a variety of other factors, described earlier. In the future, the recreational sector may want to increase its share of access to the coho or chinook resources during medium or high abundance years; or either the recreational or commercial sector may want to increase its base share of sockeye, pink and chum resources.
6. In either case, the sector that needs long-term increased access to specific resources will have to follow the procedures in place at the time.
7. Any sector's increased access could be defined by calculating actual catch as a percentage of total catch (recreational and commercial) and comparing it to benchmark 1991-1994 shares. Generally compensation would be due for increased access above benchmark shares.

While the approach outlined above could be managed on an annual basis, it would be both time consuming and costly, and thus inconsistent with the Terms of Reference. Consideration should be given to managing shares over a longer time frame such as four years. Such an approach could parallel the situation in the commercial industry.

Term-sharing arrangements could have a requirement for a mid-point evaluation, and could be agreed to for large or small sections of the coast. Agreements on sharing arrangements would have to be based on factors such as initial benchmark shares, general prognosis for the stocks for that time period, and this policy.

These term-sharing allocations could be designed to mesh with the commercial fishing industry's long-term allocation plan. Such an approach would provide more long-term certainty to both sectors. Term-sharing arrangements offer the added advantage of not having to deal with fluctuating variances in stock abundances on annual and short-term basis. The approach outlined above is extremely simplistic and ignores the technical complexities, of which there are many.

Technical Considerations

There are many issues to be considered when implementing the intersectoral allocation policy. Some of these considerations are discussed below but the solutions are not clear and will have to be resolved either prior to implementation of the policy or gradually over time.

1. It will be important to agree on how to count salmon. Issues such as what data sources and how data gaps are dealt with must be agreed upon prior to implementation.
2. In assessing the potential impacts of transfer of shares from one sector to another, there has to be criteria on how fish will be valued in the context of transfer.
3. Relying on term-sharing arrangements poses many questions. For mid-point assessment, what would trigger action within the agreed term? How would management mistakes that alter allocations be dealt with? How would factors such as strikes be dealt with? What level of change in shares would trigger a short-term impact requiring compensation? What criteria separates short term from long term?
4. With respect to the recreational sector share during periods of low abundance, it should be noted that there will not always be adequate TAC to permit the recreational sector to take all of its benchmark share. In those situations, the recreational fishery would be allocated more of the TAC but they must work with DFO to develop fishing plans that ensure catches remain within that defined TAC.
5. Recreational "access" based on specific bag and retention limits should ideally be constant throughout the season subject to conservations and other DFO obligations. Because it is extremely difficult to communicate in-season changes in sport regulations to all anglers, it would be beneficial to avoid in-season adjustments to bag and possession limits, and to open areas. A process that publishes regulations early in the year and leaves them in place for the season works best.
6. Compensation mechanisms, as discussed in Chapter 3, must be able to distinguish between short-term reallocations (those occurring in low abundance years) and long-term reallocations (those occurring in response to other factors.)
7. The relationship between reallocations and magnitude of compensation required should be explored. It may be that the relationship between a sector's increased share and the magnitude of compensation is not direct. Other factors might need to be considered in determining the magnitude of compensation.

It is clear that these technical issues represent the tip of the iceberg. Prior to implementing this policy a technical team should address these issues and others as identified.

Managing Intersectoral Allocations

The focus of the policy recommendations in this report is on developing a process - a process flexible enough to accommodate the complexities associated with implementing and living within an Intersectoral Allocation Policy. Outlining a detailed approach would not likely result in a process that was workable from the perspective of both those who must implement and manage it and those who must live with the impacts of those decisions.

A Tribunal combined with a system of Local Boards such as the one generally described above has several advantages. First, it provides a mechanism for impartial decision making and removes DFO from the decision-making loop. Second, it offers a system where decisions are made based on established but transparent rules and criteria. Third, because decisions are final, it eliminates the need for lobbying. Fourth, it provides communities with an opportunity for more involvement in decisions which affect them.

