

CHAPTER 13

OTHER INDUSTRIAL DEVELOPMENT POLICIES

*...we are pinning our faith in... a stable,
secure future in a prosperous industry.*

UNITED FISHERMEN AND ALLIED WORKERS UNION¹

The preceding six chapters have dealt with governmental policies for licensing access to fish resources and regulating commercial fishing fleets. In this chapter I consider other areas of governmental intervention that influence development of the fishing industry. These include additional controls on commercial fishing, aid for vessel construction, regulation of the processing industry and controls on marketing.

OTHER COMMERCIAL FISHING LICENSING ARRANGEMENTS

The main instruments for regulating the commercial fishery are the licences that provide access to the resources. But in addition to these, dealt with in earlier chapters, the Department has evolved other types of licences that warrant review. The most important are the personal licences required of all commercial fishermen and the licences issued to vessels that transport fish.

Personal Commercial Fishing Licences

A long-standing element of the regulatory system for commercial fisheries is the licence required of all persons who fish on commercial fishing vessels. The regulations under the Fisheries Act specify that to qualify for one of these licences a person must be a Canadian citizen or, if not a citizen, one who has served in the Canadian armed forces or has been a permanent resident in Canada for less than three years. The number of licences issued is unrestricted.

In my Preliminary Report I reviewed the rationale for these licences and suggested that a strong case could be made for abolishing them, but I postponed making a firm recommendation until this report. Since then, the commentary I have received on this question has strengthened my conclusion that the licences serve no justifiable function.

First, these licences were introduced many decades ago under quite different circumstances from those that prevail today. Apparently, they were originally intended to exclude certain ethnic groups, who were denied citizenship, from the fisheries. Today, the original policy objective no longer exists. Regulations for governing the employment of noncitizens are provided under the Immigration Act, so special rules for the fishing industry are redundant.

Second, the licences are no longer needed as an enforcement tool. Today, with all fishing regulated under specific privileges in the form of licences and permits, the full onus of responsibility for any infractions should be on the holders of these fishing privileges, not on the individuals employed by them. This, of course, is the practice in other industries that use Crown resources.

Third, these licences are not appropriate means of raising revenue from the fisheries. The fee for these licences was recently doubled from \$5 to \$10 on the grounds that the former fee (which yielded a total revenue of roughly \$95 thousand) was insufficient to cover the cost of administering them. Today the cost is undoubtedly greater. The revenue could be raised at much lower cost as an increment to other fees and charges proposed in this report, and the manpower and financial resources now expended in administering these licences could be directed to much more useful purposes.

Finally, testimony at my hearings and meetings has revealed that the personal commercial fishing licence is the source of much inconvenience, especially to fishermen in communities where there is no resident issuing officer. Fishermen must often travel considerable distances to an office of the Department and then, if an officer is not readily available or if the fisherman is unable to produce sufficient evidence of citizenship, they are inconvenienced further. Moreover, cases recur of fishermen being unable to produce their licences on demand because they have misplaced them or deliberately refrained from carrying them in wet fishing conditions. This has led to charges, or more often, to friction with the authorities.

In short, these licences can no longer be justified and should be abolished as an anachronism of fisheries policy. I therefore recommend —

1. Personal commercial fishing licences should be abolished.

I understand that some of these licences were issued last year for five-year terms. Holders of these should be rebated their unused portion.

Regulating Fish-Packing Vessels

Packers are vessels that transport fish from the fishing grounds and fish camps to processing plants. Packer

boats and barges have a traditional place in the salmon industry, and are used in the roe-herring fishery as well.

At present any vessel that is licensed for fishing may be used as a packer, with no additional licence required. Other vessels may be issued special packer ("D") licences, which authorize them to pack if they meet requirements regarding their construction and fish processing capability. These licences are issued annually for a fee of \$10, and their number is unrestricted. In 1980-81, 192 packer licences were issued.

Over the years, the dependence on packers has diminished for several reasons.² One is the increase in size and seaworthiness of fishing vessels, which enables them to deliver their own fish. A second is the progressive shortening of weekly fishing times (resulting from expanding fleets) enabling fishermen to deliver fish between openings. A third is the decreasing proportion of the fleets controlled by the processing companies, so that more fishermen seek out and deliver their fish wherever they can obtain the highest price. A fourth reason is that developments in other forms of fish transport have reduced the need for packers; transportation by truck or even aircraft is sometimes faster or more economical.

These trends have created concerns about the future place of packers and tendermen. But it would not be in the broad public interest for the Department to intervene directly to obstruct this gradual evolution of the industry. It should confine its activity to maintaining standards of vessels that handle catches to protect the quality of fish at sea, as it now does through packer licences. I therefore propose only a change in the licence fee to bring it into line with my other licensing recommendations.

2. **The Department should continue to issue licences to fish packers not otherwise licensed to carry fish, providing they meet established quality control standards. The fee for packer licences should be raised to \$50.**

The fleet rationalization I propose in earlier chapters could have the result of reducing, if not reversing, the recent decline in demand for packing services.

SUBSIDIES FOR VESSEL CONSTRUCTION

An obvious reform needed to provide consistency between other government programs and fisheries policy is the removal of subsidies that encourage construction and rebuilding of fishing vessels. It is incongruous for the government to provide financial incentives to build new fishing vessels when the overriding problem is one of too much fishing power, particularly when almost the entire fishing industry disapproves of the subsidies, as is the case on the Pacific coast at least. In 1980, the government was advised (not for the first time) to eliminate "perverse subsidies" to those who construct new fishing vessels.³

The overwhelming weight of opinion expressed at my public hearings was consistent with that position, and my Preliminary Report last year contained strong recommendations for immediate removal of direct and indirect subsidies for vessel construction. Since then, the Minister has announced his support for these recommendations, but beyond this no action has been taken.⁴

The general policy position of the Department is that no subsidies will be paid to support construction of vessels to be used in the Pacific fisheries. This is an improvement over previous policies, under which vessels were subsidized heavily; however, it is contradicted by policies of other federal government departments.

The most important of these direct and indirect subsidies are the following:

- i) The Department of Industry, Trade and Commerce provides a subsidy to Canadian shipyards of 9 percent of the approved cost of constructing or converting vessels greater than 75 feet in length. These shipyard subsidies are normally passed on to those who contract for new vessels.

I have been informed by the Department of Industry, Trade and Commerce that during the last 3 fiscal years (which were depressed years for fishing vessel construction) subsidies were provided for constructing 32 vessels intended for fishing on the west coast, and they amounted to \$5.7 million.⁵

- ii) The Income Tax Act permits investors to deduct a varying fraction of the cost of new investments from their tax otherwise payable in the year of acquisition. A tax credit of 10 percent is provided for designated equipment on new fishing vessels.⁶ This is a deduction from tax payable, not from taxable income, and so is much more valuable to a taxpayer than a standard deduction of the same amount.
- iii) Ordinarily, the Income Tax Act allows fishing vessels to be depreciated at a rate of 15 percent, but new vessels built in Canada can be depreciated at an accelerated rate of 33 $\frac{1}{3}$ percent. This rate can be claimed on a "straight line" basis, and the result is to shelter from tax an amount of income equal to the full cost of a new vessel in as little as three years, whereas it would ordinarily take seven years.

These arrangements provide an incentive for fishermen, especially those in high income brackets, to invest in new vessels in order to shelter incomes from tax.

- iv) The Department of Fisheries and Oceans, under the Fisheries Improvement Loans Act, guarantees Fisheries Improvement Loans of up to \$150 thousand from banks to fishermen for the purchase, construction or improvement of vessels. The subsidy element

in these loans is mainly in the favorable interest rate of one percent above the prime rate.

In the fiscal year 1980-81, 415 loans were extended under this program to vesselowners on the Pacific coast, of which 238, amounting to \$11.8 million, were for the purchase or construction of vessels. At the end of March of this year, some \$68 million in guaranteed loans was outstanding, of which about 80 percent were held by vesselowners on the Pacific coast.⁷

The Department can be called on to honour the guarantees if fishermen default on their loans. In recent years claims have ranged from \$200 to \$400 thousand annually, and recoveries on the claims paid have been low. The number of loans in default has apparently increased sharply in recent months because of high interest rates and other economic conditions. Calls on the Department's guarantees can be expected to rise in consequence.

- v) The Federal Business Development Bank has a program of loans to provide fishermen with working capital and with capital for purchasing boats and equipment. In July of this year, 116 loans were outstanding to the west coast fishing industry, amounting to \$4 million, of which \$450 thousand was authorized during the last fiscal year.⁸ To the extent that borrowers are given credit they might not otherwise obtain or that the interest rates charged are lower than they would otherwise have to pay, this loan program encourages investment in the fishery.
- vi) The Small Business Development Bond program, extended last November to include unincorporated businesses, provides assistance to businesses in financial difficulty. Under this program, the banks can convert from \$10 to \$500 thousand of fishermen's debt into Small Business Development Bonds, for which the interest charged is only 2 to 4 percent above half the bank prime rate. Interest paid by bondholders is not deductible from income for tax purposes. About 500 fishermen on the Pacific coast are currently included in this program, holding bonds amounting to about \$70 million.⁹ Because eligibility for these bonds is limited to those who are in serious financial difficulty, they do not encourage new entrants into the fishing industry, but they sustain some who could not otherwise continue.

In addition to these programs, there are special assistance programs for Indians (described in Chapter 12) and a wide variety of other federal and provincial support programs directed toward manpower training, processing, technology development and insurance. Since many of these have a well-defined and defensible social purpose, they are beyond the scope of my concern here,

which focuses on programs that stimulate general expansion of the already overexpanded fishing fleets.

It is not possible to quantify the impact of all these subsidies; some are part of national programs that do not isolate fishing vessels on the Pacific coast, and the effect of many is indirect. But the direction of their impact is clear. They encourage vessel construction and expansion of fishing capacity, thereby aggravating the complicated problems of controlling fleets. They are a wasteful use of taxpayers' money that is urgently needed to deal with other fisheries management problems described in this report. They should therefore be abolished without further delay.

3. General subsidies in the form of tax credits, accelerated depreciation allowances, subsidies to shipbuilders and loan guarantees should be immediately terminated insofar as they apply to fishing vessels used on the Pacific coast.

In Chapter 9 I recommended that no more commercial fishing licences should be issued for newly constructed vessels for the time being; this will forestall some of the impact of these subsidies. But many of them apply to vessel improvements as well, and some of them support acquisitions of secondhand vessels. Now, while few new vessels are being built, is the appropriate time to abolish subsidy arrangements that threaten to frustrate future gains from fleet rationalization and improved economic conditions.

UNEMPLOYMENT INSURANCE

Although fishermen are not employees in the usual sense, and are not normally paid a wage, they are nevertheless covered by the unemployment insurance system. This is a result of a special amendment to the Unemployment Insurance Act in 1956,

...providing for the extension of the act to persons engaged in fishing notwithstanding that they are not employees of other persons, and for including as an employer of a fisherman any person with whom the fisherman enters into contractual or other commercial relationship. . . .¹⁰

Thus, for purposes of unemployment insurance, a fisherman is considered an employee of whomever buys his fish, and the buyer must pay the employer's share of the contribution to the unemployment insurance fund.

The unemployment insurance provisions for fishermen are complicated and controversial, and were the subject of much criticism at this Commission's hearings. But the insurance scheme is a national one and raises fundamental issues of social policy that go well beyond the scope of this inquiry. It would be inappropriate for me to propose

changes in its application to commercial fishermen in the Pacific region in isolation. So, I confine my commentary to problems that have been brought to my attention without making specific proposals for altering the program.

First, some fish buyers complain about the complications and cost of administering contributions. Because the amounts due in respect of each fisherman varies and a fisherman often deals with more than one buyer, the administrative load is heavy.

Second, it is frequently pointed out that because the fishing season is short for most fishermen, their benefits far exceed their contributions. In the most recent period covered by seasonal benefits, Pacific coast fishermen received \$13.3 million; and fishermen's contributions amount to less than 5 percent of the benefits received.¹¹ The resulting drain on the unemployment insurance fund is sometimes seen as a subsidy to the fishing industry, encouraging participation in an overcrowded activity.

Third, benefits are paid without regard to the fisherman's total earnings. Some earn high incomes from fishing and others receive earnings from other occupations. So the benefits are not consistently paid to those in need in the usual sense.

Fourth, the criteria for eligibility for seasonal benefits puts pressure on the Department to alter fishing periods in order to enable fishermen to obtain the required number of stamps. In order to qualify for benefits between November 1st and May 15th (the most relevant period for fishermen), a fisherman must have had a minimum of 10 to 14 weeks of insurable employment during a specified preceding period. As a result, fishermen press the Department to provide fishing opportunities in the required number of weeks, leading to what are commonly referred to as stamp fisheries.

This last is the feature of the unemployment insurance system that bears most directly on fisheries policy. As I explained in Chapter 4, the Department has a heavy responsibility to design fishing plans and to regulate fishing during the season, to meet the needs of resource management and conservation. It should not be distracted from this duty by provisions in the unemployment insurance program.

These are complicated problems, and should be reviewed in the full context of the unemployment insurance system in Canada. I therefore recommend —

4. **The Unemployment Insurance Commission should review the unemployment insurance provisions for fishermen, taking full account of the circumstances of the commercial fisheries of the Pacific coast and their management requirements.**

A related matter raised by some participants at the Commission's hearings is the desirability of catch insurance for fishermen.¹²

Such arrangements are well developed in some other countries, and the Department has supported catch insurance arrangements for some fisheries on the Atlantic coast. Advisors to the Minister suggested in 1973 that such arrangements be considered for the Pacific salmon fishery, but so far, this has not been done.¹³ Yet the major Pacific fisheries, which generate such volatile earnings, seem particularly well suited for catch insurance for fishermen. Thus I recommend —

5. **The Department, in consultation with the Pacific Fisheries Council, should investigate the desirability and feasibility of catch insurance for fishermen engaged in Pacific fisheries.**

THE PROCESSING INDUSTRY AND ITS REGULATION

Pacific coast fish are processed into a variety of products and marketed widely. The processing industry, consisting primarily of canning, freezing and curing operations, is linked to primary fishing activities through fish markets and vessel ownership. In the following paragraphs I describe the basic features of the industry and how it is regulated.

Dimensions of the Processing Industry

Fish buyers and processors are licensed by the Province of British Columbia under its Fisheries Act,¹⁴ and the numbers licensed in both categories in 1980 are shown in Table 13-1. The number of processing companies active in the industry is smaller than the number of licences issued because some firms operate more than one plant and a separate licence is required for each. In 1980 there were 77 processing firms, 41 of which processed fresh salmon, 42 frozen salmon and 13 canned salmon, while 17 firms processed roe herring (but even the firms in each of these categories are not mutually exclusive).¹⁵

Table 13-1 Fish buyers' and processors' licences issued in 1980

	number of licences issued ^a
salmon cannery	18
fish cold storage	92
fish processor	179
fish buyer	672
other	175
total	1,136

^a Figures refer to licences issued in the fiscal year ending March 31.

Source: Marine Resources Branch, Ministry of Environment of British Columbia.

The numbers of licences for all categories except canneries have increased during the last few years. Fish buyers have increased particularly rapidly, reflecting in part an influx during the late 1970s of so-called cash buyers (often associated with foreign interests), who purchase and pay for fish on the fishing grounds. They are

not usually involved in canning and therefore often compete only for the best-quality fish for freezing. However, most fish are purchased by long-established processing companies or their agents. Between 1973 and 1977 these processors, who are involved in canning as well as fresh and frozen sales, accounted for 95 percent of the purchases of raw salmon.¹⁶

Processing roughly doubles the landed value of fish catches. In 1980, the wholesale value of processed products produced exceeded \$400 million, as shown in Table 13-2. Some \$290 million, more than 70 percent of the total, was accounted for by salmon products. This includes some fish imported from the United States for processing in Canada. Roe-herring production accounted for 10 percent of the total, but production in 1980 was only about half the level of preceding years because of a lengthy strike.

Table 13-2 Value of fish products produced on the Pacific coast

	wholesale value in 1980	
	(\$ millions)	(% of total)
salmon		
canned	146.8	
fresh	10.4	
frozen	109.3	
roe	13.2	
other	9.3	
total	289.1	71
roe-herring ^a		
roe	33.1	
spawn-on-kelp	2.4	
frozen for roe	1.1	
total	36.6	9
food and bait herring		
frozen for food	7.2	
bait	1.6	
herring by-products	2.8	
total	11.6	3
halibut ^b	11.7	3
other groundfish	34.9	9
shellfish and invertebrates	14.9	4
other species	5.1	1
TOTAL, all products	\$403.9	100

^a Value of roe-herring production in 1980 was low because of a strike. The average in the preceding eight years was \$70 million.

^b Includes halibut landed by Canadian fishermen in U.S. ports.

Source: Compiled from Fisheries Statistics of British Columbia 1980. Economics and Statistical Services, Fisheries Management, Department of Fisheries and Oceans, Vancouver, 1981.

In recent years the number of enterprises serving the fresh market has increased considerably; and the volume of salmon processed into fresh or frozen products has increased, while the volume canned has declined somewhat. The number of roe-herring processors has under-

gone a dramatic rise and fall, from 21 in 1975, to 42 in 1979, down to 17 in 1980.

Recent fluctuations in numbers of salmon and roe-herring processors and buyers have been triggered mainly by changing market circumstances in Japan. The majority of those that entered and exited were small firms, and they had little effect on the general pattern of control in the processing industry.

Industrial concentration Processors range from small specialized firms to the large integrated operations that produce most fish products. A small number account for most of the production, however. (A recent study indicated that the three largest firms (excluding cooperatives) accounted for more than half of all salmon purchased.¹⁷) But a significant portion of the catch never enters the market: in the salmon and herring fisheries, the landings recorded by vessels owned by processing companies, by members of fishermen's cooperatives and by others who have made advance commitments to buyers are not subject to arms-length transactions.

The industry originally consisted of a large number of canneries scattered along the coast near major fishing grounds, but it is now consolidated into a few large processing facilities near the major population centres, with only a few plants in remote coastal locations.¹⁸ As this geographical realignment took place, ownership of the industry became concentrated in the hands of a few large integrated operations.

The degree of corporate concentration in the processing industry is indicated in Table 13-3, which shows the salmon and herring roe production accounted for by the largest producers. The industry is most concentrated in the canned salmon sector, where the 4 largest firms account for 82 percent of the total output. Concentration is much lower in fresh salmon processing, and has been decreasing as this sector has grown in recent years. The 4 largest firms processed less than 40 percent of output in 1980, down from 57 percent 5 years earlier. Concentration in herring roe production appears almost as high as in canned salmon, but the figures shown for 1980 exaggerate this because a strike that year interrupted supplies to many firms.

Table 13-3 Share of production of salmon and herring products accounted for by the largest firms in 1980

	in 1980				herring roe
	salmon			all products	
	fresh	frozen	canned		
	(percent of all production)				
two largest firms	23	54	68	49	70
four largest firms	39	63	82	62	84

Source: Unpublished data from the Department of Fisheries and Oceans.

In 1980 the largest processor, British Columbia Packers Limited, increased its share of salmon processing capacity from about 33 percent to about 42 percent through acquiring assets from the Canadian Fishing Company Ltd.¹⁹ These included vessels, vessel servicing facilities and processing capacity. In addition, in the last few years a number of bankruptcies and mergers involving smaller firms have occurred. These latter developments, and not internal growth of the largest companies, account for most of the increased concentration of the processing industry.

The salmon canning industry is clearly highly concentrated. However, there is no clear evidence that the existing structure is an impediment to industrial efficiency, and in view of Canada's limp competition policy I cannot advocate restrictive controls on the fishing industry in isolation. The current degree of concentration in the canning sector would be cause for greater concern were it buttressed by artificial barriers to new entrants through licensing or control over resource supply. But, as I describe below, the dominant canning companies' control over fish supplies is relatively modest and decreasing, and provincial licensing of processors does not restrict entrants.

Vertical integration Since the beginning of the fishery on this coast, processing companies have maintained their own fleets, renting or chartering vessels to fishermen, many of whom are Indians. In Chapter 9 I described arrangements between the Minister and the Fisheries Association of B.C., whose members agreed not to increase their share of the salmon fleet at the inception of the limited-entry licensing program in 1969. Since then, the consistent trend has been for processors to dispose of their interests in fleets, and this trend may well continue.

We want to leave primary fishing entirely and concentrate on the processing side. Entrepreneurial captains owning their own boats can do a better job of getting fish out of the water and controlling their costs than we can.²⁰

In general the processing industry appears to be depending more on market competition for fish and less on the traditional means of securing fish from their own or tied fleets. This is a desirable trend, which should enhance the vigour and competitiveness of the industry.

Moreover, I have made recommendations in Chapter 8 calling for limits on licence holdings to forestall any reversal of these trends that might lead to undue concentration of fishing privileges. Those restrictions will ensure that processing companies now holding substantial fishing privileges do not increase their shares, but they will accommodate new companies, cooperatives or other

ventures as long as the proposed limits are adhered to. In order to maintain a vigorous and competitive industrial structure, the Department should monitor licence holdings carefully to ensure that those limits are not exceeded.

Fish Prices and Markets

To complete this description of the Pacific processing industry, the following paragraphs briefly review fish pricing and product markets.

Determination of fish prices The prices paid in the two major fisheries, salmon and roe-herring, are heavily influenced by pre-season negotiations between representatives of fishermen and processors. Fishermen are represented mainly by the United Fishermen and Allied Workers Union and the Native Brotherhood of British Columbia, and processors, by the Fisheries Association of British Columbia. Minimum prices are negotiated for salmon caught with net gear, though in recent years the prices paid have often risen above these minima as a result of strong market demand and the influence of cash buyers. The prices paid for salmon landed with troll gear are not negotiated, and they are generally higher than prices for net-caught fish, depending on species and quality.

The landed prices paid for salmon do not represent the full payment for the catch because of significant post-season bonuses paid to vesselowners. These payments serve to strengthen ties between fishermen and particular buyers; and, because bonuses are not necessarily subject to division between the vesselowner and the crew, they tend to bolster the return to vesselowners. (The traditional share system for seine vessels provides 7/11ths of the earnings to the crew, with the remainder going to the captain and owner of the vessel.) Bonus payments have been paid to gillnetters as well as seiners, and recently to some trollers.

Because the roe-herring industry is relatively new and has been turbulent, it is difficult to speak of a normal process of price determination. And in the late 1970s, eager cash buyers drove roe-herring prices well above the levels contemplated when the pre-season price agreements were concluded. The United Fishermen and Allied Workers Union and the Native Brotherhood negotiate an amount to be paid to crews (not the full landed price).

In other fisheries, prices are determined more flexibly in response to market supply and demand. Most halibut are sold through long-established exchanges in Prince Rupert and Vancouver, in which buyers post bids and sellers negotiate sales, often before the fish are landed. The prices of other species also fluctuate with market conditions between and during the fishing seasons.

In addition to landed prices and bonuses, some processors provide fishermen with services at less than cost.

These include packing and collecting services, boat and gear storage, repair facilities, credit and capital financing, and commitments to purchase all fish delivered. This practice is particularly important in the salmon fishery, but it appears to have been declining in recent years as fishermen have become more independent and prices have become increasingly influential in determining the distribution of fish.

Product markets Fish processors on the Pacific coast have little influence over the prices they receive for their products. They produce only 13 percent of the world's catch of Pacific salmon, of which roughly 70 percent is exported, some 44 percent to Japan in the form of frozen salmon. But this accounts for only 11 percent of Japanese frozen salmon imports and a considerably smaller share of the total Japanese consumption. The market share of Canadian producers in other export markets such as Britain and Europe is also low. Thus —

Canada's (B.C.) position in supply and market is by no means dominant - it must react to resource and economic realities related to the harvests in other countries.²¹

Sales in the domestic market are very sensitive to retail prices. Salmon and most of the other fish produced on the Pacific coast are luxury foods, which are not a major component in the diet of most Canadians; so price increases will induce them to shift to meat, poultry and other substitutes.

All this implies that producers have little market power. Moreover, they are highly vulnerable to external economic circumstances such as supplies from elsewhere, changing exchange rates and world economic conditions.

Products other than salmon have narrower markets. Herring roe is sold almost exclusively in Japan, where a volatile market has created highly unstable conditions in the Canadian roe-herring industry. In this market as well, Canadian suppliers have little influence on price.

Groundfish, other than halibut, are of much lower value and hence are not sold in distant markets. Some 60 to 70 percent of the groundfish produced on the Pacific coast is sold in Canada, the rest almost entirely exported to adjacent markets in the United States. The minor products serve a variety of specialized markets. Geoducks are sold almost entirely in Japan, as are most abalone; mussels are sold mainly in Europe, while shrimps, prawns, crab and other shellfish are sold mostly in Canada.

Some participants at the Commission's hearings expressed anxiety about possible intervention by the government in marketing fish products, apparently resulting from governmental controls on the Atlantic coast. I see no useful purpose to be served by direct governmental

involvement in marketing fish on this coast, and in view of the concern about this matter I specifically recommend —

6. **The government should not become directly involved in marketing fish products produced on the Pacific coast.**

Regulation of Fish Buying and Processing

Under the Canadian constitution, the federal government has authority to license fish buying or processing only at sea. For this purpose the Department issues processor "P" licences; but so far only one has been issued.

Shore-based fish buyers and processors are licensed by the Province of British Columbia under its own Fisheries Act. Licences are issued annually and fees are based on the nature and size of the facility. A separate licence is required for each facility operated.

The province places no limit on the number of buyers and processors licensed:

An "open" licensing system will provide for a climate in which competition for raw product can flourish, in which new entrants to the industry can reduce corporate concentration and generally provide for economic efficiencies which will allow the industry to respond to changing market demands.²²

However, some participants in this Commission's public hearings pressed for restrictions on buyers and processors. Some have argued that the influx of additional buyers in the late 1970s, especially of cash buyers, has disrupted fish markets by driving up landed prices, and one participant urged the government to —

... investigate the advantages of tying commercial buyers' licenses to processors as this would prevent the growth of a new "middle-man" level of fish traders which provide no benefit to the fishing industry.²³

That is, only processors would be eligible to buy fish. It has also been suggested that an unrestricted entry policy for the processing sector leads to excess capacity.

In Chapter 7 I explained the need for government policy to regulate entry to common-property fisheries in order to prevent their economic benefits from being dissipated through wasteful fleet expansion. But there is no corresponding need to limit entry to the fish buying and processing industry because there is no common property problem: these operators deal with fish after they have been landed and so have become the property of fishermen. In this respect, these sectors are no different from any other manufacturing industry, so government does not need to treat them differently. Competition

among firms in the industry, and the opportunity for others to enter if they feel that they can successfully compete, promotes economic efficiency in the use of available resources.

Furthermore, independent fish buyers can perform valuable services to the industry by matching available raw products with the requirements of processors and thus ensure that raw product will flow to those able to use it most efficiently and hence who will pay the highest price. This kind of competitive environment also ensures maximum prices to the fishermen.

The same holds true for fish processing. Some excess capacity is bound to occur in certain sectors at particular times, as new firms enter or as one sector expands (such as freezing) at the expense of another (such as canning) in response to market trends. Parallel circumstances can be expected in any manufacturing industry.

Consequently, I endorse the province's policy of unrestricted entry for both fish buyers and processors. But while new entrants should not be artificially restricted, I see no need either for subsidizing them. The industry appears capable of adjusting to and accommodating the available supplies of fish; and artificial stimulus to expand capacity will only prejudice the competitive position of established firms.

A related concern of some established processors is that the smaller operators "high-grade" the harvest; that is, they buy and process only the most profitable species and grades of fish:

The existence of these "high-graders" is predictably forcing traditional processors to re-evaluate their role as a market for all fish from all fishermen. . . . Standards cannot be so onerous that they effectively restrict all new entries, but they should certainly be at a minimum level requiring a serious investment in processing facilities and a year-round commitment to be a complete market for a distinguishable class of fishermen.²⁴

Public policy should not discourage specialized processors, however. If each processor were required to provide a market for all fish from all fishermen, potential efficiencies of specialization in the industry would be lost. Processors should be free to participate in any sector of the industry and to specialize in any product. This competition helps to ensure that resources are used most efficiently and will generate maximum net returns.

However, the pricing arrangements for fish aggravate the difficulty the large producers face in competing with the so-called independents. The negotiated prices for more valuable species are apparently sometimes lower than their value, to offset higher prices for low-valued

species. And, as I explained above, pre-season bargained prices for net-caught salmon do not discriminate among grades, and the large buyers (who are traditionally committed to their best fishermen to never refuse any fish) sometimes take poor-quality fish at a loss. This suggests a need for more discriminatory price negotiations and a grading system for landed fish, as I propose below.

PRODUCT QUALITY REGULATION

Primary responsibility for maintaining standards of quality of fish products rests with the Inspection Division of the Department's Field Services Branch. Its role is to ensure that fish products meet health standards and requirements relating to grading and labelling, and to promote improvements to industry practices.²⁵

The Department's legal authority for much of this work derives from the Fish Inspection Act,²⁶ which provides for inspection of fish products that are traded inter-provincially and internationally. But it administers other related federal legislation as well.²⁷ As I explain in Chapter 18, the province is responsible for standards of products produced and marketed entirely within British Columbia; but its relevant legislation, the British Columbia Fish Inspection Act,²⁸ is also administered by the federal authorities.

To ensure that fish products meet health standards, the Department's Inspection Division routinely tests samples for bacteria and contaminants. A special coordinator is concerned with controlling paralytic shellfish poison. All imported fish products are subjected to rigorous inspection as well.

The division also periodically inspects vessels licensed to fish and pack fish and facilities for unloading, handling and transporting fish to ensure they meet specified standards.

Processing and packing plants in British Columbia are licensed by the province, but since most export some of their production, they require federal certification. The Department enforces both federal and provincial regulations relating to their construction, equipment and operations.

The Department's fish quality improvement program includes efforts to improve fish handling practices on vessels, to upgrade the quality of fish frozen at sea, to improve quality control in processing plants and to design new regulations. In cooperation with the industry, the Inspection Division is attempting to develop grade standards for final products. And, to facilitate international trade through establishing processing and product standards, the division is participating in the Codex Alimentarius Commission of the United Nations.

In 1981-82 the Inspection Division was allocated 64 person years (not all of which were filled) and a budget of \$1.8 million.

Product Inspection and Quality Control

The Department and the fishing industry recognize the extreme sensitivity of fish markets to the product's reputation for high health standards. The industry is particularly vulnerable to deficiencies in the quality of canned salmon products. Thus, the Department's role in ensuring that standards of quality and health are consistently met is important to the whole fishing industry. Moreover, many countries require that imported fish products be certified by a recognized authority as having met specified processing and quality standards. The Department meets this requirement by certifying exports (which, incidentally, enables exporters and importers to proceed with financing arrangements).

The Department's performance in protecting product quality appears to have been very good, and its product inspection and certification arrangements are widely respected. In 1981 export certificates were issued for fresh and frozen fish products valued at more than \$100 million and canned salmon valued at \$40 million. The Department's certification of quality undoubtedly helps to ensure this continuing access to valuable foreign markets.

My investigations suggest that the commercial fishing industry would benefit from the Department's efforts in maintaining quality standards being extended in a couple of respects. The most important relates to the grading of fish landed, especially salmon. At present, salmon are roughly graded in some cases by size and colour. A significant distinction is made between troll-caught and net-caught fish, but this distinction is becoming obsolete with changes in technology and fish handling: fish caught in nets and handled carefully are now often sold as troll fish (which bring a higher price). As a result, the statistics on landings by sectors of the fleet are misleading, and grade distinctions are inconsistent.

The problem is complicated by the present pricing arrangements for net-caught salmon, in which pre-season bargained prices provide for a uniform price for each salmon species. This provides no reward for fishermen and vesselowners who strive for higher quality standards.

In other primary food-producing industries, such as wheat and livestock, governments play a valuable role in supporting quality grading that serves as a basis for pricing. A similar system for grading raw fish, in which variations in fish quality are recognized, would provide incentives for achieving higher standards. This would benefit the fishing industry and also serve the broader public

interest by encouraging the most beneficial use of resources. Accordingly, I recommend —

- 7. The Department, in close consultation with the fishing industry, should explore the feasibility of establishing quality grades for fish landed, with special attention to salmon.**

I emphasize the importance of close cooperation with the industry in this matter. I do not intend that the government become heavily involved in dockside grading or interfere with private marketing processes; it should promote the establishment of grades and leave the industry itself to administer them to the maximum extent possible.

The second opportunity for constructively extending product grading relates specifically to the small food herring industry. In Chapter 10 I noted the sensitivity of foreign markets to the grade of food herring products, yet there are no international standards for them. Although markets for food-herring products are currently weak and while herring bring much higher returns in the roe fishery, this may change in the future especially if foreign buyers can be assured of high-quality food herring from this region.

I therefore recommend —

- 8. The Department should investigate the possibility of establishing product quality standards for food-herring products.**

This investigation should be directed toward establishing standards recognized in international trade, which in this case involves mainly sales to Japan. Thus, it should be conducted in consultation either with the Codex Alimentarius Commission or directly with Japan.

Export Regulation

My major reservation about the Department's approach to quality control in exported fish products is its attempt to use its regulations to restrict export opportunities in the interest of promoting local processing: it apparently restricts exports of frozen sockeye and pink salmon to protect the canning industry; it applies processing requirements on roe and food herring and herring spawn-on-kelp in an effort to increase "labour content"; and it imposes parallel regulations on pollock and certain shellfish.²⁹

These objectives are quite separate from the Department's responsibilities in setting and enforcing product quality standards, and indeed conflict with the objective of enhancing export opportunities. Although pressure from established processors and plant workers to restrict exports of less highly processed products is understandable, to do so is inconsistent with fishermen's interest in high prices and with the public interest in generating the highest returns from resources.

The Department takes satisfaction from the fact that Japanese buyers pay more for the frozen salmon it allows to be exported than they pay for the corresponding U.S. product.³⁰ I fear this may be the result of preventing foreigners from buying anything but the best quality products. But exporting only the best product should not become a policy objective. The purpose should be to assure buyers of the quality of the products they bargain for, but not to prevent them from buying the full range of products produced.

Moreover, the argument that such restrictions provide more employment is apparently exaggerated; studies have shown that the labour content in frozen salmon exports is very close to that of canned salmon. Furthermore, restrictions on fresh and frozen exports reduce the value added in processing in Canada; and the benefits to producers of canned fish are outweighed by the losses they impose on fishermen and other producers.³¹

I therefore urge the Inspection Division to use quality controls to promote market opportunities for fish products, and to avoid using them to manipulate patterns of processing and trade.

- 9. The Department should continue to develop its program of quality certification for exported fish products to ensure that product standards are met; it should refrain from using quality controls as a means of restricting export trade.**

Thus, the fishing industry should be free to respond flexibly to changing market opportunities for fish products.

A related matter is the Department's practice of restricting fishing licences in certain fisheries in an attempt to generate higher prices by controlling the supply of the product available to foreign markets.

...there have been examples of the Department of Fisheries and Oceans developing internally, market misinformation for use in fisheries management. For example, in the mid-1970's the Department determined that the Japanese herring roe market would be damaged if Canada produced in excess of 45,000 tons of roe herring. After industry protestations, the limits were raised to purely biologically safe catches of in excess of 80,000 tons. During that period, herring roe was sold at its highest prices experienced to that date.³²

This objective also lies behind the limitation on herring spawn-on-kelp licences, described in Chapter 10. Although the resources can support a greatly expanded industry, the Department has refused to issue more licences for fear of depressing prices in the Japanese market.

The Department's commercial licensing policy ought not to be concerned with manipulating market power. As I have emphasized in preceding chapters, it should be directed toward providing access to the available resources in a way that will encourage the fishing industry to respond efficiently to market opportunities. (This implies avoiding development of more fishing capacity than needed to harvest the available catch, but this is a separate matter from restricting the available catch itself.)

I therefore recommend —

- 10. The Department should not be influenced by considerations relating to market prices in deciding the appropriate number of commercial fishing licences to be issued.**

Such considerations distort licensing policy and are beyond the responsibility of the Department.

Vessel Inspection

Apart from distributing information about fish handling methods, the Department's vessel-inspection program is confined to ensuring that vessels handling fish are constructed to meet certain specified standards for fish holds and other facilities that enable them to maintain the quality of catches. But even the best-equipped vessel can prejudice fish quality unless it is maintained in a clean condition. Thus, participants in the Commission's hearings have noted that the failure to enforce standards of housekeeping on fishing vessels is a major weakness of the vessel-inspection program. This deficiency should be met by gradually extending the program to include inspections of operational maintenance to meet standards of health and quality on vessels. Thus I recommend —

- 11. The Department should extend its vessel-inspection program to include inspections of operational cleanliness and standards of vessel housekeeping.**

However, having made this recommendation I should note that regulations applied to vessels are only indirect means of improving fish quality. Ideally, attention should be focused on the quality of fish landed. Vessel standards should be used only as an expedient means of forcing the industry to equip itself adequately to handle fish. In the long run, more sophisticated quality grading of landings should replace dependence on regulating the characteristics of vessels.

CONCLUSION

This chapter has dealt with a variety of arrangements that are tangential to the Department's central role in managing fish resources and fishing activity. Some of

these, like maintaining product quality standards, are essential. Some others are, or should be, the responsibility of other governmental agencies, such as the regulation of buyers and processors by the province and regulation of

exports by the federal trade authorities. The Department should resist the temptation to become involved in regulating activities in which it does not have unique expertise or responsibility.