It is critical that, prior to establishing the Tribunal or implementing the policy, two events happen. First, the Federal Government must work with the Province and stakeholders in developing and agreeing to the framework under which the Tribunal will operate. That would require clear Terms of Reference, an Evaluation Mechanism within which to analyze transfers, and rules and principles to guide the decisions. Second, prior to implementing the policy a technical team must address and resolve key technical issues in particular those relating to counting and valuing the fish and the accounting framework for term-sharing arrangements. In the absence of this work the proposed policy and accompanying institutional framework cannot be successful.

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Appendix I

Terms of Reference: For an Assessment of Intersectoral Allocation of Salmon in British Columbia

Context

Pacific salmon are highly prized and support important aboriginal, commercial and sport fisheries. Fisheries on salmon are intensive and are widely distributed throughout the B.C. coastal and inland area. At the same time the allowable catches are fully subscribed, and there is little flexibility to allow new access to the resource without disrupting the harvest of existing users or increasing the harvest on stocks already being fished at optimal levels.

The lack of explicit sharing arrangements among the sectors and the absence of a transparent mechanism to adjust catch shares over time has made it increasingly difficult to effect changes in fisheries management. The prospect of adjusting catch shares tends to result in intensive conflicts between users, leading to a general lack of co-operation among the sectors which hinders proper management of the stocks.

The situation is untenable and must be rectified if the salmon resources is to be conserved and managed effectively for the people of Canada. The Minister of Fisheries and Oceans recently expressed his views on Intersectoral allocation in the context of the Pacific Roundtable. He stated:

"Future changes in sector allocations must be managed in an orderly and equitable manner. Shares cannot be guaranteed in perpetuity as fisheries will continue to evolve. The recreational fishery will continue to grow. However, any future growth of this sector has to be managed so that change continues to be gradual, becomes more predictable and is harmonized with developments in the commercial sector."

"Aboriginal participation in fisheries will also increase over time. Government must be responsive to direction by the courts. Third party interests will be addressed in the settlement of land claims in accordance with the government's comprehensive land claims policy: the general public interest and third party interests will be respected in the negotiation of land claims settlements and, if affected, will be dealt with equitable."

Given the need for clear, understandable and transparent rules, the Minister has decided to appoint an independent Advisor to review and make recommendations to address intersectoral allocation issues.

Altering Course

Objectives

The independent Advisor will review, evaluate and make recommendations addressing the problems and issues associated with allocating Pacific salmon among aboriginal, commercial and sport fisheries in British Columbia. Accordingly, the purpose of the assessment is twofold:

1. To provide the Minister of Fisheries and Oceans with advice on an intersectoral allocation policy framework, including initial shares for each sector.
2. To describe a process to allow adjustments in shares between sectors.

Government Policy

The following policy principles will guide the Advisor:

CONSERVATION IS PARAMOUNT. It is vital to ensure conservation of the salmon resources and to maintain the genetic integrity, diversity and viability of salmon stocks. Any advice or recommendations of the assessment must support conservation and rebuilding targets determined by the Minister of Fisheries and Oceans.

- **ABORIGINAL FISHERIES FOR FOOD, SOCIAL AND CEREMONIAL PURPOSES ARE FIRST IN PRIORITY ONCE CONSERVATION NEEDS ARE MET.** The Department has a legal duty to provide fish as per Section 35 of the Constitution and to consult Native people with respect to activities that might have an impact upon aboriginal or treaty rights.

The existing arrangements employed by the Department of Fisheries and Oceans and First Nations for determining allocations and establishing fishing plans will be maintained and will be excluded from this study.

CONSISTENT WITH THE PACIFIC SALMON TREATY. Catch sharing arrangements among sectors must be consistent with Canada's obligations with respect to the Pacific Salmon Treaty.

Guiding Principles

The independent Advisor is also to be guided by the following:

- **FAIR AND EQUITABLE ALLOCATIONS.** Allocation decisions should be marked by impartiality and conform to transparent rules and principles.
- **MANAGEABLE AND COST EFFECTIVE.** Catch sharing arrangements must be manageable and implementable without increasing costs to government.