FOOTNOTES

1. United Fishermen and Allied Workers Union, Exhibit #138, p. c-1.
2. United Fishermen and Allied Workers Union, Local 23, Exhibit #192.
3. F.J. Doucet and P.H. Pearse, Fisheries Policy for the Pacific Coast: Issues and Advice. Department of Fisheries and Oceans, Vancouver, 1980, p. 26.
4. Press Release. Minister of Fisheries and Oceans, Vancouver, March 2, 1982.
5. The figures for each of the years are as follows:

fiscal year	number of vessels built with subsidy	total subsidy (\$ thousands) paid
1979-80	14	\$2,216
1980-81	7	1,566
1981-82	11	1,875

These figures exclude vessels constructed for export. These data were provided by the Department of Industry, Trade and Commerce.

6. The deduction is 10 percent of the first \$150 thousand, and 5 percent of the balance.
7. Fisheries Improvement Loans Act, Annual Reports. Department of Fisheries and Oceans, Ottawa, 1981.
8. Figures provided by the Federal Business Development Bank.
9. D. Reid, "The Small Business Development Bond Program." Prepared for the Department of Fisheries and Oceans, Vancouver, 1982.
10. Debates, House of Commons, Session 1956. Volume III, p. 6843.
11. Information supplied by the Departments of Employment and Immigration, and Fisheries and Oceans.
12. Native Brotherhood of British Columbia, Exhibit #198.
13. West Coast Salmon Fleet Development Committee Report. Fisheries and Marine Service, Department of the Environment, Vancouver, April 1973.
14. Fisheries Act, Revised Statutes of British Columbia, 1979, Chapter 137.
15. Records of the Marine Resources Branch, Ministry of Environment of British Columbia.
16. Marvin Shaffer and Associates, "An Economic Study of the Structure of the British Columbia Salmon Industry." Prepared for the Salmonid Enhancement Program, 1979.
17. Shaffer and Associates, "Structure of the British Columbia Salmon Industry." p. 34.
18. See, for example, D.J. Reid, "The Development of the Fraser River Canning Industry 1885 to 1913." Fisheries and Marine Service, Department of the Environment, 1973; Shaffer and Associates, "Structure of the British Columbia Salmon Industry."
19. For the current level of participation in the industry by British Columbia Packers Limited, see Exhibit #98, p. 18.
20. A spokesman for George Weston Limited (parent company of British Columbia Packers Limited), quoted in Financial Times of Canada, May 17, 1982, p. 17.
21. Exhibit #98, p. 16.
22. Commercial Fisheries and Mariculture: A Policy for the 1980's. Province of British Columbia, Ministry of Environment, April, 1980, p. 11.
23. Fisheries Association of British Columbia, Exhibit #63, p. 40.
24. Exhibit #63, p. 39-40.
25. Department of Fisheries and Oceans, Exhibit #184, p. 9.
26. Revised Statutes of Canada 1970, Chapter F-12.
27. Including portions of the Fisheries Act, Food and Drug Act, Consumer Packaging and Labelling Act, Saltfish Act and the Freshwater Fish Marketing Act.
28. Fish Inspection Act, Revised Statutes of British Columbia, 1979, Chapter 136.
29. Exhibit #184, pp. 19-20.
30. D. Wilson, Department of Fisheries and Oceans, transcripts of the public hearings, Volume 62, p. 12976.
31. See R. Morley, "A Benefit Cost Analysis of Export Reduction for Frozen Sockeye in British Columbia." Prepared for the Department of Fisheries and Oceans, 1979; Shaffer and Associates, "Structure of the British Columbia Salmon Industry"; and Marvin Shaffer and Associates, "Economic Management of the Processing Sector." Prepared for the Ministry of Environment, Victoria, 1979.
32. Exhibit #63, p. 10.

Part IV

Indian and Sport Fisheries

CHAPTER 14

THE INDIAN FISHERY

The fishery has been of such importance that it is at the very roots of our cultures; our lives have revolved around the yearly arrival of the river's bounty. And so we cannot talk of the fishery without talking of our cultures because in many ways they are one in the same.

GITKSAN-CARRIER TRIBAL COUNCIL¹

The Indian fishery puts relatively light demands on the fish resources in the Pacific region but it involves issues of profound social, political and economic consequence. It is a complicated and often contentious aspect of fisheries policy. This is reflected in the remarkable amount of testimony this Commission has received on the question of Indian fishing, from Indian bands, tribal councils and individuals, and also from commercial fishermen, sport fishermen and others. Present policies are obviously unsatisfactory in many respects, and most groups stress the urgent need for reform.

The Indian fishery has presented a major challenge for this Commission. The legal underpinnings of Indian fishing rights are subtle and complicated. Neither these nor the traditions upon which they are based are widely understood. Few non-Indians have been exposed, as I have, to the extensive testimony of Indian leaders about their traditional fishing, their economic and cultural dependence upon fish and the problems they have encountered in exercising what they regard as their historical rights to fish. Moreover, because the rich cultural heritage unique to the Indians of this region is not widely appreciated, the task of formulating appropriate policies to accommodate it in relation to other users of the resource is even more difficult.

Furthermore, the Commission's terms of reference restrict me to consider only Indian rights to fish and their implications for resource management. Yet Indian fishing rights are a part of the much larger and more controversial issues of aboriginal rights and land claims, which have yet to be resolved.

A number of stimulating presentations by Indian organizations at the Commission's public hearings have

helped to identify means of alleviating the present deficiencies of Indian fisheries policy and for deepening Indians' involvement in resource management. Certainly some fundamental changes are called for. I perceive promising opportunities for Indians and for improvements in management through a bold new approach to this question.

To bring these issues and opportunities into focus, in this chapter I sketch the historical background of traditional Indian fisheries and examine the available information about the dimensions of this fishery and its impact on the resource. Then I trace the development of regulatory policy and identify the most pressing policy issues. The legal character of the Indian fishery and associated issues were raised repeatedly in the public hearings, so I will review these as well before turning to policy objectives and recommendations.

INDIAN FISHERIES AND POLICY DEVELOPMENT

The present Indian fishery, or the Indian food fishery as it is commonly called, is a continuation of traditional native fishing practices.² The traditional importance of fish extended well beyond its food value, however. Fish were also a major commodity of trade among Indian bands and tribal groups. The pattern of Indian settlement can be traced in large part to the accessibility of fish both on the coast, where permanent villages and seasonal camps were located near fishing grounds, and in the interior, where villages and fishing stations were established on rivers and streams near places where salmon could be easily caught. Today, this pattern of Indian settlement remains in large part unchanged. Seasonal fishing established the annual routine of life, and the runs and catches of salmon were viewed with reverence since fish were the primary means of survival. The great social and cultural significance of fish, especially salmon, is reflected in the important role they play in elaborate traditions of feasts, ceremonies, myths and art.

Indian people devised a wide variety of methods for harvesting fish, adapting their technology to the varying species sought and their physical circumstances. Hooks were fashioned from bone or hardwood and attached to lines made of cedar bark or nettle fibre. Spears, harpoons, dipnets and gillnets were common. Weirs and traps were especially effective in catching salmon migrating upstream to their spawning grounds.

Salmon were usually abundant, but in low-cycle years they were sometimes insufficient for winter food supplies. At such times coastal tribes could turn to groundfish and shellfish to meet their needs, but interior tribes occasionally suffered hunger and starvation. And even in years of abundance, tribal wars sometimes prevented harvests of available stocks.

The fur trade, with its associated forts and trading posts, changed the complexion of the Indian fishery. In addition to furs, Indians were encouraged to barter foodstuffs, including fish, for manufactured goods. Dried salmon rapidly became a staple food among fur traders because of its light weight, preservation qualities and rich food value.

Trends in Indian Fishing

The native Indian population in British Columbia and their harvests of fish, mainly salmon, have undergone long cycles of growth, decline and revived growth since the early 19th century. According to Hudson's Bay Company records, the Indian population in 1835 was estimated to be 70 thousand. But since initial European contact decades earlier, they had suffered from the introduction of new diseases, firearms and alcohol, so the precontact population of the region could have been as high as 125 thousand.³

The Indian population in the province declined dramatically during the next 100 years reaching a low point of about 23 thousand in 1929. Since then, their numbers have gradually increased to some 57 thousand registered in 194 bands by latest count. More than 21 thousand are registered in 96 bands on the Fraser River and its tributaries. On the next 2 largest salmon-producing rivers, the Skeena and Nass, there are 4,000 Indians in 8 bands.

The importance of fish in the traditional Indian society of this region can hardly be exaggerated. According to some estimates, fish comprised three-quarters of the diet of coastal Indians and a large but unknown portion of the diet of interior Indians.⁴ One estimate suggests that before colonial settlement 700 pounds of fish per capita were consumed each year;⁵ this implies a very substantial total catch.

Today, many Indians still depend heavily on fish for food, although their diets are now much more varied. Some continue to fish with traditional equipment, the technical and economic efficiency of which often compares favourably with that of the modern industrial fishery. Traditional methods of processing and preserving fish through dry-curing, smoking and other means are also practised and, with the recent renewed interest in traditional culture, its use in feasts and ceremonies has been increasing. The traditional Indian fishery is thus a blend of a search for food, production for trade, a social activity and a cultural expression. The distinction customarily drawn by non-Indians between commercial and recreational fishing is inappropriate in this context. Indian fishing has elements of both, and more.

The Indians' historical attachment to fish and the importance of fish to their cultural identity often sur-

prises non-Indians. As one group put it in testimony to this Commission—

... fish are more than food, fish are an integral part of life itself. Without fish we have no culture and with no culture we are not a people. To us, the marine resources of B.C. are part of our struggle to survive and to grow.⁶

Current Catches

The available statistical data on both the amount of fishing activity and on catches in the Indian fishery are very weak. In 1978, the last year for which figures have been compiled, about 3,500 individual permits and 50 band permits were issued. In addition, some permits were issued to Indian commercial vesselowners to allow them to catch specified quantities of fish for coastal bands that could not otherwise meet their requirements using traditional methods in the rivers.

But there are many more people involved in the Indian fishery than these numbers suggest. Individual permits are issued to heads of families, but they allow other members of the family to fish. And band permits enable band councils to assign fishing rights to any member of their bands. Recent estimates suggest that about 25 thousand Indians in British Columbia benefit directly from the food produced in the Indian fishery; this represents almost half the number of status Indians in the province.⁷

A variety of methods are used to collect data on the catch. Local fishery officers, who are responsible for reporting this information, have developed their own methods for estimating catches in their administrative areas. Sometimes the whole catch is counted. More often, only a sample of the catch in a few nets is counted and then extrapolated. In some cases estimates are based on interviews after the season, and in others the local fishery officer is provided with reports from the band council or individual fishermen. As a result of these diverse methods, the accuracy of catch estimates is questionable in many cases, and many believe that catches are underestimated.

Salmon are overwhelmingly important, but a wide variety of other species are used in the Indian fishery as well. Many bands attach a special value to eulachon (ooligan or candlefish), which is used as a source of oil ("grease") and protein, and for traditional medicinal and cultural purposes. Some coastal bands take significant quantities of herring and herring roe; some catch groundfish such as halibut and cod; others use clams, oysters, abalone and other shellfish extensively; and some interior Indians take considerable catches of kokanee (land-locked salmon).

The catch of salmon in the Indian fishery has apparently been increasing significantly in recent years.⁸ The

estimated catch in 1965 was 350 thousand fish, or roughly 1.6 percent of all salmon landings. By 1975 this had increased to roughly 600 thousand fish, and by 1980 to 700 thousand fish or 3.5 percent of salmon landings. Increases in catches have been the most pronounced in Johnstone Strait, where they have more than trebled, and off the west coast of Vancouver Island, where they have doubled. In both of these areas, Indians have been able to use commercial gear to supplement their traditional methods. In the Fraser River system and Howe Sound area, average catches have increased over this period by only about 60 percent.

Table 14-1 Indian Salmon Catch by Area^a

	Fraser River and Howe Sound	West Coast Vancouver Island	South Coast	Northern B.C. and Yukon	Total
	— thousands of fish —				
1965	200	13	22	119	354
1970	207	12	31	153	403
1975	347	15	44	182	588
1980	263	39	143	251	696

^a Includes steelhead catch, which accounts for less than one percent.

Source: Department of Fisheries and Oceans, Exhibit #167.

Sockeye is by far the most important species taken, accounting for 50 to 70 percent of the total, but all the other salmon species are used as well. No statistical information on the catch of fish other than salmon is available because no method of reporting has been established.

Most salmon are taken in freshwater on the Fraser, Skeena and Nass river systems, but Indian fishing takes place throughout the province. Table 14-1 sets out Indian catches by area. The Fraser River is by far the most important source, and accounts for as much as 60 percent of all the salmon taken in the Indian fishery. Many Indian reserves are located close to the river or its tributaries, and its large summer runs of salmon provide an important part of the Indians' food supply. Fishing is especially intense upstream from Lillooet, where traditional culture and practices are pronounced.⁹

Although the dependence of these Indians on salmon for food has declined to some degree over the years, the fishery remains both a valuable source of protein and an important element in their cultural life.¹⁰ In the upper Fraser River, where Indians depend on specific, individual stocks, yearly fluctuations in runs and strict conservation measures for ensuring adequate escapement often lead to shortfalls in catches. In the lower reaches of the Fraser River, Indians have access to more plentiful sup-

plies of fish; but even there, increased restrictions on fishing times in recent years have made it difficult for some to obtain their supplies.¹¹

The Skeena and Nass Rivers account for about 30 percent of the salmon catch in the Indian fishery (and a much larger proportion of the eulachon catch). Fish are extremely important to the Indians on these rivers; more than a third participate directly in fishing and a much higher proportion depend on it for food.¹² Fish are a particularly important component of the diet of Indians in the Nass Valley.¹³ In recent years, heavy commercial exploitation has restricted supplies of certain species for the Indian fisheries on these rivers.¹⁴

Coastal Indians depend on a wider variety of fish, but some have experienced increasing difficulties in obtaining their customary catches of salmon. Many coastal bands have come to depend on commercial gear, and much of their food fish is taken in the commercial fishing season. But the widespread displacement of Indians from the commercial fishery in recent years (see Chapter 12) has left some bands without the means to meet their requirements even by this method. The Department has partially alleviated this problem for certain bands in the Strait of Georgia by allowing commercial fishermen to harvest surplus hatchery stocks for distribution. This arrangement does not, of course, replace the traditional and social significance attached to Indian fishing.

Even with the increases in catch in recent years, the present Indian catch of about 5 million pounds annually is only a fraction of the level prior to European settlement.

Evolution of Regulatory Policy

The present arrangements governing the Indian fishery are the outcome of a century of policy development. Throughout, the basic issue has been that of reconciling the conflict between Indian traditions of fishing and hereditary fishing areas, on the one hand, and early British colonial policy, federal-provincial constitutional responsibilities over Indians and fisheries, and the need to conserve fish stocks, on the other. In the evolution of policy, a significant role was played by several royal commissions, and the travels and hearings of some of these bear a striking resemblance to those of this Commission.

When British Columbia entered Confederation in 1871, certain constitutional responsibilities having an important bearing on Indian fisheries policy were assumed by the Dominion Parliament. The Dominion's jurisdiction included "sea coast and inland fisheries" and also "Indians, and lands reserved for the Indians." From the beginning, measures adopted regarding the Indian fishery under both of these areas of responsibility recognized a special status for the Indian fisheries.

Fisheries regulation Before 1877, all fisheries in British Columbia were essentially unregulated.

In this era there was no distinction between "food fishery" and commercial fishing. There were no regulations, no Proclamations, no Orders-in-Council, no laws of any kind which specifically restricted or regulated Indian fishing in British Columbia.¹⁵

The Dominion Fisheries Act, which was applied to the province that year, included the first official recognition of native fisheries in the province by enabling the Minister to issue licences to Indians to allow them to catch fish for their own use. The British Columbia Fishing Regulations were first adopted under the Act the next year, but it was not until 10 years later in 1888 that they dealt specifically with the Indian fishery. A lease or licence was required by others for fishing in all waters of the province, but it was provided that —

Indians shall, at all times, have liberty to fish for the purpose of providing food for themselves, but not for sale, barter or traffic, by any means other than with drift nets, or spearing.¹⁶

Over the ensuing decades the regulations continued to give special recognition to Indian fisheries, with a few minor modifications and exceptions. In 1894 the permission of the Department was required for Indians to engage in the fishery, a requirement that was strengthened by regulations enacted in 1910. Then, a permit was required, under which the Department could fix the area and time that fishing activities could be undertaken and the gear to be used.

These provisions continued more or less unchanged until 1977, when new regulations required licences instead of permits. Although this change in name caused some anxiety among Indians, it was not really very substantial. As with the former permits, licences could specify the area, gear and time of fishing. (In this report I continue to refer to these authorizations as permits, as they are commonly known.) The regulations continue to prohibit the sale or trade of fish to others. The most recent development came in 1981, when a new regulation required permits to specify both the species and the quantities of fish that may be taken. However, I understand that this latter requirement has been implemented only in some permits.

The permit system has given rise to a good deal of friction between the Department and certain Indian bands, as I describe below. In 1977, in an effort to reduce tension, the Department initiated the practice of issuing permits to some Indian bands instead of to their individual members, with the permits to be administered by

band councils. This practice has been formally acknowledged in recent amendments to the fisheries regulations. Today, about 10 percent of the bands engaged in the fishery participate under this arrangement, and the Department reports few problems with enforcing these permits. For other bands, individual permits continue to be issued directly by fishery officers, though sometimes they simply supply a number of permits to an Indian community. Another arrangement involves issuing permits to Indian commercial fishermen authorizing them to use commercial gear to catch food fish for distribution to others.

Indian lands administration A recurrent source of friction between the two levels of government and the Indian community since British Columbia joined Confederation has been the allotment of reserves to Indian bands in the province. The Terms of Union that were settled between the two governments in 1871 provided that —

... tracts of land of such extent as it has been hitherto the practice of the British Columbia Government to appropriate for that purpose, shall from time to time be conveyed by the Local Government to the Dominion Government in trust for the use and benefit of the Indians. ...¹⁷

Difficulties with interpreting these general expressions led to the appointment of Reserve Allotment Commissions over the 40 years from 1876 to 1916, which were to make recommendations to both governments with respect to reserve lands for Indian bands in the province. In the course of discharging their responsibilities, these commissions frequently recognized traditional Indian fishing locations by allotting to some bands exclusive fishing rights at tidewater and over certain stretches of inland streams, although at the time the commissioners expressed concern about their authority to do so.

CURRENT PROBLEMS

The present policy governing the Indian fishery is not only unsatisfactory to many Indians, but gives rise to awkward management and enforcement problems for the Department. Unless the arrangements are improved, friction between the government and the Indian community will almost certainly increase.

Increasingly stringent regulations, particularly those requiring permits and curtailing fishing times, have been regarded by the Indian community as unfair interferences with their historical traditions and rights. Some have complied with the regulations, but others have refused, leaving fisheries officials with little choice but to prosecute. Tighter regulations have meant increased enforcement, which in turn has led to charges and court

battles. Already sensitive relations between Indians and the Department have become inflamed, and resentment and mistrust have been aggravated.

We also have been legislated against, arrested or threatened with arrest for practicing our harvest of resources. . . . Since regulations, restrictions and policies have come into existence by the Federal Government, harassment has become a real problem for Indian people. Harassment on Indian Fishing increases as more policies are developed.¹⁸

. . . a great deal of harm and bad faith has arisen . . . over the rights . . . to food fish. . . .¹⁹

This deterioration in relations between Indians and the government is the result of a long history of resentment over restrictions on Indian fishing, recurrent legal disputes and confrontations, and recently the resistance by the Department to band fishing by-laws (described below). And pervading all this is the frustration over the slow progress toward resolving the fundamental issues of Indian land claims and aboriginal rights.

Several concurrent trends can be expected to aggravate present problems. Increasing pressures on resources from the commercial and sport fisheries in addition to the growing demands of the Indian fishery itself will inevitably call for improved control of escapements and more stringent regulation of fishing, as I explain elsewhere in this report. Moreover, the sharp rise in Indian fishing may well continue in view of the trends in Indian populations and age structures, and the movement of off-reserve Indians back to their communities.

It should be emphasized that Indian fishing is not problematical everywhere. In some areas, smooth working relationships have developed between the Department and local bands. But in many other areas, the issue of Indian fishing is contentious and in some, explosive. In the following paragraphs I summarize the main difficulties with the present arrangements before turning to my proposals for resolving them.

Priority

The Department has stated that it recognizes Indian fishing rights, and accords this fishery first priority in the utilization of fish, subject only to the paramount needs of resource conservation (which means leaving enough spawners to replenish the stocks).²⁰

But according first priority to the Indian fishery presents a practical problem, since this fishery usually comes last in the sequence of demands on migrating salmon. Indian fishing on the rivers takes place after the much larger commercial and recreational fisheries have taken their catch. Giving priority to the Indians' catch therefore

is exceedingly difficult, especially when the size of the total stock is not reliably known until most fishing is completed.

Inevitably, the commercial and sport fisheries sometimes take too many fish to provide sufficient stocks for both needed escapement and the Indian fishery, and by the time this is known the only way to maintain the stocks is to constrain Indian fishing. This problem is aggravated by the fact that the requirements for the Indian fishery are not quantitatively specified. The Department never knows in advance how many salmon in the various runs it should reserve for the Indian fishery, and similar uncertainty is faced by the International Pacific Salmon Fisheries Commission in regulating the sockeye and pink salmon of the Fraser River. To resolve this problem, among others, I propose below that the Indians' first priority claim on the catch be defined quantitatively.

The Permit System

The permit system has been adopted to identify Indian fishermen and to regulate their fishing times and places where this is required. The system is offensive to some Indians and, in communities without a fishery officer near at hand, it is inconvenient.

Certain administrative requirements of these permits are criticized by Indians as being unjustifiable or unnecessarily bothersome. These include the provisions that gear must be marked with identifying tags and that Indians must provide their Social Insurance numbers and band numbers as well as certify that they are Indians under the Indian Act. The administrative practice of restricting fishing in some areas to a few days per week is also criticized. Under the regulations, permits may require the fish to be marked to identify them as Indian food fish by removal of their snouts and dorsal fins, which Indians view with distaste. And some Indians object to the whole system as an unwarranted interference with their fishing rights.

There is another side to all this, however. The permit system enables Indians to fish in ways and areas that are forbidden to non-Indians. Their legal effect is to exempt Indians from general restrictions, such as those on fishing for sockeye and pink salmon in nontidal waters, the use of nets on inland streams and the bag limits that apply to sportfishing. Permits provide the instruments to authorize these special exemptions for Indians.

Permits also provide the means for managing stocks by stipulating fishing in certain places, at certain times and for certain species. As well, they are a means of obtaining needed statistical information on Indian fishing. Moreover, they help to avoid disputes among Indians: by authorizing certain Indians to fish in certain places, the

Department can protect traditional fishing stations from interference by others (and usually does so at the Indians' request). So at least some of the administrative details that are a nuisance to Indians appear to be necessary to identify legitimate Indian fishermen, to manage the resources they use and to enforce the restriction on selling their catch. Some others can be simplified.

A more fundamental issue underlies the Indians' dissatisfaction with the permit system, however. While permits confer fishing privileges that are not available to non-Indians, they have also been the government's means of curtailing Indian fishing. But many Indians feel that their traditional access to fish is their right and not merely a privilege to be meted out by the authorities as they see fit. It has become clear to me that this is the root of much of the discontent and friction that have erupted in the field and spilled over into the courts. Under current policy, Indians view their access to fish to be vulnerable to changes in Indian fishery regulations and the Department's policies, to catches by other, larger resource users, to pollution and other habitat damage, and to the Department's difficulties in managing the resources. Thus, the permit system offers the Indians no security for their claim on the resource. To overcome this I propose below that Indian catches be guaranteed.

Illegal Sales of Fish

The illegal sale of fish caught in Indian fisheries is by no means universal, but it is common in certain areas and draws much criticism from outside observers. The measures taken to control it are irritating to innocent Indians, and it presents an exceedingly difficult enforcement problem for the authorities.

Many Indians resent the prohibition on sales of fish as a denial of their historical practices. In the words of one northern group,

The idea that the inland Indian fisheries should be for subsistence only was first introduced in this area in the B.C. Fishery Regulations, November, 1888. Up to that time, and indeed after, it was considered legitimate for an Indian fisherman to trade or sell any of his catch that was surplus to the needs of his family.²¹

The desirability of permitting sales of fish caught in the Indian fishery is debated among Indian groups themselves. Those on the Skeena and Fraser typically support legalization of sales, while those of the Nass valley generally oppose it. But all advocate inland commercial fisheries as a means of economic development.

The refusal of some Indians to accept the legitimacy of restrictions on the sale of their fish makes enforcement

particularly difficult. Moreover, many believe that the system has attracted non-Indians to become involved in bootlegging fish taken in up-river Indian fisheries. As salmon have increased in value, the incentives for illegal sales have increased correspondingly, and enforcement has become almost impossible.

These problems would disappear if the restrictions on Indian sales of fish were abolished. This could be done if Indians had the right to specific quantities of fish, as I propose below under certain conditions. This would also meet the fundamental concern that underlies the prohibition on sales: that is, keeping the catch to a legitimate level.

Other Enforcement Issues

In addition to the difficulties over sales of fish, the Indian fishery has a history of abrasive relations between the Department and Indians over enforcement of requirements concerning fishing times, places and other matters. Many Indians find these regulations offensive in principle, others maintain that they are arbitrarily imposed, and others appear to misunderstand them. In the course of public hearings and meetings with Indians, I heard of many incidents in which gear or fish have been destroyed or confiscated and arrests made that have left Indians bewildered or outraged and have often had severe economic consequences for them. These measures are often interpreted by Indian people as harassment;

... Indian people (have) experienced harassment, intimidation, unjustified confiscation of fish, cars and gear, unnecessary and fruitless court action pursued at great expense by Fisheries personnel, constantly using emotionally loaded terms as "massive poaching", "illegal possessions", etc.²²

For enforcement officers, too, the present arrangements often pose very difficult problems. While they must apply the law with understanding and sensitivity, they are, at the same time, under heavy pressure to closely monitor highly visible Indian fishing.

To help resolve these problems I propose new provisions to clarify in advance the fishing arrangements for particular bands and to enable the Indians themselves to take more of the responsibility for administering them.

Consultation and Participation

A recurrent criticism by Indians is that the Department fails to consult them in formulating regulations for their fishing activity and that this results in difficulties relating to their customary fishing practices. They also claim that their local knowledge is ignored and that they have little opportunity to contribute to fisheries management.

Many Indians have expressed concern that the Department might, without consultation, authorize commercial exploitation of certain minor marine species that they have customarily relied on. They are particularly apprehensive about eulachon. This fish, which has such a special place in Indian food and traditions, is not now widely harvested commercially, but there are recurrent rumours of a potential market for eulachon and hence of its commercial exploitation. Indians are concerned that commercial harvests of the relatively small stocks of this species would soon impinge on their traditional supplies. Similar concerns are felt about licensing commercial harvests of certain types of seaweed that are traditional foods among some coastal bands, and of minor shellfish species. Some argue that the commercial abalone fishery has already interfered with a traditional food source.

In response to these concerns, the Department has made various informal arrangements to improve its communications with those involved in the Indian fishery. Some fishery officers consult with and seek the advice of local Indians, and the Department has recently created at the regional level the position of Indian liaison officer to improve communication with Indian people (although the position is presently unfilled). Regular discussions are held with the bands along the Skeena River, through the Skeena River Advisory Committee, which help the Department determine the escapement required from the commercial fishery to supply the Indian food fishery, as well as to provide for adequate spawning. Both the Departments of Indian and Northern Affairs and Fisheries and Oceans have held frequent meetings with Indian groups in the Pacific region and in Ottawa to confer on Indian fishery issues.

Indian organizations have suggested that more formal consultative structures be adopted to assist both Indians and the Department; suggestions include a representative Indian fisheries board that would implement a "co-management strategy" for developing Indian fisheries,²³ and a board to coordinate management of all Indian fisheries on the Fraser River system.²⁴ My proposals build on some of these ideas; I suggest a formal consultative body for Indian fishing interests and contractual arrangements to enable Indians to become directly involved in management and enhancement.

Legal Issues

In recent decades Canadian courts have grappled with Indian rights to fisheries and wildlife resources in relation to federal and provincial law-making powers. For Indians in British Columbia this process has been complicated by the fact that few of the bands ever formally relinquished their claims to land and resources under treaties. So, while some Indian claims on fish are based on treaties, most rely on unextinguished aboriginal rights

and the Terms of Union between British Columbia and Canada. I review below the issues involved in each of the claims and related legal problems.

Treaties Indian treaties in British Columbia are confined to Vancouver Island and the northeast part of the province. In the 1850s, fourteen "Douglas treaties" were negotiated with various coast Salish and Kwakiutl bands on the island by James Douglas, then of the Hudson's Bay Company. Under these treaties the bands formally surrendered claims to certain lands in return for cash, but they retained their village sites and fields. In addition, in identical language for all treaties, they were given the assurance that they were "at liberty to hunt over the unoccupied lands, and to carry on (their) fisheries as formerly."²⁵

Other than the Douglas treaties, the only treaty affecting Indians in British Columbia is Treaty No. 8, signed at the turn of the century between Dominion Treaty Commissioners and several Indian tribes, covering an extensive tract of land in northeastern British Columbia, Alberta and the Northwest Territories. Here, the Indians' fishing rights, according to the text of the treaty, were more qualified:

(T)hey shall have the right to pursue their usual vocations of hunting, trapping and fishing throughout the tract surrendered as heretofore described, subject to such regulations as may be made from time to time by the Government of the country under the authority of Her Majesty, and saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, lumbering or other purposes.²⁶

Despite these formal assurances in treaties, Canadian courts have consistently held that any rights they confer to the Indians over fish and wildlife are subject to federal laws that relate to these resources. Thus, hunting restrictions in the federal Migratory Birds Convention Act have been applied by the Supreme Court of Canada to Indians who were assured hunting rights under treaty.²⁷ More to the point for this Commission, this principle has been applied to Indians on southern Vancouver Island where one of the Douglas treaties is in effect.²⁸ So, notwithstanding the assurances of access to traditional fisheries contained in these treaties, Indians are required by law to comply with the regulations under the Fisheries Act respecting permits, gear, fishing times and so on, even though the treaties themselves do not permit such qualifications to fishing rights.

I find these court decisions unsettling. It is hard to avoid the conclusion that they permit the government to unilaterally curtail the Indians' contractual rights embodied in treaties. The editor of a recent law report reached

a similar conclusion, in referring to this line of court decisions in an unusually pointed comment as "a sad history of national dishonour."²⁹

Canadian judicial attitudes toward Indians' treaty rights in this region contrast sharply with those in the State of Washington, where, under the controversial 1974 "Boldt decision," fishing rights in 5 treaties were interpreted to provide a 50 percent interest in fisheries resources to Indian tribes. Following protracted litigation that came on the heels of the initial court ruling, an umbrella Indian fisheries organization has recently participated with governmental authorities in co-managing the resource, as a means for securing the Indians' share.

Aboriginal rights Most Indians in British Columbia have never formally surrendered land and resources through treaties, however, so their claims to fish rest on their aboriginal rights. All of the mainland (with the exception of the land in the north-east covered by Treaty No. 8), most of the coast, including the Queen Charlotte Islands, and parts of Vancouver Island fall into this category.

In the early 1970s the Nishga Band attempted to obtain judicial clarification of the status of these lands and resources by launching a law suit against the province, basing its claim on unsurrendered aboriginal rights and a 1763 British Royal Proclamation. In its decision, the British Columbia Court of Appeal declined to recognize aboriginal rights.³⁰ Subsequently, the Supreme Court of Canada, in a fragmented decision, left the issue unresolved and in limbo.³¹ Since then, the Supreme Court of Canada has decided that any native aboriginal rights that remain unextinguished are subject to the Fisheries Act and regulations concerning Indian fishing, placing treaty and nontreaty Indians on the same legal footing with regard to fisheries.³²

Despite the lack of judicial unanimity about the legal nature of aboriginal rights, the federal government announced in 1973 its intention to negotiate with the Indians for the extinction of their claims. This has led to talks with some Indian groups, but by and large progress has been slow.

The recently proclaimed Canadian Charter of Rights and Freedoms provides that "the existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed."³³ But the effect of this guarantee in relation to Indian fisheries is unclear, and so far remains untested in the courts.

Terms of Union When British Columbia joined Confederation in 1871 the Dominion undertook responsibility for Indians and pledged that "a policy as liberal as that hitherto pursued by [the] British Columbia Government shall be continued by the Dominion Government

after the Union."³⁴ The Supreme Court of Canada has since determined that this provision offers no comfort to the Indians of British Columbia.³⁵ The Fisheries Act and regulations have overriding authority. Inconsistencies in the application of this decision by British Columbia lower courts leave unresolved some important issues concerning the management priority to be accorded Indian fisheries, and I understand that litigation to higher courts on this question is currently proceeding.

Indian fishing by-laws The Indian Act authorizes band councils to enact by-laws covering a wide range of activities on reserves, including fish preservation, protection and management.³⁶ These may be vetoed by the Minister of Indian and Northern Affairs within 40 days after he is notified of them; otherwise they become effective. So far, such fishing by-laws have been adopted by 10 bands in the region.

To the extent that these by-laws conflict with the Fisheries Act and regulations, their legal status is far from clear. The conflict here is not between federal legislation and the rights claimed by Indians, but rather between two federal statutes. Indians claim that the Indian Act, and hence also the by-laws passed under it, supercede the Fisheries Act and regulations, a contention that has been supported by a legal opinion of the federal Department of Justice. According to this view, band councils can assert regulatory control over fisheries on reserve lands by approving an appropriate by-law without consulting with the Department of Fisheries and Oceans. On the other hand, the Department has taken the position that, in the interests of resource conservation, the Fisheries Act must be complied with in all cases. In the Department's view, the Fisheries Act must therefore have priority; band by-laws should not eliminate the obligation of Indians to obtain permits to fish and to observe their terms, conditions, and other fishing regulations. However, the Department has apparently been instructed to follow the legal opinion.

To date, the Minister of Indian and Northern Affairs has not exercised his power to veto Indian fishing by-laws. And a countervailing authority of the Governor in Council (effectively the federal cabinet) under the Indian Act to regulate fishing on reserves, has so far not been exercised. The effect of this imbroglio is that fishing is carried out on some reserves without regard to the Fisheries Act or its supporting regulations and permit system.

Summary of legal framework All these developments leave an alarmingly ambiguous and incoherent legal framework for Indian fisheries. Treaties and other historical assurances leave Indian fishermen vulnerable to shifts in fisheries policy that may be imposed on them unilaterally by the government. And the band by-law impasse undermines even the scant opportunity offered

by the permit system for Indians to be involved in fisheries management cooperatively with the Department. The resulting uncertainty about the legal foundation for Indian fisheries has left the Indians in an unacceptable position and the Department unable to properly manage the resources.

A Commission such as this one cannot purport to adjudicate the legal merits of Indians' claims. That is up to the courts to decide. Nevertheless, it is within Parliament's power to give stronger legal recognition to Indian fisheries, and it is clearly within my mandate to consider the merits of doing so.

A NEW APPROACH TO INDIAN FISHERIES POLICY

Indian fisheries policy cries out for reform. I have identified the major shortcomings and frustrations associated with current Indian fisheries policy arrangements; I now turn to my proposals for change. (Because the arrangements in Yukon are already the subject of an agreement in principle, described in Chapter 20, my recommendations below apply only to Indian fisheries in British Columbia.)

My recommendations are guided by my terms of reference that require me to ensure that they are "conducive to proper management and conservation, to an equitable division of the catch among sectors. . . ." In this context I perceive several urgent requirements: to clarify and strengthen Indian fishing rights; to enable Indians to become involved in fisheries management; to provide opportunities for Indians to take better economic advantage of their rights to fish; and to improve the administrative and enforcement arrangements.

Securing Indian Rights to Fish

My investigations lead to the conclusion that the Indian claim to some fish is legitimate and substantial. This has always been acknowledged, though the legal foundation is weak. But apart from the law, Canadians have a moral responsibility to ensure that this important claim on fish resources is respected. It is inconceivable to me that those Indians who entered into treaties more than a century ago would understand, or could have anticipated, the subtleties of the parliamentary and judicial systems that could override their bargain with the government. And for the majority who never made such bargains to relinquish their claims to land and resources, the moral case is at least as strong.

Canadians, and their governments, pride themselves on Canada's cultural diversity. But no culture in British Columbia is as deeply rooted in the fisheries resources as

the Indians'. No other group in our society seeking to preserve its culture can lay claim to the ancient links that have been forged between the Indians and the fish of the region.

At the same time, modern policy towards Indian fisheries must take account of the other demands on fisheries resources that have developed over the past century, including the large commercial industry and the recreational fishery. I propose, therefore, that the Indian claims on fish should not only be acknowledged but should also be made explicit, binding and unequivocal, so that they can be provided for in the context of modern social and economic conditions. To accomplish this, defined quantities of fish must be allocated to Indian fisheries. This will secure the Indian's claim on the available catch and eliminate the legal uncertainty that now surrounds this question. It will also enable the Department to work toward escapement targets, knowing how many fish will be taken by Indians. So my first recommendation is —

- 1. The Department should allocate a specific quantity of fish to be available annually to each Indian band involved in the Indian fishery.**

This is consistent with the present (albeit normally unmet) requirement that the quantity of fish to be taken must be specified in permits. It is also consistent with the new fishing arrangements for Indians proposed below.