Appendices

- PROVIDE FOR THE FUNDAMENTALLY DIFFERENT NATURE OF EACH OF THE FISHERIES. There are fundamental differences in the approaches to managing aboriginal, commercial, sport fisheries. A long term catch sharing plan must recognize these differences.
- SECURITY OF ALLOCATION. Uncertainty with respect to resource allocation can undermine the commitment of participants in each sector to management measures capable of enhancing conservation and viability. A long term catch sharing plan should enhance security of allocation at the sector level and at the individual participant level.

Tasks

Consistent with the foregoing, the Advisor will inquire into and report on:

- i) existing allocation or catch sharing arrangements in pacific salmon fisheries:
 - a) catches in Pacific salmon fisheries with particular attention to:
 - trends over time in catch sector
 - criteria used to determine any existing catch share arrangements
 - b) government policy or regulation with respect to Pacific salmon fisheries relevant to determining allocations, defining shares, or assigning quotas.
- ii) experience in other jurisdictions in addressing fisheries resource allocation issues and establishing catch shares with particular attention to:
 - how share were defined
 - the criteria used to determine sharing arrangements
 - the implementation strategies
 - the effectiveness of approaches where this assessment is available
- iii) criteria, guidelines, and processes for establishing initial catch shares for Pacific salmon and outlining mechanisms to permit changes in catch shares over time, including:
 - a) recommendations on establishing explicit intersectoral catch shares and a timetable whereby initial shares would come into effect;
 - b) the mechanisms and rules for changing initial catch shares over time that minimizes or avoids government intervention, where possible; and,
 - c) 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.

Appendix 2

Minister's Press Release and Backgrounder

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.

.../2



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Appendices

- 2 -

- 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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For information:

Louis Tousignant
Regional Director General
Fisheries and Oceans
(604) 666-6098



BACKGROUND

FICHE D'INFORMATION

B-PR-96-05E

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.

January 1996

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Appendix 3

Chronology of Events

1. January 23, Dr. May was appointed by the Minister of Fisheries and Oceans to provide advice on three intersectoral allocation issues.
2. February - Dr. May met with selected representatives of the commercial, First Nations and recreational sectors and invited them to submit briefs outlining their views on key intersectoral issues. Simultaneously, invitations to submit briefs were sent to a much broader group encompassing communities and environmental organizations.
3. April 22, 1996 - Meeting with Provincial government ADM's and special advisors at their request to inform them of the process, schedule, scope and plans for consultation.
4. April 26, 1996 - Reminder letters were sent to all individuals and groups who received initial invitations requesting submission of briefs by May 17, 1996.
5. May 15 - 17, 1996 Invitations were sent to all those who submitted briefs to date (approximately 35 briefs) inviting them to attend an all sector meeting. The purpose of the meeting was to provide individuals and organizations who submitted briefs with an opportunity to emphasize those issues most important to them.
6. May 29 and 30, 1996 - Two multi-sectoral sector meetings were held at the DFO offices in Vancouver. Of the 35 stakeholders who had submitted briefs, by that time period, 27 came to discuss their views in more depth.
7. June 10, 1996 - a letter was sent to all stakeholders thanking those who submitted briefs and attended the workshop in late May and informing all parties of the process to completion.
8. June 1 - July 31, 1996 - The three consultants summarized the briefs (by this time over 50 briefs had been received) and prepared the discussion document.
9. July 31, 1996 - Second meeting with the Provincial government representatives: Lorne Seitz, Deputy Minister, Ministry of Agriculture, Fisheries and Food and S. Culbertson, Assistant Deputy Minister, BC Fisheries Secretariat.
10. July 31, 1996 - The discussion paper "Policy Options for the Intersectoral Allocation of Salmon in British Columbia," prepared by Edwin Blewett, Philip Meyer, and Timothy Taylor was sent to all interested stakeholders. The covering letter asked for stakeholder views on what mix of options could work and what could not work and why not?" It also indicated that there would be a final series of sector workshops in the fall. Dates and times were identified, and they were requested to confirm attendance.