The quantity of fish to be allocated to each band, and its species composition, should be based mainly on recent levels of utilization, which vary widely among the Indian bands in British Columbia. Other special circumstances should be taken account of as well, such as trends in band populations and their economic opportunities. These should be considered in consultation with the Indians. Accordingly—

- 2. The quantity and kind of fish to be allocated to each band should be determined through negotiations with the bands, primarily with reference to their catches in recent years but also taking into account special circumstances relating to population trends and economic opportunities.**

These negotiations should be initiated immediately. In Chapter 17 I propose an Indian fisheries advisory committee for the region, and the advice of this body should be sought in organizing the process.

These allocations should be given priority over all other fisheries. However, unforeseen events or errors in managing other fisheries may require the Department to constrain bands from taking their full allocations in order to meet the paramount needs of conservation. Whenever this happens, the Department should be required to com-

pensate the affected bands by making up the shortfall later. Thus:

3. **The Department should be committed to giving the catch allocated to Indian bands priority over the commercial and sport fisheries. If in any year a band fails to harvest its allocation because of conservation measures imposed by the Department, and if the Department is unable to provide an alternative source of fish, the Department should be required, in subsequent years, to make up the deficiency plus an amount to compensate the band for the delay in obtaining its catch.**

I suggest that the extra increment be determined with reference to prevailing interest rates.

Because the above arrangements are intended to recognize Indians' traditional rights, no royalties should be applied to the fish allocated through them, notwithstanding my recommendation in Chapter 8 for royalties on the commercial catch and my recommendation below that Indians be permitted to sell their catches under some circumstances. Thus:

4. **No royalties should be levied on fish harvested by Indians under the allocations proposed above.**

Forms of Rights

I have already described the considerable variety of administrative arrangements that are now used to regulate the Indian fishery. Particular systems appear to work well for some bands but not for others. This is not surprising in view of the diversity of fishing opportunities, the varying dependence of bands on fish and the range of political organizations and attitudes among Indian communities. Some are anxious to become more actively involved in fisheries management and development, while others appear to be more or less satisfied with existing opportunities. This suggests that the appropriate policy must provide some flexibility.

I propose that Indian bands that are content with the present permit system be given the opportunity to continue under these arrangements with the more clearly defined rights to fish described above. Others who wish to become involved in resource management and enhancement, and are able and willing to accept the responsibilities that this entails, should be encouraged to do so under new Indian fishery agreements proposed below.

I therefore recommend that allocations to bands be conveyed through either of two forms of rights:

5. **Each band should be given the opportunity to choose whether its entitlement to fish will be allocated through Indian fishing permits or a new Indian fishery agreement.**

The character of each of these is described below.

Indian fishing permits The permit system should be geared towards bands that want fish only for food and ceremonial purposes and that do not have an interest in becoming involved in fisheries planning and management. By and large, present policies should be continued for these.

6. **Indian fishing permits should be issued annually to individual fishermen directly by the Department or through band councils. Permits should authorize Indians to take fish for food and ceremonial purposes only. They should specify the quantity and composition of the authorized catch, and the location, time and method of fishing as required for management purposes.**

Later I propose that the Department establish more systematic arrangements for consultation with Indian fishery interests. I expect that through the consultative process some possible simplifications of the permit system can be identified. Moreover, some of the present regulations governing Indian fishing should be reviewed. I am particularly concerned about restrictions on fishing times that have been imposed more or less across the board without sufficient recognition of the needs of either the Indians affected or resource management.

Indian fishery agreements Bands that find the permit system unsatisfactory, and wish to participate more actively in fisheries management and enhancement, should have the opportunity to do so. Indians are well suited to engage in fisheries development activities, because of their historical use of and strong cultural attachment to fish. In Chapter 12 I noted that Indians in this region have been more successful in adapting to commercial fishing than other modern industrial activities. Moreover, their communities are well situated geographically to participate in fish management and enhancement. Most reserves are located on or near productive salmon streams throughout British Columbia: on the coast, they are situated at the mouths of salmon streams and near productive saltwater and shellfish beaches; and in the interior, they are dotted along the reaches of the major salmon rivers.

At present few Indians are able to support themselves on their reserves. In contrast to other parts of Canada where reserves are large, most of the Indian reserves in British Columbia are small. This is due, at least in part, to the opinion of the authorities who set aside reserves, that Indians in this region did not require large areas of land because of their dependence on fish and wildlife. Thus an early Indian Superintendent for British Columbia noted:

There is not, of course, the same necessity to set aside extensive grants of agricultural land

for Coast Indians; but their rights to fishing stations and hunting grounds should not be interfered with, and they should receive every assurance of perfect freedom from future encroachments of every description.³⁷

Thus most reserves west of the Rocky Mountains are capable of supporting agriculture or forestry only on a very modest scale. In addition, most reserves are isolated, so off-reserve employment opportunities are limited.

While the Indians' orientation toward fish resources justified small reserves, fisheries policy has prevented them from developing economic activity based on fish. What was once an activity that provided a base for commerce as well as food has become, through prohibition on the sale of fish, a subsistence fishery.

To enable Indians to regain the economic opportunities afforded by their access to fish, I propose new Indian fishery agreements that will take the form of contracts between the government and Indian bands. These agreements should have terms of 10 years to provide reasonable security for planning and development; they should contain provisions for renewal at least 1 year before they expire in order to avoid uncertainty as the end of the term approaches; they should incorporate the band's allocation of fish recommended above; and they should permit the bands to sell their authorized catches, under appropriate monitoring and marketing arrangements.

Each agreement should call for an annual fishing plan to be designed jointly by the band and the Department in advance of the fishing season. This will enable the Department to approve fishing times and the demands on particular stocks and ensure orderly harvesting with reference to the cycles of fish abundance.

The agreements should also provide Indians with an opportunity to engage constructively in enhancement activities. Many Indians are interested in becoming involved in enhancement programs, especially for salmon. In Chapter 5 I described the participation of Indians in the Salmonid Enhancement Program through its Community Development Program, but the resources of this program are insufficient to cope with the large number of proposals from Indians. Thus, Indian fishery agreements offer an avenue for broadening this activity without depending on the enhancement program's funds.

Where bands have identified enhancement opportunities and are willing and able to undertake them, their Indian fishery agreements should enable them to do so under an attached enhancement plan approved by the Department. And they should benefit from a share of the enhanced production. The share should be set out in the plan, and be fixed with reference to the cost of the enhancement activity, any governmental support received and other considerations.

The following recommendation incorporates all these features:

7. **The Department should be authorized to enter into Indian Fishery Agreements with Indian bands. These agreements should —**
 - i) Carry terms of 10 years with provisions for renewal 1 year before the term expires.
 - ii) Specify the bands' allocation of fish.
 - iii) Authorize the band to harvest its allocation of fish according to an annual fishing plan determined jointly by the band and the Department.
 - iv) Where appropriate, authorize the band to engage in enhancement activities on or near their reserves and to augment their allocated catch by a portion of the enhanced stocks, under fisheries management plans.
 - v) Exempt the band from restrictions on the sale of fish under agreed monitoring and marketing arrangements.

The provision for marketing arrangements is necessary to enable monitoring and inspection of catches and to ensure that health standards are met. I expect that the market channel will normally be an organization of the band itself or an associated corporation or cooperative.

On larger river systems, where several bands hold these Indian fishery agreements, collective planning might be advantageous. Discussions leading up to annual fishing plans, especially, could include all the relevant bands, and might involve tribal councils and other umbrella native organizations.

Administration and Enforcement

An important objective of these new arrangements should be to enable the Indian bands to participate in administration and enforcement. Certainly they are well placed to assist with the allocation of catches among their members, and regulating and monitoring fishing activity. Many Indians want this responsibility, and experience has shown that where they have been given it, the administrative and enforcement problems of the Department have been lessened.

Individual permits issued by fishery officers, band permits administered by band councils, and fisheries management plans of the kind proposed here represent a progression of responsibility into the hands of Indians themselves. As a general rule, the more responsibility successfully delegated to the Indians in this matter, the better, providing that the needs of fisheries management are met.

I therefore recommend —

8. Where they are willing and able to do so, band councils should be encouraged to take responsibility for administrative and supervisory functions associated with Indian fisheries. In particular, they should be given responsibility for—

- i) **Apportioning the band's allocation of fish among the band members.**
- ii) **Issuing individual Indian fishing permits where the Department issues a general permit to the band.**
- iii) **Negotiating with the Department about the band's fishing arrangements and the design of plans under Indian fishery agreements.**
- iv) **Supervising the bands' fishing and related activities.**
- v) **Providing statistical and other information to the Department.**

Under Indian fishery agreements the responsibilities of the band council should be set out in the agreement itself.

Since the Department is ultimately responsible to Parliament for managing the fisheries resources, it must have the opportunity and means to ensure that the arrangements for Indian fisheries are properly administered and enforced. The new forms of fishing rights I have proposed, by providing for specific quantities of fish instead of undefined allocations, will shift the focus of enforcement away from compliance with restrictions on fishing time and gear and toward monitoring catches. It is essential that catches under Indian fishing arrangements be reliably monitored and identified. To meet this need I recommend—

9. Simple tags should be required to be attached to all fish caught under Indian fishery arrangements. The Department should issue sufficient tags to each band to cover its allocation of fish.

10. The present regulation requiring Indians to remove the dorsal fins and snouts of their fish should be rescinded.

The Department requires accurate and timely statistical information about catches in Indian fisheries in order to manage escapements. But these requirements vary considerably as do the bands' ability and willingness to provide the information. So the procedures for reporting catches should be determined jointly by the Department and individual band councils. Where Indian fishery agreements are adopted, the agreed arrangements should be set out in the agreements themselves, and all agreements should pledge the band to cooperate with the

Department in providing information and facilitating inspections of fishing activities.

Finally, the legal and administrative uncertainty surrounding band fishing by-laws should be eliminated. Under my proposals above, I can foresee a valuable role for such by-laws in managing and administering the bands' fishing activities on reserves, organizing marketing arrangements and so on. But they must be compatible with the proposed agreements and permits. And the Department, with its general mandate to conserve and manage fish, must be able to monitor these arrangements effectively. I therefore recommend that steps be taken to resolve the conflict between the Indian Act and the Fisheries Act:

11. The Minister of Fisheries and Oceans should initiate discussions with the Minister of Indian and Northern Affairs and representatives of Indian organizations to find means of reconciling band fishing by-laws with the paramount responsibility of the Department of Fisheries and Oceans for fish conservation and management.

To a large extent at least, Indian fishing by-laws have been a response to unsatisfactory working relationships between bands and the Department. With the more secure access to fish and the more effective management framework recommended in this chapter, by-laws can become more constructive supplementary instruments for regulating Indian fisheries and advancing fisheries management generally.

Mariculture Opportunities

In Chapter 11 I reviewed the promising developments in mariculture and the considerable opportunities for this activity on the Pacific coast. My proposals for mariculture leases are designed to enable private parties to engage in commercial fish culture and ocean ranching ventures. These offer special opportunities for Indians because of the strategic location of their communities and their familiarity with fish.

Indians should be encouraged to participate in developing mariculture and ocean ranching opportunities, and I suggest that some of the initial pilot projects recommended in Chapter 11 be undertaken by Indian organizations.

12. The Department should encourage Indian organizations to participate in mariculture and ocean ranching through carefully selected mariculture leases.

Some imaginative proposals for ventures of this kind were presented by Indian organizations at hearings of this Commission.³⁸

I have already emphasized the need for cautious development and careful planning of mariculture and ocean

ranching policy. Until satisfactory arrangements are demonstrated, only a few such ventures should be approved. In the long run, however, this form of commercial fishing activity may provide a major base for economic development in Indian communities. Under appropriate arrangements, the allocations of fish to Indian bands proposed earlier in this chapter could be incorporated into mariculture leases.

Assistance

Initially at least, some Indian bands will probably need assistance to take advantage of the opportunities afforded by Indian fishery agreements and mariculture leases. I therefore recommend —

13. **The Departments of Fisheries and Oceans and Indian and Northern Affairs, in consultation with Indian organizations, should explore means of providing technical, financial and educational assistance to enable Indians to develop opportunities under Indian fishery agreements and mariculture leases.**

In Chapter 11 I referred to certain consultations that have already begun on these matters, and suggest that these be pursued vigorously.

CONCLUSION

A major impediment to developing satisfactory policies for Indian fisheries has been the lack of public understanding of Indians' traditional reliance on fish, the cultural and economic significance they attach to these resources, and the complicated legal questions surrounding them. This has generated many of the frustrations and confrontations that have beset Indian fisheries in many parts of the province. The government has an important responsibility to resolve the prevailing vagueness of public policy on this issue and to improve public understanding of it.

Earlier in this chapter I suggested that new policies should be directed toward certain objectives. First, was

the need to clarify and strengthen Indian fishery rights. I have proposed, among other things, that this be done by clearly defining Indian rights to the resources quantitatively, and obliging the Department to see that these allocations are provided.

Second, I pointed to a need for Indians to become involved in fisheries management, and my proposals for new Indian fishery agreements and mariculture leases are designed to meet this need. Third, I suggested that new policies should provide opportunities for Indians to take economic advantage of their rights to fish. Thus I have proposed arrangements to allow them to use their catches for commercial purposes and to develop economic opportunities through enhancement and fish culture. Finally, I emphasized a need to improve the administrative and enforcement arrangements governing Indian fisheries. My proposals will lighten the burden of enforcing fishing activity and the way that fish are used, and will enable Indians themselves to participate in regulating their fishing activities.

The proposals in this chapter are intended to provide an improved framework for recognizing Indians' fishing rights. They do not, of course, resolve the legal questions about Indian claims under treaties and aboriginal rights. Those must be dealt with through legal and political processes. My proposals offer means of accommodating Indian fisheries in the meantime, and they should be adopted without prejudice to the ultimate resolution of Indian claims.

In spite of the friction and frustration that has aggravated relations between the government and certain Indians over their fishing activities, I have found in the course of my consultations with Indians a concern to find more constructive arrangements that will enable them to enjoy their fishing rights, while at the same time contributing to resource management and development. My proposals are aimed at providing these opportunities; but to implement them successfully, a major cooperative effort on the part of both Indian organizations and the government is required.

FOOTNOTES

1. Gitksan-Carrier Tribal Council, Exhibit #52, p. 10.
2. The term "Indian food fishery" is criticized by many Indians on the grounds that it implies a traditional dependence on fish for direct consumption only. Fish have historically been important commodities of trade and barter as well.
3. Wilson Duff, *Indian History of British Columbia*. Anthropology in British Columbia Memoir No. 5, Victoria, 1964. Vol. 1. p. 39.
4. G.W. Hewes, *Indian Fisheries Productivity in Pre-contact Times in the Pacific Salmon Area*, Northwest Anthropological Research Notes, Volume 7, 1973.
5. Hewes, *Indian Fisheries Productivity*.
6. The Native Brotherhood of British Columbia, Exhibit #141a, p. iv.
7. W. McKay, "The Native Food Fishery and the Potential Impacts of Oil Spills." A report prepared for the West Coast Oil Ports Inquiry, 1978.
8. Because of the lack of a consistent system of data collection, catches and trends are very uncertain. Some of the increase suggested by these figures may be due simply to improvements in reporting. The figures cited were provided in Department of Fisheries and Oceans, Exhibit #167.
9. Marilyn G. Bennett, "Indian Fishing and its Cultural Importance in the Fraser River System." A report prepared for the Union of B.C. Indian Chiefs and the Fisheries and Marine Service, 1972.
10. W.F. Sinclair, "The Economic and Social Impact of the Kemano II Hydroelectric Project on British Columbia Fisheries Resources, (Vol.II)." A report prepared for the Fisheries and Marine Service, 1976.
11. Edwin, Reid and Associates Ltd., "Working Paper on Indian Food Fisheries and Salmonid Enhancement." A report prepared for the Department of Fisheries and Oceans, 1979.
12. Sinclair, "The Economic and Social Impact of the Kemano II."
13. Nishga Tribal Council, Exhibit #129, p. 4.
14. Edwin, Reid and Associates Ltd., "Working Paper on Indian Food Fisheries."
15. Reuben M. Ware, "Five Issues Five Battlegrounds - An Introduction to the History of Indian Fishing in British Columbia 1850-1930." Prepared for Coqualeetza Educational Training Centre, 1978, p. 14.
16. British Columbia Fisheries Regulations, November 26, 1888.
17. Revised Statutes of Canada 1970, Appendix II, No. 10.
18. Union of B.C. Indian Chiefs, Exhibit #133, p. 2,4.
19. Squamish Indian Band, Exhibit #106, Part III, p. 2.
20. Exhibit #167, p. 1.
21. Exhibit #52, p. 26-27.
22. Exhibit #133, p. 18.
23. Exhibit #133, p. 24.
24. Nicola Valley Area Council, Supplementary Document #S-10.
25. See Robert B. Lane and Barbara Lane, "Union of British Columbia Indian Chiefs Fishing Portfolio." 1978.
26. Lane and Lane, "Union of British Columbia Indian Chiefs Fishing Portfolio."
27. The Supreme Court of Canada has acknowledged that such legislation could impinge on previously guaranteed treaty rights in *R. v. Sikyea*. [1964] 2 Canadian Criminal Cases 325; Affirmed [1964] Supreme Court Reports 642, [1965] 2 Canadian Criminal Cases 129, 50 Dominion Law Reports (2d) 8.
28. *R. v. Cooper*, (1968) 1 Dominion Law Reports (3d) 118.
29. C.A.G. Palmer, "The Unilateral Abrogation of Indian and Eskimo Treaty Rights", 47 Criminal Reports 395.
30. *Calder et al v. A.G.B.C.*, 74 Western Weekly Reports 481, 13 Dominion Law Reports (3d) 64 (B.C. Court of Appeal).
31. *Calder et al v. A.G.B.C.*, [1973] Supreme Court Reports 313, [1973] 4 Western Weekly Reports 1, 34 Dominion Law Reports (3d) 145 (Supreme Court of Canada).
32. *Derriksan v. The Queen*, [1976] 6 Western Weekly Reports 480 (Supreme Court of Canada).
33. Canadian Charter of Rights and Freedoms, Canada Act.
34. See Revised Statutes of Canada 1970, Appendix II, No. 10, Schedule, Article 13.
35. *Jack et al v. The Queen*, 100 Dominion Law Reports (3d) 193 (Supreme Court of Canada). In a dissenting judgment, Mr. Justice Dickson stated that the Indian fisheries should be accorded a priority second only to conservation needs.
36. Indian Act, Revised Statutes of Canada 1970 chapter I-6, sections 81(o), 82.
37. Annual Report. Department of Indian Affairs, 1876, p. 32.
38. See The Nimpkish Band Council, Exhibit #156; and The Native Brotherhood of British Columbia Exhibit #198.

CHAPTER 15

THE SPORT FISHERY

The present task of Fisheries is to manage the resource and the recreational user so that one is not sacrificed at the expense of the other.

THE SIDNEY ANGLER'S ASSOCIATION¹

The salmon and trout of the Pacific coast provide superb sportfishing opportunities. These highly prized game fish, along with the natural beauty and other features of this region, attract sportsmen from many parts of the world. In addition, sportfishing is an important recreational activity for hundreds of thousands of Canadians, many of whom have made it an important part of their lives.

An unusually wide variety of sportfishing experiences is available, from trophy fishing for the impressive chinook salmon and the first-rate experience of river fishing for steelhead to the casual dangle of a line as an excuse to be outdoors. A good deal of commercial activity is now based on sportfishing. All of these are part of the sport fishery, and all have been growing rapidly.

In tidal waters the sport fishery is based mainly on salmon, with chinook and coho being the most sought-after species and pinks being taken when they are available. In addition, anglers catch a range of species of pelagic and bottom fishes (cod, perch, rockfish, flatfish), as well as clams, oysters, crabs, prawns and other shellfish and crustacea. Sea-run cutthroat trout have a special appeal for a select group of aficionados.

Freshwater anglers also seek salmon as they enter coastal rivers and streams on their routes to the spawning grounds. In these nontidal waters, sportfishing is permitted only for chinook and coho salmon. It is here that the highly prized steelhead trout is taken as well.

The Pacific region of the Department of Fisheries and Oceans is responsible for managing the Pacific tidal water sport fishery for all species and for sportfishing for chinook and coho salmon in nontidal waters. It is also responsible for monitoring and regulating all sport fisheries in the Yukon Territory, activities which I review separately in Chapter 20. Responsibility for managing steel-

head and other freshwater species has been delegated to the Province of British Columbia. Here I confine my attention to sportfishing in tidal waters where salmon are overwhelmingly important.

SPORTFISHING ACTIVITY

As I noted in my Preliminary Report, discussions of sportfishing activity have been hampered by a great deal of argument and uncertainty about the basic data regarding the scope of this fishery and its implications for management. I must emphasize at the outset that statistical information on the tidal water sport fishery is meagre, and the sport catch of salmon in nontidal waters is for most rivers largely unknown. New sportfishing licences and studies of sportfishing effort and catch are providing useful information but, as I explain in this chapter, the data base remains alarmingly weak in light of the present importance of sportfishing, and this is a serious impediment to effective management.

Numbers of Sport Fishermen

Both tidal and nontidal water sport fishermen 16 years of age and older are required to purchase a sportfishing licence. While a provincial freshwater sportfishing licence has been in place for many years, tidal water anglers were not licensed until 1981. The fee structure and sales of the tidal water sportfishing licences during the first licence year (April 1, 1981 to December 31, 1981) are set out in Table 15-1. These data indicate that tidal water sport fishermen 16 years and older numbered some 282 thousand in 1981. Allowing for those under the age of 16, the total number of anglers was probably about 320 thousand. This figure is somewhat less than previous estimates of 467 thousand for 1979,² and 400 thousand for 1980.³

Table 15-1 Fee schedule and sales, tidal water sportfishing licence, April 1, 1981 - December 31, 1981

<u>Licence Type</u>	<u>Fee</u>	<u>Number of Licences Sold</u>	<u>Total Revenue</u>
Resident of Canada (annual)	\$ 5.00	228,127	\$1,138,602
Resident or nonresident (1 day)	3.50	21,948	76,818
Nonresident (annual)	20.00	19,340	386,800
Nonresident (3 day)	10.00	12,832	128,320
		282,247	\$1,730,540

Source: Department of Fisheries and Oceans.

Whether the number of licensed anglers in 1981 accurately represents the level of angler participation in recent years is difficult to determine. Early in 1981, in addition to introducing the licensing system, the Department announced a number of conservation measures intended

to reduce the sport catch of wild chinook salmon. These, and the ensuing heated debate among sportfishing organizations, created an unsettled climate throughout the year and adversely affected participation in the fishery, particularly the nonresident component. Moreover, in this first year of licensing, compliance was likely less than full. Judging from the licensing experience of the provincial Fish and Wildlife Branch, the impact of new licensing or fees is greater in the first year than in following years.

For these reasons, the 1981 licence sales may under-represent the normal level of angler participation. Early sales of licences this year appear to be substantially higher than in 1981, but in the current depressed economic conditions 1982 licence sales may not be typical either.

Sportfishing Effort and Catch

While licence sales provide information on numbers of anglers, they do not provide accurate measures of sportfishing effort or catch. Estimates of these, for salmon, appear in Table 15-2. The differences in the estimates in this table are the result of independent studies that differ in scope, the period covered and the statistical methods used.

covered only the Strait of Georgia (as far west as Beechey Head), and relates to the 12-month period following July 1980 which, as I have already noted, was a period of some turmoil. I do not hold much confidence in the other two sets of statistics which are based on weaker statistical methods that may well bias the results. Moreover, the Tidal Diary Program excludes substantial numbers of nonresidents and fishermen less than 18 years old.

The Creel Survey indicated 1.8 million angler days in the Strait of Georgia alone during 1980, and this probably approaches 90 percent of the total coastwide sportfishing effort. It is directed mainly at coho and chinook salmon, and accounts for a significant catch of these species, as shown in Table 15-2.

The Creel Survey indicated a total sport catch of just under 900 thousand salmon. Since the catch outside the Strait of Georgia is believed to account for something more than 10 percent of the total, the coastwide sport catch was probably about 1 million fish, of which two-thirds were coho, most of the rest chinook, with pinks accounting for a little more than two percent. This is significantly less than the Department's earlier estimates but may be roughly consistent with the estimates from

Table 15-2 Recent estimates of tidal water salmon sportfish catches and angler effort

	Department's estimates presented in Preliminary Report		Tidal Diary Program ^b (1980)		Creel Survey (1980-81)	Share of total catch taken by sport fishermen in the Strait of Georgia ^c
	Georgia and Juan de Fuca Straits ^a	Total Coast	Georgia and Juan de Fuca Straits ^c	Total Coast	Strait of Georgia ^d	(percent)
(thousands of fish)						
Catch:						
chinook	360-630	400-700	328	391	320	50
coho	630-810	700-900	329	362	553	68
total salmon ^f	n.a.	1190-1690	697	798	895	31
Effort in thousands of angler days	n.a.	2500	710	851	1810	

^a Statistical areas 13 to 20, 28, 29, A, B and C.

^b Includes only British Columbia residents over 18 years of age.

^c Includes Johnstone Strait (statistical area 12) as well as the areas described in (a) above.

^d Includes areas in (a) above, except area 20.

^e Based on Creel Survey estimates and average commercial landings in 1979 and 1980.

^f Includes catch of salmon other than chinook and coho.

Sources: Department of Fisheries and Oceans, Exhibit #172.

M. MacGregor, "The Tidal Sportfishing Diary Program Report on the Pilot Years 1979-80." Prepared for the Department of Fisheries and Oceans, 1982.

DPA Consulting Ltd., "1980-81 Georgia Strait Sportfishing Creel Survey Summary Report." Prepared for the Department of Fisheries and Oceans, April 1982.

The Creel Survey undoubtedly provides the most accurate data. It is based on rigorous statistical sampling of sport fishermen, coupled with overflight surveys and boat counts, and includes all categories of fishermen. But the findings should be interpreted cautiously. The survey

the Tidal Diary Program, taking into account the differences in coverage.

Table 15-2 also indicates the fraction of the total catch of these species in the Strait of Georgia that is taken by

sport fishermen, based on the Creel Survey estimates and commercial landings. This suggests that sportfishing accounts for 68 percent and 50 percent of the total coho and chinook catch in this area. These proportions are lower than the estimates that appeared in my Preliminary Report, but they nevertheless show that the sport fishery puts heavy demands on coho and chinook salmon, especially on the particular stocks that appear to be suffering most from excessive fishing pressure (see Chapter 2).

If we assume that the catch in the Strait of Georgia is 90 percent of the total salmon sport catch, and that catches elsewhere are in the same species proportions, then coastwide sportfishing appears to account for 21 percent of the total chinook catch and 15 percent of coho. Taking all species of salmon together, sportsmen account for about 4 percent of the total harvest.

These estimates of sportfishing effort and catch are the best available, and they are more reliable than any previously available. But they hardly provide a solid statistical base on which to build sportfishing policy: they relate to only one year; they diverge from other estimates (insofar as they can be extrapolated over inconsistent periods and areas covered); and they are incomplete. Later in this chapter I return to the implications of this information deficiency for sport fishery management and policy development.

Fishing Success

Sport fishermen do not, on average, catch very many fish. If there were 320 thousand fishermen last year (which, I suggest above, is a conservative figure), and they caught altogether 1 million salmon, their average catch would be less than four fish. The fairly accurate Creel Survey estimates in Table 15-2 suggest that in the Strait of Georgia, at least, sportsmen caught on average one-half a salmon per angler day.

However, the effort and catch is distributed very unevenly among sport fishermen. Almost two-thirds of all sport fishermen fish five days or less, and only fifteen percent fish more than ten days.⁴ Ten percent of the fishermen catch more than half of the total catch, while nearly 40 percent catch no salmon at all.⁵

Economic Impacts

Sportfishing has grown to the point where it now generates substantial economic activity based on boats and gear, moorage and other services, and tourist accommodation and guiding. About half of the resident sport fishermen fish from their own boats,⁶ and the capital value of the sportfishing fleet is now about the same as the value of the commercial fleet. One study indicated 108 thousand boats were used in 1979 for sportfishing in the Strait of Georgia alone, and these had a capital value of more than \$600 million;⁷ a more recent estimate is

roughly consistent, indicating a coastwide angler-owned pleasure boat fleet in 1980 worth \$837 million.⁸ Fishing is not the only motive for acquiring boats, of course, but it is apparently the dominant one,⁹ with about 60 percent of all pleasure boats being used in sportfishing.¹⁰

Spending related to saltwater sportfishing on the Pacific coast now approaches \$100 million annually.¹¹ A high proportion of these expenditures are on local goods and services; many of the boats, tackle and other supplies are manufactured locally and virtually all accommodation, food, boat services and so on are supplied locally.

The sportfishing tackle and equipment manufacturing industry has developed along the lines of a cottage industry, especially in the Victoria region. These local manufacturers have demonstrated remarkable entrepreneurial skill and innovation. They now supply most of the local market with lures and tackle and have expanded into foreign markets as well. Their total sales have increased to several million dollars annually.¹²

DEVELOPMENTS IN SPORTFISHING REGULATION

Sportfishing in tidal waters has been subjected to increasingly stringent regulation during the past three decades. A daily bag limit of ten salmon was introduced in 1951; this was reduced to eight in 1959 and four in 1963. The minimum size required for keeping salmon was increased from eight inches in 1951 to twelve inches in 1965 and to eighteen inches for chinook in 1981. Additional restrictions have been put on gear and areas in which sportfishing is permitted.

In 1981, major new restrictions on sportfishing were imposed. Most important was the tidal water sportfishing licence, ending more than a decade of discussions, proposals and debate about licensing. The purpose of licensing is twofold: to provide information about sportfishing for resource managers and to raise revenue from the sport fishery for resource enhancement.

Other regulations introduced last year, designed to reduce the fishing pressure on certain stocks, and specifically to increase chinook salmon escapements in the Strait of Georgia and the Fraser River, have been heavily debated. Equally controversial was the way in which they were introduced. In the context of its urgent concern for conserving the declining chinook salmon, the Department announced on February 11th, reduced bag limits for chinook salmon everywhere on the coast, a winter closure on sportfishing for this species, continued closure of the Fraser River to chinook sportfishing and a ban on the use of downriggers.

Sport fishermen and those with commercial sportfishing interests strenuously opposed these changes

and, through the Sport Fish Advisory Board, proposed an alternative seven-point plan, which they maintained would make the same contribution to chinook escapement with less adverse impact on sportfishing opportunities and on supporting industries. A moratorium was put on the announced changes (except for the prohibition on downriggers without quick-releases and the Fraser River closure) while the counterproposal was discussed. The latter was subsequently adopted.

The current regulations governing salmon fishing in tidal waters include a daily bag limit of four salmon, only two of which may be chinook during the winter period (December 1st to March 31st). The possession limit is two daily bag limits, or eight salmon. An annual bag limit of 30 chinook is enforced by means of a punchcard system. Regulations govern the number of lines that may be fished from a boat, and downriggers without quick-release devices are prohibited. The minimum size limit for chinook salmon is 45 cm (18 inches) and 30 cm (12 inches) for other species.

In addition to these broad regulations, special restrictions have been imposed on the size and number of fish that may be taken in certain areas, and provisions have been made for spot closures for conservation purposes.

Earlier this year, new restrictions were announced as part of a program to "halt the decline in chinook salmon stocks in British Columbia . . ."¹³ Coupled with measures to restrain further the commercial catch of this species, reduced bag limits for sportsmen were imposed in northern waters.

My investigations have revealed that there is currently no monitoring program of the kind needed to identify the impact of such regulatory measures. So their effectiveness is unknown. And the analysis on which the recent restrictions on sport fishermen were based was rudimentary at best.

We are left with little to judge the efficacy of sportfishing regulations in meeting their objectives. Moreover, the effect of the new controls will take years to assess and I fear that in any event, the Department lacks the base-line data needed to measure their impact.

This void of reliable data generates much of the contentiousness of sportfishing policy. The majority of sport fishermen, and certainly most sportfishing organizations, are clearly willing to accept the controls needed to conserve the resources on which their recreation depends. But equally clearly, they will be receptive to such measures only if there are reasonable grounds for believing they are necessary and will have the desired effect. Until the Department has better information to support changes in regulations, it will remain vulnerable to criticism and obstruction. Without the support and

confidence of the sportfishing community, both resource management and sportfishing opportunities are likely to suffer.

PRIORITIES FOR SPORTFISHING POLICY

I turn now from our present position to directions for the future. We clearly face both challenge and opportunity: the challenge of coping with intensifying competition for salmon among commercial, recreational and native Indian user groups; and the opportunity to develop a clearly defined policy that reflects the needs of each competing group.

Priority must be given to the development of a reliable information system upon which effective management decisions can be based. In the meantime, sportfishing policy should be cautiously conservative and as uncomplicated as possible. It should be designed as a base to which refinements can be added as information accumulates about the resources and the impacts of fishing. This, in the long run, should provide scope for a richer diversity of sportfishing opportunities.

Sportfishing in Fisheries Policy

Until relatively recently, sportfishing was of little consequence to resource managers. But recent expansion of sportfishing, in conjunction with intensifying demands on the resource from other users, has created a need for a coherent sportfishing policy. The Department has begun to recognize this, but its approach to sportfishing remains awkwardly integrated with overall fisheries policy. In the Department's words:

The broad objective of recreational fishery management is to accommodate as far as possible the needs of the growing recreational fishery without major negative impacts on the other user groups.¹⁴

This rather vague and reluctant attitude is inadequate in view of the present numbers of sport fishermen, the importance of sportfishing and its heavy demands on certain stocks. With the present competition for the available harvest, the sport catch must inevitably encroach on that of other groups, and vice versa.

Sportfishing organizations commonly perceive that sportfishing receives short shrift from the Department:

It is quite obvious that the Department does not have a recreational fishery policy. They do not recognize sport fishermen as legitimate users of the resource . . .¹⁵

Support for this criticism is plentiful: the Department has never had a sportfishing branch; the statistical series on sport catches was abandoned a few years ago; currently only two or three of the Department's staff are concerned

mainly with recreational fishing; and recognition of sportfishing in fisheries legislation is desperately lacking.

The resulting distrustful attitude of sport fishermen is not conducive to cooperation and support. Dispelling it should be the first step in sportfishing policy reform. This could be done with an unequivocal policy statement and commitment to sportfishing. Hence I recommend that:

1. **The government's policy should explicitly recognize sportfishing as a legitimate, valuable and significant use of fish resources, and this should be reflected in a commitment of staff and budget.**

In other circumstances such a policy statement would be unnecessary. But in the current circumstances an explicit policy statement committing the Department to sportfishing management is the necessary first step toward improving its credibility among sport fishermen and generating the needed confidence and support of the sportfishing community.

The Department cannot identify how much manpower and expenditure is now devoted to sportfishing because there is no administrative centre with sportfishing responsibility; but it estimates that sportfishing management and enforcement, dispersed among personnel concerned mainly with other matters, accounts for some 17 person-years and \$200 thousand in other costs. I cannot say what an adequate provision would be (in Chapter 19 I propose a Departmental review for such purposes), but given a regional budget of \$85 million and a staff of over 1,200 I have no hesitation in concluding that the present provisions are insufficient.

Policy Objectives

The general policy objective prescribed in my terms of reference is to ensure that the resources are used in a way that will yield maximum social and economic benefits. This raises two fundamental questions for sportfishing policy: how much of the available catch should be allocated to sport fishermen, and how this share should be allocated among them? Both of these questions call for an understanding of the essential values generated by sportfishing and how they are affected by regulatory methods.

Sportfishing values The value generated by sportfishing cannot be measured simply by determining the value of the fish caught. This is a relevant measure of the values generated by the commercial fishery, but it is only incidental to the value of sportfishing, which is derived primarily from the associated recreational experience. The quality of this experience is undoubtedly affected by the opportunity to enjoy a good catch, but the fishing opportunity, not the market value of the fish themselves, is what excites most sport fishermen. This explains why most sport fishermen spend far more on

fishing equipment, supplies and services than it would cost to purchase their catch on the market, and why many enjoy fishing even though they do not catch fish or do not take them home to eat.

Nor can the benefits of sportfishing be properly measured by calculating the expenditures on fishing equipment and services. A sportsman will go fishing only if he expects that his enjoyment will be worth more to him than the outlays he must incur to fish. The net benefit is, therefore, the excess of his enjoyment over his costs. Expenditures on boats and other goods and services referred to earlier in this chapter indicate the amount of economic activity generated by the sport, but so far as the value of recreational fishing is concerned they are more indicative of the costs than of the benefits.

The value of sportfishing, in terms comparable to the economic value of other goods and services, is most appropriately measured by the amount of money sport fishermen would be willing to pay for it, not by what they buy to compliment their fishing. There is a good deal of confusion about this. The value of a movie, for example, cannot be measured by how much the viewer spends on transportation to the theatre and on popcorn or babysitters, but by how much he is prepared to pay to see the show. In the case of movies, entrepreneurs charge what the market will bear and their receipts reflect the value of their product to the public. In the case of sportfishing, the government does not charge what the market will bear, but nevertheless, the users' potential willingness to pay is the correct measure of the value of sportfishing opportunities.

Because Canadian governments do not try to maximize returns from sportfishing, the benefits accrue, for the most part, to the anglers themselves rather than to the resource owners (the people of Canada) generally. This policy can be defended on socio-political grounds, but it has the incidental effect of leaving no direct economic indicators of the values generated. This can be estimated only from indirect evidence.