Appendices

11. September 24, 1996 - A fax was sent to all stakeholders reminding them of the October workshops and requesting that they confirm attendance.
12. October 4 and 5, 1996 - Final sector workshops were held at the DFO offices in Vancouver.
 - Community workshop - 14 representatives and observers attended and four new briefs were submitted.
 - Environmental workshop - 10 representatives and observers attended and one new brief was submitted
 - First Nations workshop - 23 representatives and observers attended and three new briefs were submitted.
 - Commercial workshop - 30 representatives and observers attended and seven new briefs were submitted.
 - Community workshop - 24 representatives and observers attended and two new briefs were submitted
 - In addition, five other submissions were received.
13. October - December - preparation of final report outlining recommendations.

Appendix 4

List of Briefs Dealing with Intersectoral Allocation Issues

First Nations

- FN1 Carrier Sekani Tribal Council
- FN2 B.C. Aboriginal Fisheries Commission
- FN3 Heiltsuk Tribal Council
- FN4 June Quipp (individual from Sto:lo)
- FN5 Haisla
- FN6 Kitsoo
- FN7 NTC (Nuu-chah-nulth Tribal Council)
- FN8 Hul'qumi'num Treaty Group
- FN9 John Louie (Sliammon Native Council)
- FN10 Central Van-Isi Native Fishers
- FN11 Nisga'a Tribal Council

Commercial

- C1 Fred Penland
- C2 Roy Alexander, Pacific Seafood Council
- C3 D.R. Boyes
- C4 Ken Erikson, President - Pacific Coast Fishing.
- C5 Paul Paulson, Northern Gillnetters Association
- C6 UFAWU
- C7 John Disney (Omega Packing Company)
- C8 Northern Trollers Association
- C9 Pacific Trollers Association
- C10 Scott Fennell
- C11 Abe Vanderhorst
- C12 Pacific Gillnetters Association
- C13 Gulf Trollers Association
- C14 Robert Ostrom
- C15 BC Deep Sea Fisherman's Guild
- C16 Fisheries Council of BC
- C17 Prince Rupert Fishing Vessel Owners Association
- C18 John Lennic
- C19 CFIC
- C20 Dawn Stranbery

Appendices

Recreational

- R1 Kitimat Charter Boat Association
- R2 Steelhead Society of BC
- R3 BC Wildlife Federation
- R4 Sport Fishing Institute
- R5 Sport Fishing Advisory Board
- R6 Victoria Golden Rods & Reels Society

Community

- CE1 Masset Community Adjustment Committee
- CE2 District of Salmon Arm
- CE3 Skeena-Queen Charlotte Regional District
- CE4 City of Parksville
- CE5 Village of Gold River
- CE6 Alberni-Clayoquot Regional District
- CE7 West Coast Sustainability Association
- CE8 Village of Masset
- CE9 Coastal Community Network
- CE9 Coastal Community Network Submission #2 (Resolutions)
- CE11 Masset Community Adjustment Submission #2

Environmental

- CE10 Greenpeace
- CE12 David E Ellis
- CE13 P.E. Broomhill
- CE14 Amalgamated Conservation Society

Other

- O1 Lorne Brownsey, Director of Treaties, Indian and Northern Affairs Canada

Total Briefs = 53

Appendix 5

List of Briefs Submitted Responding to Discussion Paper

Community

- COA West Coast Sustainability Association
- COB Pacific Salmon Alliance
- COC Village of Gold River
- COD Ian D. Wickett, Mayor, District of Salmon Arm

Environmental

- EA The Steelhead Society of B.C.

First Nations

- FNA Namgis Nation
- FNB Heiltsuk Tribal Council
- FNC Musgamagw Tsawataineuk Tribal Council

Commercial

- CA Pacific Seafood Council
- CB Pacific Trollers Association
- CC Northern Trollers Association
- CD David R. Boyes to Pacific Trollers Association
- CE David R. Boyes
- CF Pacific Coast Fishing Vessel Owners Guild
- CG David Boyes

Recreational

- RA BC Wildlife Federation
- RB Sport Fishing Institute of BC

Other submissions

- OA The Honourable Judd Buchanan, Canadian Tourism Commission
- OB Darren Deluca, Pacific Rim Outdoors Ltd.
- OC Gordon Gislason, The ARA Consulting Group Inc.
- OD David W. Ellis
- OE Jim Hurford

Total Briefs = 22

Appendix 6

Attendance at Public Meetings and Workshops

6.1 Sector Meeting — February 19 and 20, 1996

First Nations Representatives

Name	Representing or member of
Mike Staley	FWSC/BCAFC
Ernie Crey	Sto:lo Fisheries
Lester Ned	Sumas S/N
Ken Malloway	BCAFC/Sto:lo Nation
Chief Nathan Mathew	Secwepemc
Joe Alphonse	Tsilhqot'in National Gov.t.
Ray Harris	Mid Island Tribal Council
Christine Hunt	Kwakiutl Nation
Alvin Dixon	NBBC
Greg Wadhams	Namgis
Brian Assu	Cape Mudge Band
Cecil Hill	Tsimshian Tribal Council
Don Hall	Nuu-chah-nulth Tribal Council
Larry Greba	Kitasoo Bank/Kitasoo Fisheries
Bill Wilson	Aboriginal Fishing Vessel Owners of BC
Gilbert Harris	Squamish

Commercial Representatives

Ron Fowler	CFIC/PTA
Rick Nordstrom	Troll Panel, Roundtable
Bob Ostrom	Troll Panel, Roundtable
John Lenic	Seiner/FVOA
Phil Eby	FVOA
Gordon Halsey	Prov. Gov./Environment Lands & Parks
J.D. Anderson	Prov. Gov. MAFF
Mike Hunter	FCBC
Alvin Dixon	NBBC
Bill Wilson	AFVO B.C.
Robert Hill	PARC
Robert Wright	PARC
Dennis Brown	UFAWU
Mike Forrest	

Appendices

6.1 Sector Meeting — February 19 and 20, 1996 cont'd:

Recreational Representatives

Name	Representing or member of
Tim Cyr	President, SFI
Tom Davis	SFAB
Wayne Harling	SFAB/BCWF
John Brockley	SFAB
Dan Sewell	SFAB/MTA/SFI
Bruce Hill	SS BC/NCCC/SWC
David Narver	BC Wildlife Federation/SFAB
Velma McColl	SFI - Executive Director
Robert Wright	PARC/SFAB

Consultants and Others

A.W. May	Intersectoral Allocation Advisor
Mary Hobbs	DFO
Ken Roeske	DFO
Paul Sprout	DFO
Hugh MacAulay	DOJ/DFO
Sheila Fagnan	DFO
Steven Wright	DFO
Tom Bird	DFO

Altering Course

6.2

Multi-Sectoral Meetings — May 29 and 30, 1996

May 29, 1996

Commercial Representatives

<u>Name</u>	<u>Representing or member of</u>
Roy Alexander	Pacific Seafood Council
Ken Erikson	Pacific Coast Fishing Vessels Guild
Paul Paulson	Northern Gillnetters Association
David Wong	Northern Trollers Association
Dan Sundvick	Pacific Gillnetters Association
Mike Forest	Pacific Gillnetters Association
Robert Ostrom	Individual commercial fisher
Mike Hunter	FCBC (Fisheries Council of BC)
Rick Haugan	Prince Rupert Fishing Vessel Owners Association

Environmental Representatives

Craig Orr	Steelhead Society
Pete Broomhill	Steelhead Society

Commercial Representatives

John Disney	Masset Adjustment Society
Rick Nordstrom	Pacific Trollers Association
Abe Vanderhorst	Individual fisher
Ron Parke	Gulf Trollers Association
Peter Haugan	Deep Sea Fishermens Guild
John Lennic	Individual commercial fisher
Scott Fennell	Individual Fisher
D.R. Boyes	Individual Fisher

First Nations Representatives

Arlene Wilson	Heiltsuk Tribal Council
Cecil Reed	Heiltsuk Tribal Council
Larry Greba	Kitasoo Band

Recreational Representatives

Wayne Harling	BC Wildlife Federation
Dave Narver	BC Wildlife Federation
Velma McColl	Sport Fishing Institute
Brent McCallum	Sport Fishing Institute