Studies conducted in British Columbia, Washington and Oregon indicate that the average sport fisherman would be prepared to pay about \$15 per day for the opportunity to participate in general saltwater fishing, and \$25 per day for trophy saltwater sportfishing and for steelhead freshwater angling.¹⁶ These are crude estimates, and they were made in 1977, but they indicate the appropriate kind of measure for determining the value of sportfishing. If the \$15 per day figure were applicable to saltwater sportfishing in 1981, the aggregate value generated by sportfishing in tidal waters would have been about \$30 million.

The true value of sportfishing opportunities in this area is governed by the quality of the recreational experience

those opportunities offer. Therefore, recognizing the factors that affect the quality of the experience is crucial in designing sportfishing policy. The opportunity to catch fish is central, but many other factors are involved.

... if the salmon is the key or the axle of the wheel, perhaps the other factors [fraternity, the desire to become a better fisherman, the competitive aspect and the opportunity to get away from job pressures, family commitments and social obligations] are the spokes and rim of the wheel which turns the motivational crank — giving us a more complete picture of what sportfishing is and what it means to the people that participate in it.¹⁷

Many of these factors are beyond the scope of fisheries managers, who obviously have little influence on such things as the weather, scenery and comradeship. But fisheries authorities have in their hands the essential key to an exciting recreational experience: they regulate the opportunity to catch fish. And by regulating access to the fish, fixing bag limits, imposing gear restrictions, and making other rules, they control whether a sport fisherman can, with a little luck, a little skill, and some dedicated effort, take a satisfying catch.

The essential motives in sport fishing are hope and the gamble. The hope is that a day on the water will produce a few nice fish. Time and money are spent for this gamble. The sure way to kill the urge to go sport fishing is to remove these two motives.... A fisherman will go out day after day and not catch a single fish. If he is told he can only go out and catch one fish, and can't even use his favourite tackle, then the hope and fun of the gamble is removed and he ceases to want to go fishing.¹⁸

To enhance the value of sportfishing, therefore, regulatory authorities should strive to preserve and develop the opportunity to catch "a few nice fish," and policies should be considered in terms of whether they will increase or diminish this opportunity within the constraints imposed by the limited available catch and other users.

Basic choices The basic choice is between spreading the available catch among more fishermen, which enables a greater number to participate but reduces the quality of the experience for each, and controlling the numbers, which enables a smaller number to enjoy a more valuable fishing opportunity. Historically, regulation has favoured the former: sportfishing has been freely accessible to everyone, with the catch being controlled by progressively reducing the numbers of fish that each may retain, and by gear restrictions and closures. These controls have

been advocated because they do not limit the number of fishermen who may participate. But as long as the number of potential sport fishermen continues to grow, and the available catch does not keep pace, this policy implies that individual catches will progressively deteriorate, as will the value of the sportfishing opportunities. Judging from reactions, this point may have been reached with the proposal last year to reduce the bag limit for chinook salmon to one fish. Obviously, any further reduction would virtually eliminate that sportfishing opportunity.

The alternative approach is to control the total pressure on the stocks by regulating access and reducing the expansion in numbers of fishermen, thereby preserving their opportunity to take a satisfying catch. With the continuing growth in sportfishing demand, the bleak prospects for significantly increasing the catch available to the sport fishery in the near term, and the modest bag limits that now exist, sportfishing policy should be directed toward this latter alternative for the time being.

I therefore recommend this change in policy direction:

2. **Sportfishing policy should aim at preserving the quality of sportfishing opportunities, which implies dampening the rate of growth of sportfishing effort and maintaining average catches until the available harvest can be increased.**

In Chapter 4 I discuss the opportunities for increasing the available stocks through improved escapement, and in Chapter 5 I explain that enhancement efforts may increase chinook and coho stocks in the Strait of Georgia. But whether or not these measures are effective, management of the sport fishery requires regulating sportfishing privileges and improving information on the impacts of sportfishing. These are the issues I turn to in the remainder of this chapter.

REGULATORY ENDS AND MEANS

The basic instrument for regulating access to sportfishing is the licence, now finally in place. The privileges and obligations embodied in these licences offer fairly flexible means of achieving sportfishing objectives. I propose that the tidal water (saltwater) sportfishing licence system be retained, simplified in certain respects, and modified to better serve policy goals.

Licences

First, I propose that the federal saltwater sportfishing licence and the Province of British Columbia's freshwater sportfishing licence be integrated into a single document. Many sportsmen participate in both saltwater and freshwater fishing, and the proliferation of fish and wildlife authorizations from both governments with their separate networks of issuing agents has become a considerable

nuisance. The governments should provide simple and convenient licensing arrangements, and by engaging the same agents they may realize certain economies as well.

3. The governments of Canada and British Columbia should cooperate in integrating the saltwater and the freshwater sportfishing licences, so that both can be acquired through a single document, which all agents should be authorized to issue.

The most expedient system would appear to be a stamp for each of the two fisheries, either or both of which may be affixed to a single sportfishing licence document. I understand that officials of the two governments have already examined the feasibility of joint arrangements, and while no unmanageable technical difficulties seem to exist, the financial arrangements have not been made.

In the longer term, the feasibility of extending the licensing system to cover younger fishermen should be examined. The present exemption for those under 16 is presumably in place to avoid burdening children financially, but an alternative is to require them to hold licences issued at nominal or no cost. This would bring all fishermen within the framework of the regulatory system and provide more comprehensive data. Any such change would obviously be more suitable if made in conjunction with a conforming change in provincial freshwater licensing, I therefore propose—

4. The governments of Canada and British Columbia should examine the feasibility of extending the sportfishing licensing system to include younger fishermen perhaps under licences issued at nominal or no cost.

This change could have the incidental benefit of engendering greater appreciation among young people of sportfishing opportunities and the need for resource conservation. It would also deter the alleged practice among some sport fishermen of attributing their catches to accompanying children to circumvent bag limits.

Licence Fees

The current saltwater sportfishing licence fees are very low, and fall well short of the value of the fish caught by average sport fishermen. Indeed, the annual \$5 fee for residents is much less than the value of an average salmon. So, in order to bring the fees closer to the value of the resources used, and to support my proposals for a greater commitment to a sportfishing information and management system, I recommend that—

5. Saltwater sportfishing licence fees should be doubled.

This change will bring the saltwater fees roughly into line with the province's freshwater fees, though there remain differences among categories, and these should be

reviewed. In Chapter 5 I propose that half of the sportfishing licence revenue be directed toward the enhancement effort and that the remainder support the expanded sportfishing management and information program I recommend below.

In addition to raising more revenue, higher fees will tend to dampen the growth in numbers of sport fishermen by deterring those who put only a marginal value on the sport. They will thereby assist in preserving the quality of sportfishing opportunities.

Some people object to the idea of higher charges for sportfishing privileges on grounds that they would impinge most heavily on the poor. This is a worthy concern, and it is for this reason that special rates are often provided in licensing systems for old-age pensioners and others. But sportfishing licence fees are generally rather trivial in comparison with the other substantial expenditures that most anglers incur in order to sportfish, so the argument that an increased fee is unfair is not very convincing. Moreover, sportsmen must recognize that the fish they take are very valuable, and they could alternatively yield significant value in the commercial fishery. Sportfishing opportunities on the Pacific coast are exceptionally attractive, and it is reasonable for those who use the resources to pay for the privilege, as my terms of reference imply they should.

Punchcards, Tags and Annual Bag Limits

As I explained earlier in this chapter and elsewhere in this report, the need to constrain fishing pressure on the chinook and coho stocks that support most sportfishing is urgent. The proposals set out here are designed to do so without eroding further the quality of sportfishing opportunities.

The present licence includes a punchcard which limits the bearer to an annual catch of 30 chinook salmon. This arrangement has several shortcomings:

- i) The best available information, some of which was referred to earlier, suggests that an annual bag limit of 30 chinook salmon will have very little impact on the total catch because so few fishermen catch significantly more than this.
- ii) It requires sport fishermen to distinguish between the species of salmon, but many casual fishermen are probably incapable of doing so.
- iii) It does not apply to coho salmon, but recent information suggests that many coho stocks, like chinook, need urgent conservation.
- iv) By applying to chinook salmon only, it bears more heavily on sport fishermen in those areas where chinook salmon predominate.

- v) It constrains all fishermen to the same generous limit, though most will catch less and a few would be prepared to pay to catch more.

To correct these deficiencies and to maintain the quality of sportfishing opportunities, I propose the following:

6. **In 1983, the saltwater sportfishing privilege should embody a punchcard limiting the holder to 30 salmon regardless of species.**
7. **Simple plastic tags should be available at a price of \$2 each, and should be required to be attached to all salmon in excess of a licence holder's punchcard limit.**

The relative advantages of tags and punchcards have been studied at length. Most observers agree that tags are a better means of regulating catches than punchcards because they are more flexible and, being visible, promote better compliance; but they are much more costly. My proposal is aimed at providing the flexibility without the high costs. With the punchcard entitling each licensee to 30 salmon, relatively few will purchase tags (recall that nearly 40 percent catch no salmon at all, and few, perhaps 6 percent, catch more than 30 per year). Moreover, I propose minimal administrative requirements, which is the main source of estimated costs of tag systems. I intend that they be simple plastic tags detachable from a sheet, like those used in New Brunswick, and that they be issued without restriction at the same price for all categories of licence holders. No attempt should be made to prohibit transfers, which means no records need to be maintained to identify particular tags with particular licences.

These arrangements will provide all sport fishermen with an equal opportunity to catch salmon; the most ardent will be able to continue to take large catches providing they pay extra for their heavy demands on the resources; the different salmon species and the different geographical groups of fishermen who depend on them will be treated more appropriately; and the revenues from sportfishing will be more closely related to the value of resources used.

Nonresident Sport Fishermen

Over 30 thousand nonresidents purchased licences to fish on Canada's Pacific coast last year. These visitors make a substantial contribution to the tourist industry, and many resorts, charterboat operations and service establishments depend mainly on them.¹⁹

Judging from the apparent willingness of many foreign fishermen to pay to fish in Canada, particularly on the west coast, the goal of maximizing economic and social benefits from the resources suggests that opportunities for this category of sport fishermen should be maintained. But in contrast to fishing by Canadians (where the

benefits of recreational enjoyment accrue to Canadians whether they are paid for or not), the benefits to the people of Canada from sportfishing by foreigners arise almost entirely from their expenditures on sportfishing. Indeed, insofar as they use fish that would otherwise be available to Canadians, they impose a cost.

For these reasons, a heavier fee on foreign sport fishermen is justified. My earlier recommendation to double fees will have the effect of raising the annual licence for nonresidents to \$40 and the three-day licence to \$20 and so no further change is warranted for the time being.

The Charterboat and Guiding Industry

Rapid growth in sportfishing over the last two decades has substantially increased the demand for fishing guides, charterboats, accommodation and a host of other goods and services. For present purposes I will set aside all those shore-based businesses that supply goods and services to fishermen, such as tackle, accommodation, bait, and so on, because they are only indirectly influenced by fisheries policy. Here I am concerned with operations that provide sportsmen with professional assistance in fishing in the form of vessels, vessel operators and guides.

Charterboat clients are motivated by the same qualities of sportfishing opportunities as are other sport fishermen, and the operators offer a useful service that broadens these opportunities.

... the industry is affected by two overriding factors, the ability of potential clients (the public at large) to pay for a sportfishing experience, and the perceived likelihood that his expenditure will be justified in terms of recreational value and the opportunity for a good catch.²⁰

Despite a surprising amount of debate about whether guiding and charterboat operations constitute recreational or commercial fishing activity, I have no hesitation in classifying these businesses as commercial. However, they differ fundamentally from the sector usually referred to as the commercial fishery; whereas the commercial fishing industry is based on the production and sale of fish, the charterboat and guiding industries are concerned with the provision of sportfishing services and facilities. The fees charged by these businesses and their total incomes are not closely correlated to the number of fish landed by their clients.

Charterboat operations Charterboat operations take a variety of forms, which can be roughly categorized into four groups: *floating resorts*, which are large ships, typically stationed in remote areas near superior fishing grounds, that provide a full range of hotel accommodation and services to sport fishermen; *guided charters*, which are typically vessels of 12 to 45 feet hired with a

guide for an hourly or daily fee; *party boats*, which offer "fun fishing" to large numbers of novices at low cost; and *guide services*, which may be provided independently of vessel rental arrangements at an hourly or daily rate.²¹

Small boats available for hire without an operator or guide are not appropriately classified as charter operations; "bareboat" rentals are analogous to rentals of tackle and accessories, and are not a special issue in fisheries policy.

Like so many other matters relating to the sport fishery, statistical information on the charterboat industry is very sparse, and until last year virtually nonexistent. Through a voluntary registration program for guides and charterboats undertaken by the Department in 1981, some 500 guides and operators and 600 boats were registered, and these are believed to represent roughly 80 percent of those active in the industry.²² A supplementary mail survey of those registered, which aimed at obtaining more information about the nature and scope of the industry, was not successful: few responses were received due to a lengthy postal strike, resentment over recently announced sportfishing regulations, suspicions about the Department's reasons for conducting the survey, and depressed economic conditions that closed some operations for the entire season.²³ At the same time, a Sport Fishing Guide Log Book was distributed for voluntary completion and return, but again the response was low, so that reliable information on the charterboat industry remains sparse.

Charterboat licensing The dearth of information about this important and expanding sector of the fisheries and about its resource utilization is a serious impediment to effective management and policy development. I therefore propose that charterboats be required to obtain licences, like other commercial fishing vessels, for the primary purpose of obtaining data on the size and structure of the industry and its catches:

8. **Those who provide vessels with guides for sportfishing should be required to obtain a licence for each charterboat.**
 - i) The licence should be issued by the Department at an annual fee of \$50.
 - ii) Licensees should be required to maintain a simple logbook for each vessel documenting the number of persons fishing, their catches and related information for the Department's use.

Compliance with the logbook requirement should be enforced through powers to cancel or refuse to renew a licence.

The proposed licence fee is the same as I propose for other commercial fishing licences. It is intended to defray

administrative costs only. For purposes of raising revenue and capturing some of the economic rent, direct levies on the sport fishermen themselves, through fees for licences and tags, are more appropriate. Given these general charges on all sport fishermen, additional contributions from those who provide sport fishermen with certain services cannot be justified. Nor is there any justification for special levies on charterboat operators as distinct from operators of shore-based establishments that serve sport fishermen.

Some have suggested that charterboat licences should be limited, like some other commercial fishing licences. But for the latter, the purpose is to control the growth of fishing capacity so that it does not exceed the level needed to harvest the catch. This threat does not exist in the commercial sportfishing sector, so no comparable restrictions are needed. This industry grows as demand for its services grows, much like the hotel and other tourist industries; and (unlike overcrowded commercial fisheries) as it grows, production grows also.

Some of the concern expressed at the Commission's hearings to restrict the charterboat industry stems from a broader concern to control the sportfishing catch. The share of the available catch allocated to sportfishing is unquestionably an important issue in fisheries policy, and the catch of the users of charterboats is part of the sport catch. But whether sport fishermen choose to use their own fishing equipment and expertise or to hire them is not a matter for governmental concern.

Fisheries policy should interfere as little as possible with the choices of fishermen about how they choose to fish and, within the limits of the available sport catch, accommodate as much variety of choice as possible to enrich recreational opportunities.

Policy should avoid discriminating among sport fishermen on the basis of the services they employ or among service businesses. My proposal regarding licensing of charterboat operators is thus directed at closing an important gap in the information required for effectively monitoring and regulating the sport fishery.

Sportfishing guides The 500 or so saltwater sportfishing guides work on a wide variety of vessels and under varying arrangements with customers and employers. Some are full-time career guides, often with substantial investments in vessels and equipment and long experience; a larger number are seasonal employees — students and men and women who take other winter employment. They are unorganized except for one or two local associations, which are concerned mainly with market promotion.

Hitherto, saltwater sportfishing guides have been unregulated. But a form of regulation by licensing, akin to the

licensing of guides for hunting and freshwater fishing by the British Columbia Fish and Wildlife Branch, was frequently suggested in the Commission's public hearings and meetings. The arguments most frequently used to support this position are as follows: it would identify those involved in guiding and improve communication and a sense of professionalism among them; it would provide a vehicle, through suspension or cancellation, for enforcing safety rules and fishing regulations; it could be used as a device for establishing standards of service and qualifications; and it could be a means of raising revenue. But as others have pointed out, the Department of Transport regulations already cover matters of safety, other means are available for enforcing fishing regulations, and the other issues are mainly the business of guides themselves. Furthermore, easily available and even casual guiding services are a valuable adjunct to the tourist industry and provide considerable summer employment, which few would want curtailed.

In addition, the licensing of charterboat operations, already recommended, will go a long way toward identifying the size and scope of the guiding fraternity. Insofar as they operate as employees of licensed operators, and the operators are responsible for ensuring that regulations are obeyed and the necessary logbook information recorded and reported, I can see no useful purpose to be served by licensing guides as well. To do so would add an unnecessary administrative burden and expense to the Department and, in the eyes of some anglers, it might imply that the Department has approved the qualifications of guides, an implication the Department should avoid. However, any voluntary organization of guides, as long as it is not aimed at restricting competition, should be encouraged. For these reasons I have concluded that the Department should not become involved in licensing sportfishing guides, at least at the present time.

Sportfish Regulations

In addition to licences and general bag limits, the Department has developed a host of regulations regarding the fishing gear sportsmen may use, the size of fish they may keep, areas they may fish and so on. All of these were discussed at length in my public hearings. Because the usefulness of such measures varies with circumstances, and because we know so little about their impacts, I make no specific recommendations.

Sportfishing regulations of this kind should be designed to protect the stocks from destructive fishing methods. Beyond this, I make no specific recommendations about them, because they should be applied discriminately and invoked or modified in consultation with the sportfishing community. Later in this chapter I propose a temporary ceiling on the aggregate sport catch, and these

regulations should be considered as means of complementing that objective. The following comments consist of relevant observations that have arisen from my investigations.

Spot closures In areas where immature salmon congregate or where mature adults concentrate as they approach spawning grounds, uncontrolled fishing can be very destructive to the stocks and so the policy of closing such areas is justified. During the last couple of years the Department has invoked spot closures more frequently and more discriminately for both commercial fishing and sportfishing.

Some commentators at the Commission's hearings have advocated much more flexible use of spot closures, particularly to protect concentrations of immature fish, including temporary "mini-closures" where schools of young fish pause on their migration routes. The scope for such measures is limited, however, by practical considerations. Hitherto, the Department's power to invoke closures has been constrained by a legal requirement to describe and authorize a closed area in a formal regulation passed by the federal Cabinet through an Order-in-Council and an advertisement in the Canada Gazette. In Chapter 4 I propose that this impediment be eliminated. But other obstacles remain. Closed areas must be readily identifiable by all fishermen, so their boundaries must be marked by recognizable natural geographical features or artificial markers. The latter are inevitably costly, especially for temporary purposes. More problematical is the need to inform all sport fishermen of areas closed, not just the local fishermen but also those who might be passing through.