Appendices

6.2

Multi-Sectoral Meetings — May 30, 1996 cont'd

Name	Representing or member of
Environmental Representatives	
David Ellis	Individual
Consultants and Others	
A.W. May	Intersectoral Allocation Advisor
Jim Feehan	Memorial University of Newfoundland
Philip Meyer	Meyer Resources Inc., Consultant
Timothy Taylor	Taylor & Associates, Consultant
Edwin Blewett	EB Experts Inc., Consultant
Mary Hobbs	DFO

Altering Course

6.3 Sectoral Workshops — October 4 and 5, 1996

Name	Representing or member of
Community Workshop	
Lillian Howard	NTC Communities
Beth Brown	Heiltsuk Treaty Office
Edwin Newman	Heiltsuk Treaty Office
Foster Husoy	Director, Skeena-Queen, Charlotte Regional District.
Ken Erikson	Pacific Coast Fishing Vessels Owners Guild
Dan Edwards	Director, West Coast Sustainability Association Village of Ucluelet
Chief R. Kwakseestahla	Spokesperson, Central Van-IsI Native Fishers
Deborah Campbell	Central Van-IsI Native Fishers
Environmental Workshop	
Beth Brown	Heiltsuk Treaty Office
Edwin Newman	Heiltsuk Treaty Office
Ken Erikson	Pacific Coast Fishing Vessels Owners Guild
Dan Edwards	Director, West Coast Sustainability Association
Chief R. Kwakseestahla	Spokesperson, Central Van-IsI Native Fishers
Deborah Campbell	Central Van-IsI Native fisheries
Foster Husoy	Director, Skeena-QCI Regional District
First Nations Workshop	
Richard Watts	NTC
Don Hall	NTC
Isaac Alex	Cheam First Nations
Arnie Narcisse	Program Manager, NWSFA
Rick Krehbiel	Carrier Sekani Tribal Council
Beth Brown	Heiltsuk Treaty Office
Edwin Newman	Heiltsuk Treaty Office
John Bolton	Heiltsuk Treaty Office
Dan Edwards	Director, West Coast Sustainability Association

Appendices

First Nations Workshop cont'd

Name	Representing or member of
Greg Wadhams	Namgis First Nations
Chief R. Kwakseestahla	Spokesperson, Central Van-Island Native Fishers
Deborah Campbell	Central Van-Island Native Fishers
L. Ney	Sumas S/N
Ernie Crey	Sto:lo Nation
Lester Ned	Sto:lo Nation
Ken Malloway	Sto:lo
Mike Staley	for Sto:lo
Larry Greba	Kitasoo Band
Randall Lewis	Squamish nation
David Ellis	Survival Coalition

Commercial Workshop

Roy Alexander	Pacific Seafood Council
Kendall Smith	Northern Troll Association
Bill De Greef	Northern Troll Association
Ron Parke	Gulf Trollers Association
Peter Haugan	Deep Sea Fishermen's Union
John Sutcliffe	UFAWU
Ross Wetzel	UFAWU
Bruce Probert	UFAWU
John Lenic	Seiner
Mike Hunter	FCBC
Bob Rezansoff	Fishing Vessel Owners Association
Ken Erikson	Pacific Coast Fishing Vessels Owners Guild
Dave Boyes	
Dan Edwards	Director, West Coast Sustainability Association
Greg Wadhams	Namgis First Nations
Don Otterson	Pacific Trollers Association
Dan Sundvick	Pacific Gillnetters Association
Chief R. Kwakseestahla	Spokesperson, Central Van-Island Native Fishers
Deborah Campbell	Central Van-Island Native Fishers
Phil Eidsvik	BCFSC
Stan Watterson	PTA
Charles McKee	Troller
Phil Eby	FVOA

Appendices

6.3 Sectoral Workshops — October 4 and 5, 1996 cont'd

Commercial Workshop cont'd

Name	Representing or member of
Foster Husoy	Skeena-Queen Charlotte Regional District
Steve Carpenter	NBBC
Abe Vanderhorst	
Dan Sewell	Recreational

Recreational Workshop

Dave Narver	B.C. Wildlife Federation
Wayne Harling	B.C. Wildlife Federation
Velma McColl	Sport fishing Institute
Tim Cyr	Sport fishing Institute
Deane Strongitharm	Sport fishing Institute
Bob Wright	Sport fishing Institute
Brent McCallum	Sport fishing Institute
Gerry Kristianson	Sport fishing Institute
Bob June	Hakai Beach resort
Harley Elsts	Sport Fish Advisory Board
Dan Edwards	Director, West Coast Sustainability Association
Kendall Smith	Northern Troll Association
Bill Degrief	Northern Troll Association
Ken Erikson	Pacific Coast Fishing Vessels Owners Guild
Greg McDougall	SFI Harbour Air Ltd.
Dan Sewell	Sports Fish Institute
John Brockley	Sports Fish Advisory Board
Tom Davis	Sports Fish Advisory Board
Roy Alexander	PSC
Ron Parke	GTA
Dave Boyes	Fisherman

Appendices

6.3

Sectoral Workshops — October 4 and 5, 1996 cont'd

Observers

Name	Representing or member of
Darcy Mitchel	University of Victoria
Elizabeth Wipfli	Province of BC MAFF
Gerry Kristianson	Sport Fishing Institute
Norman Dale	Co-Ordinator for Review of Mifflin Plan
Diane Lake	Communications, DFO - Vancouver
Ken Roeske	DFO - Ottawa
Tom Bird	DFO - Vancouver

Consultants and Others

A.W. May	Intersectoral Allocation Advisor
Jim Feehan	Memorial University of Newfoundland
Edwin Blewett	EB Experts Inc., Consultant
Philip Meyer	Meyer Resources Inc., Consultant
Timothy Taylor	Taylor & Associates, Consultant
Mary Hobbs	DFO - Vancouver

Appendix 7

British Columbia Salmon Fisheries: Stock Outlook 1996-1999

Prepared by DFO, Pacific Region, April 19, 1996

Annual salmon production in British Columbia is highly variable among years. The variability is caused by natural cycles in the abundance of some stocks and changes in the freshwater and marine environments that affect salmon production. Examples of the latter include changes in the physical characteristics of marine systems that are cyclical in nature and have a period of several decades (leading to extended periods of above or below average production). Superimposed on the long term changes are more unevenly distributed climatic events like El Nino, and periodic flooding of salmon spawning grounds.

Forecasts of salmon returns are estimates and as such, are always associated with a level of uncertainty. The uncertainty is caused in part by unanticipated changes in the freshwater or marine environment or unanswered scientific questions about the effect of these changes on salmon production. Uncertainty in future returns is also introduced through the use of other variables, such as spawning escapement and smolt production, that are estimates and are used to forecast runs. In general, the reliability of salmon forecasts declines as the forecast period is extended further into the future. For example, we are more certain about the probable number of sockeye returning to the Fraser River next year than we are about the number returning in 2006. Further, as a consequence of having more reliable data, forecasts tend to be more accurate for the largest stocks. For purposes of this report, projected returns in 1996 are referred to as forecasts. Projected returns for 1997 through 1999 are referred to as expectations and are less reliable than forecasts.

It must be emphasized that we are in a period of rapidly changing conditions in the marine environment and that the effect of these changes on production is very uncertain. In this regard, actual returns for 1997 through 1999 may be considerably lower than the expectations described below, particularly for stocks originating from the southern coast on British Columbia.

Appendices

SPECIES OUTLOOK FOR 1996-1999

SOCKEYE

North Coast	Average to Below Average
Central Coast	Below Average
South Coast	Average to Below Average

PINK

North Coast	Below Average to Average
Central Coast	Below Average
South Coast	Average

CHUM

North Coast	Below Average
Central Coast	Below Average
South Coast	Average

CHINOOK

North Coast	Below Average
Central Coast	Average
South Coast	Below Average

COHO

North Coast	Below Average to Average
South Coast	Below Average

SOCKEYE

Sockeye production in British Columbia is derived primarily from the Fraser and Nass/Skeena river systems. A group of intermediate size stocks in Barkley Sound, Rivers Inlet and Smith Inlet also make significant contributions to total annual sockeye production.

The Fraser River is the single largest sockeye production system in British Columbia and is dominated by a four year cycle in the abundance of returns. The 1996 cycle year (i.e. 1996, 1992, 1988,...) is the smallest of the four and total returns in 1996 are forecast to be low. There is a 50% probability that the total 1996 sockeye run to the Fraser will reach 2.7 million fish. There is a 75% probability that the run will reach 1.6 million fish. Production should increase in 1997 and peak in 1998 with expectations in the range of 7-12 million and 10-20 million respectively. Production should decline in 1999 to 6-10 million fish. However, as previously noted, the reliability of salmon expectations decline as stock projections are extended into the future.

Appendices†

Production of sockeye from the Nass/Skeena system should be well above average in 1996 with a forecast return of 4 million fish, similar to the return in 1995. It is anticipated that production may decline beginning in 1997 and continue at low levels through 1999 due to **serious** prespawm mortalities resulting from a parasite problem in 1994 and 1995 in the enhanced Babine stocks. In contrast, the below average sockeye production evident in recent years in the Barkley Sound, Rivers Inlet and Smith Inlet systems is expected to continue in 1996 and persist through to 1999. Forecast 1996 returns to Rivers Inlet and Smiths Inlet are 0.45 and 0.35 million sockeye respectively, although there is a high degree of uncertainty associated with each of these estimates.

PINK

Pink salmon production in British Columbia is dominated by returns to the Nass and Skeena river systems, the central coast and the Fraser River. Pink production is not as strongly linked to spawning escapement as it appears to be for other salmon species.

The pink return to the Nass and Skeena river systems is anticipated **to be very low** in 1996 and possibly in 1998. The forecast/expectation for both years is approximately one to two million fish. Returns will be in the average to above average range for 1997 and 1999 (assuming average survival rates) with expectations of six million fish. Pink returns to the central coast will remain below average from 1996 through 1999. The forecast 1996 pink return to Area 8 is approximately 1.5 million fish.

As a result of the natural cycle in production, pink salmon only return to the Fraser River in measureable numbers in odd-numbered years. As such, **there will be no significant pink production in 1996 and 1998**. Expectation for 1997 and 1999 are expected to be average and in the range of 10-20 million fish.

CHUM

Chum salmon production in British Columbia is distributed throughout the entire coast.

Chum production from Queen Charlotte Islands will range from average to below average for the 1996-1999 period. Production from the Skeena and Nass river systems, particularly Portland Canal, and the central coast will remain **well below average throughout the same period**. Fraser River and other south coast chum stocks are expected to return in average abundance from 1996 through 1999.

CHINOOK AND COHO

Forecasts of abundance are generally not prepared for chinook and coho salmon. Rather these species are managed on a harvest rate or other basis. However, based on historical escapement patterns, some generalizations can be made regarding future expectation.

Appendices

Chinook returns to the west coast of Vancouver Island were very low in 1995 and will continue to be so in 1996. Returns to other south coast stocks were generally as expected although there **is significant concern** for the abundance of chinook from the Quinsam/Campbell, Puntledge and Harrison stocks. Spawning escapement for some south coast chinook stocks (excluding those from the west coast of Vancouver Island) increased in 1995 continuing a pattern that began in the mid 1980s. **However, production will probably remain below the long term average from 1996 through 1999.** Production elsewhere will fluctuate around average on the central coast and in the Nass and Skeena river systems.

Coho production in British Columbia has been marked by declining spawning escapement and reduced marine survival in recent years. As a consequence, production from 1996 through 1999 is expected to be below average. This is particularly true for the early-run upper Skeena River and Strait of Georgia stocks. Returns for other North and Central coast stocks are uncertain but are expected to be better than the upper Skeena stocks. Although spawning escapements increased to many of the south coast stocks in 1995 this was due primarily to a significant reduction in harvest rate rather than an increase in production.

SUMMARY

As previously emphasized, expectations beyond 1996 are somewhat speculative and are likely to be affected by rapidly changing marine environmental conditions. Initial indications are that the changing conditions **may** enhance coho and chinook production but lead to declines in the production of sockeye, pink and chum salmon.

In summary, due to rapidly changing conditions in the marine environment and the uncertainty surrounding the effects of these changes on salmon production, actual returns for 1997 -1999 may be considerably lower than the expectations described in this document.