Sportfishing management could undoubtedly be improved by greater use of spot closures in appropriate circumstances, and the opportunities may be increased through cooperative arrangements with local sportfishing organizations in certain areas. But practical difficulties limit the feasibility of imposing many small, temporary closures that might otherwise be desirable.

Size restrictions Size restrictions can prescribe either minimum or maximum sizes of fish that may be retained; but apart from certain special rules governing river fishing, only the former have been applied on the Pacific coast. The minimum size limits of 45 cm (18 inches) for chinook salmon and 30 cm (12 inches) for other species are intended to be conservation measures to protect immature fish. But whether they are beneficial is questionable. The limited evidence available here and in the United States indicates a high mortality among fish released and that mortality is highest among small fish, especially when they are handled and unhooked by inexperienced fishermen. As long as a daily bag limit applies, total fish mortality might actually be reduced by permitting

fishermen to keep small fish and including them in their bag limits.

Several factors are relevant to whether this is the case: the frequency of hooking "shakers" relative to "keepers"; the mortality rate of released, undersized fish; the normal survival rate of juvenile fish to their adult stage; and the numbers of small fish that would be kept by fishermen if they were permitted to do so. As with so many sportfishing questions, little data is available on these relationships, but it may well be that size limits combined with bag limits have a perverse effect on overall fish mortality.

Size restrictions also reduce the diversity of sportfishing opportunities.

Various sized fish also appeal to various anglers. The thrill of a child with a fish of any size and the desire of many elderly anglers to retain just a couple of grilse to satisfy their modest appetites and demands comes to mind. So does the desire of the expert to catch a large fish and together with that expertise, the ability to release small fish unharmed. . . . An open-ended, voluntary release, no size limit fishery would not have an adverse effect on salmon stocks in the aggregate; it would enhance the recreational opportunity and experience for many anglers and it would constitute a simple solution to a needlessly complex and over-exaggerated problem that can not be proven to exist.²⁴

Compulsory retention of all fish caught has been suggested, but this would be unenforceable, and bag limits would encourage violations. On the other hand, voluntary retention of any fish would undoubtedly reduce the enforcement burden and increase the satisfaction of many casual sport fishermen. So in the absence of evidence that size restrictions serve a useful conservation purpose, they might best be abolished in favour of more effective measures such as spot closures in areas where juvenile fish are concentrated.

Gear restrictions Restrictions on certain kinds of fishing gear such as barbed hooks, treble hooks and downriggers are highly controversial, and the arguments in favour of them vary. Some suggest that certain types of gear should be banned because they are not sporting. The government should avoid regulations based on such ethical judgements: they are inevitably subjective, and they discriminate against those who fish by certain methods and in certain conditions as well as against less experienced fishermen, who may nevertheless gain great satisfaction from catching fish.

Others advocate such restrictions in order to reduce the sport catch. Any gear restrictions undoubtedly tend to reduce fishing success, but since other means of control are available, such as licence fees and bag limits, it is questionable whether this objective should be pursued by making it more difficult to catch fish.

Still others argue that restrictions on gear, such as treble and barbed hooks, will reduce the mortality of released undersized fish, which is the purpose of the barbless hook rule imposed on commercial trollers last year. This latter case is persuasive; treble and barbed hooks are often extremely difficult to remove without mortal damage to a small fish. The justification for prohibiting such gear is particularly strong given minimum size limits for landed fish. But even without size limits, since most fishermen will choose to release small fish, prohibiting barbed or treble hooks may be justified.

Restrictions on river fishing The freshwater salmon sport fishery is an important component in the range of sportfishing opportunities. In recent years much heavier restrictions have been placed on sportfishing in freshwater rivers and streams than have been imposed on ocean fishing for the same fish. Sportfishing for chinook salmon is now prohibited in major parts of the Skeena and Fraser river systems, for example, and no sportfishing for pink, chum or sockeye salmon is permitted in any nontidal waters.

Sportfishing policy should aim at providing opportunities wherever they generate the greatest recreational value, and the rarer and more esoteric experience of river fishing for salmon and steelhead suggests that some fish allocated for this activity will generate higher recreational value than the same fish caught at sea.

The disproportionate restrictions on river fishing undoubtedly reflect concern for conserving spawners. But fish caught at sea are also potential spawners, notwithstanding their different survival rates to the spawning beds. In designing controls, therefore, account should be taken not only of the relative impact on the stocks of taking fish at sea and in rivers, but also of the relative value of sportfishing opportunities.

A SHORT-TERM STRATEGY FOR MANAGING THE SPORT FISHERY

Earlier in this chapter I suggested that maximizing the economic and social benefits from our fish resources calls for allocating the available catch between the sport fishery and other fisheries in proportions that will generate the greatest value. I have also pointed to the disturbing void of reliable information about sportfishing that prevents the necessary evaluations from being made. Nevertheless, we know that sportfishing depends mainly on chinook and coho salmon, that sportsmen take a large

proportion of the catch of these species, especially in the Strait of Georgia, and that these stocks are under especially heavy fishing pressure and in need of conservation measures (as pointed out in Chapter 2). So despite our present ignorance about many aspects of sportfishing and the resources it depends on, I recognize a responsibility to propose a more clearly defined course of action to guide sportfishing management and protect overfished stocks during the next few years until a firmer foundation for policy direction can be laid.

I therefore propose a five-year program aimed at constraining the growth of sportfishing pressure on the resource while maintaining high-quality sportfishing opportunities. I have already recommended certain changes that will tend to dampen the rate of increase in sportfishing, particularly the doubling of licence fees and the punchcard-tag arrangements. For the next five years I propose a specific ceiling on the aggregate sport catch and supplementary controls to achieve this. During this period improved management of the commercial, Indian and sport fisheries, and enhanced production should be capable of reversing the declines in important sportfishing stocks. At the same time, the information program I propose later in this chapter will provide the essential data for meaningful consultations with the sportfishing community, so that more positive sportfishing policy can be developed for the future. Specifically, I recommend—

9. **For the next five years, the Department should aim at providing an annual coastwide sport catch of 1 million salmon, of which not more than 900 thousand should be taken in the Strait of Georgia and Fraser River systems.**

According to our best information, described earlier in this chapter, these proposed targets are close to current levels of catch.

To ensure that the sportfishing targets will not be exceeded, the Department will need supplementary and more flexible controls. For reasons I have alluded to already in this chapter, sport fishermen should be involved in designing these regulations. I therefore recommend—

10. **The Department should invite the Sport Fish Advisory Board to assist in designing sportfishing regulations to ensure that the proposed targets for the sport catch will not be exceeded.**

These consultations should concentrate on sportfishing regulations of the kind described in the preceding section as well as other means of managing the sport fishery to meet the objectives.

To complement these restraints on the sport fishery, the Department should intensify efforts to reduce the

commercial fisheries' catch of the vulnerable chinook and coho stocks. These efforts have already begun with elimination of terminal gillnet fisheries in many areas, including the Fraser estuary; reduction of the permitted depth of seine nets to conserve the deep-swimming chinooks; bunt requirements to allow young fish to escape seine nets; restriction of many Indian bands fishing for chinooks; exclusion of much of the troll fleet from the Strait of Georgia; and barbless hook requirements, and increased area and time closures for trollers. In view of the urgent concern for conservation of coho and chinook stocks in the Strait of Georgia especially, and until better information is available about how these stocks are fished, the catches in all fisheries should be tightly constrained.

We must recognize the possibility that the consultative process will not succeed in designing controls that will meet the regulatory objectives or that, for unpredictable reasons, agreed regulations will fail. In either event, the Department should have recourse in other means to control the catch. Thus—

11. **In the event that regulations designed in consultation with the Sport Fish Advisory Board are insufficient to constrain catches to the target levels in any year, the Department should close the sport fishery in either the Strait of Georgia or the rest of the coast to ensure that the targets are not exceeded.**

A general closure on sportfishing, either coastwide or in the Strait of Georgia, should be invoked only as a last resort. This is unquestionably a crude method of regulating the sport fishery; it causes serious dislocation for those whose livelihoods depend on sportfishing, and it abruptly eliminates sportfishing opportunities. It should be invoked only to ensure that targets will be met for the proposed five-year program. Beyond this period larger sportfishing stocks and more discriminating management and regulations should make such action unnecessary. By then, the proposed system of licences, punchcards and tags, coupled with intensive data collection, will provide a solid foundation for determining the levels of sportfishing activity and catches, the demand for sportfishing and the impact of regulations.

IMPROVING INFORMATION ON THE SPORT FISHERY

I cannot overemphasize the importance of reliable and comprehensive data on sportfishing for purposes of managing salmon stocks; managers cannot continue to rely on extrapolations from estimates in which they have limited confidence, such as those I have referred to in this chapter. In my Preliminary Report I expressed the hope that studies then nearing completion would identify the sportfishing effort and salmon catch with much more precision. Unfortunately, they have not done so.

The controversy and confusion surrounding the statistics on the sport catch has generated a great deal of skepticism among sport fishermen.

We find it hard to believe that early last February DFO could announce it had a problem and the solution to that problem. Incredibly, nine months later they cannot produce what we could consider the minimum data needed to identify the scope of the problem and possible solutions.²⁵

This skepticism has created a climate in which the Department has difficulty obtaining the support and cooperation essential for effective regulation. Yet management of the sport fishery, in contrast to the commercial fishery, depends heavily on voluntary information. Therefore, we must have a data collection system that meets not only the technical requirements of the Department, but also generates the confidence of sport fishermen in the information and in the regulations it supports.

One of the things you have to build into your data system is the confidence of the people who are going to be affected by it.²⁶

To this end, I recommend an immediate commitment to a comprehensive sportfishing information program to support sportfishing management and policy development:

12. The Department should immediately begin to develop a comprehensive data and information system for the sport fishery.

The Department recognizes its present data deficiency, and in its brief to this Commission expressed the hope that the Tidal Diary Program could be combined with the Creel Survey in a "comprehensive sport catch data system."²⁷ But the information must be collected and compiled consistently from year to year so that problems can be identified and corrected, and so that users of the information can have confidence in it.

The State of Washington's tidal water sport fishery is strikingly similar to British Columbia's in terms of size, structure, supporting species of fish and recent trends in fishing. And the State Department of Fisheries has developed a sportfishing information system using punchcards and creel surveys that illustrates the intent of the above recommendation as well as the value of sound data. The current annual cost is about \$500 thousand (Canadian) and 14 person years. A consistent information program operating for more than a decade has apparently generated a good deal of confidence in the data and the management prescriptions that follow from them. As a result, Washington's fishery managers have recently introduced a host of new regulations and restrictions on sport fishermen in an attempt to protect declining stocks of chinook

and coho salmon. This has been done without the vexatious disputes about statistics that dissipate so much energy and goodwill in Canada.

My review of the State of Washington's experience and other information leads to further conclusions about the needed data collection program:

13. A central component of the information system should be an intensive and continuous creel survey.

The creel census involving intensive angler enumeration and interviews at marinas, boat ramps and other landing points, coupled with boat counts from overflight surveys should include the whole coast as well as salmon taken in freshwater streams and rivers. Sport catch and effort estimates should be made on a month and statistical area basis.

Supplementary information should be obtained from surveys of licence holders, returns of punchcards or samples such as those obtained through the Tidal Diary Program.

Quick and continuous compilation and analysis of data collected during the fishing season is needed to effectively integrate the sport fishery with the in-season management system I proposed in Chapter 4. This will be particularly important for monitoring catches in relation to the sportfishing catch targets I have proposed. Thus, I recommend —

14. The Department should develop a rapid data processing system designed to integrate sportfishing information into general salmon management planning.

The objectives of fishing policy can be met only when we understand the values generated by fishing and how the sport fishery responds to such things as fish abundance and regulatory controls. Such information is scarce, and this is a serious impediment to a systematic approach to the allocation of catches. I therefore recommend that —

15. The Department should sponsor research on the value of sportfishing opportunities on the Pacific coast and what effect regulations have on those values.

This sportfishing information program should be started without delay. It will take time to develop the system, to compile sufficient, consistent information to support useful analysis, and to generate the confidence of the sportfishing community. But once in place, it will soon provide the information needed to guide the development of a more sophisticated and beneficial sportfishing policy than I am able to propose now.

LONG-TERM DIRECTIONS

With sufficient restraint in the short term to allow for rehabilitation of overfished stocks, the outlook for sportfishing opportunities in the longer term is bright. If enhancement efforts are successful, the outlook is even brighter. But present resource management practices and approaches to regulating the sport fishery are clearly inadequate to ensure that these opportunities will be realized.

In this chapter I have concentrated on the salmon sport fishery, which dominates recreational fishing on the Pacific coast, but parallel values and opportunities are also provided by other fish and shellfish. I have emphasized the importance of understanding the essential value of sportfishing, and how this value is affected by regulations. In the longer term, if we succeed in improving resource management and increasing the available catch, and if we put in place a system capable of effectively regulating fishing, there is little doubt that recreational values can be increased substantially by providing more, and a broader diversity of, sportfishing opportunities.

Hitherto, most tidal water sportfishing regulations have applied uniformly over the whole coast in spite of widely varying stock conditions and sportfishing pressures. Within the last couple of years, however, modest steps have been taken toward special regulations for particular areas of the coast and particular rivers. As information and administrative capabilities permit, future policy should aim at more diverse, discriminating regional arrangements adapted to local stock conditions and sportfishing demand. A broader range of sportfishing opportunities can also be provided through trophy areas, special fisheries on hatchery stocks, varying bag limits and so on.

Sportfishing policy must be progressive, adapting to changing circumstances and demands. To promote this evolution, the Department must have the advice of sport fishermen and involve them in designing regulatory arrangements. This must be a continuing process, supported by reliable information. In Chapter 17 I propose new consultative arrangements to facilitate this process.

FOOTNOTES

1. The Sidney Angler's Association, Exhibit #118, p. 11.
2. Department of Fisheries and Oceans, Exhibit #172, p. 1.
3. W.D. Masse, "Questions and Answers on the New Sportfishing Regulations." Prepared for the Department of Fisheries and Oceans, 1981.
4. M. MacGregor, "The Tidal Sportfishing Diary Program Report on the Pilot Years 1979-80." Prepared for the Department of Fisheries and Oceans, 1982, p. 33.
5. MacGregor, "The Tidal Sportfishing Diary Program." p. 33.
6. William F. Sinclair, The British Columbia Sport Fishermen. Department of the Environment, Fisheries Service, Vancouver, 1972.
7. Mary C. Harrison, Resident Boating in the Strait of Georgia, 1979 Update. Fisheries and Marine Service Manuscript Report #1538, Vancouver, 1979.
8. A.L.W. Tuomi, "The Role and Place of Sportfishing in Water-Based Recreation." Prepared for the 35th Annual Canadian Water Resources Conference, Ontario, 1982.
9. Harrison, Resident Boating in the Strait of Georgia, p. 6.
10. Tuomi, "The Role and Place of Sportfishing in Water-Based Recreation."
11. A recent national survey estimated expenditures in British Columbia directly related to sportfishing in tidal waters at about \$89 million in 1980. See "1980 Survey of Sportfishing in Canada, Preliminary Results." Prepared for the Department of Fisheries and Oceans, 1981. This estimate is roughly consistent with a consultant's estimate of \$95 million for 1981. See Edwin, Reid and Associates Ltd., Employment and Income Directly Associated with Sportfishing in B.C. Department of Fisheries and Oceans, Vancouver, 1981. But even this estimate may be conservative because some of the expenditures in the consultant's study were based on 1976 data without adjustment for inflation. See Sport Fishing Institute of British Columbia, Exhibit #97, p. 30.
12. The study by Edwin, Reid and Associates (see footnote 11) reported total sales of about \$2 million by the five major manufacturers included in this survey. The manufacturers estimate that total sales by tackle producers in British Columbia are \$10 to \$15 million annually. See Tackle Manufacturers of Southern Vancouver Island, Exhibit #115, p. 2.
13. Press Release. Minister of Fisheries and Oceans, Vancouver, April 23, 1982.
14. Exhibit #172, p. 4.
15. Amalgamated Conservation Society, Exhibit #174, p. 3.
16. W.D. Masse and K. Peterson, Evaluation of Incremental Recreational Benefits from Salmonid Enhancement. Department of Fisheries and Oceans, Vancouver, 1979.
17. Exhibit #118, p. 7.
18. Exhibit #115, p. 11.
19. Tuomi, "The Role and Place of Sportfishing in Water-based Recreation." p. 11.
20. Victoria Charterboat Association, Exhibit #175, p. 1.
21. W.D. Masse, "Canadian Resident Charter Boat Licensing: A Background Paper." Prepared for the Department of Fisheries and Oceans, 1980.
22. P. Loftus, "Sportfishing Charter Licensing Proposal." Prepared for the Department of Fisheries and Oceans, 1981, p. 2.
23. P. Loftus, "Charterboat and Guide Identification and Monitoring Program." Prepared for the Department of Fisheries and Oceans, December 1981, p. 1.
24. Sport Fishing Institute of British Columbia, Exhibit #180, p. 10.
25. B.C. Wildlife Federation, Exhibit #173, p. 40.
26. Howard English, B.C. Wildlife Federation, transcripts of the public hearings, Volume 58A, p. 11898. As this report is being written, the Department is planning a workshop to review the sportfishing data programs in the states of Washington and Michigan and methods of improving the information system for Canada's Pacific coast sport fishery.
27. Exhibit #172, p. 12.

Part V

Policy Mechanisms

CHAPTER 16

ENFORCEMENT

The credibility of the Department is at stake if it is generally perceived that we cannot or will not protect the resource. Non-enforcement breeds lawlessness and penalizes the lawful. The resultant breakdown in law and order makes the job of stock management extremely difficult as disrespect for the law quickly transfers into disrespect for the regulators.

DEPARTMENT OF FISHERIES AND OCEANS¹

Enforcement of the Fisheries Act and regulations cuts across most aspects of fisheries policy. All other arrangements for protection and management will be futile unless users and others whose activities threaten fisheries resources are effectively regulated.

Participants at the Commission's hearings repeatedly expressed serious misgivings about the Department of Fisheries and Oceans' performance in enforcing the laws and regulations it administers. They referred to the Department's tolerance of blatant violations, lack of support for the enforcement effort and inadequate training of fishery officers. One participant concluded that "enforcement is looked on as a poor relative, maintained at, or just above, the poverty level. A necessary evil that is to be tolerated at best."² Submissions at my public hearings and the Commission's review of the Department's policies and procedures have persuaded me that the enforcement program has been suffering from severe neglect.

This chapter examines the enforcement practices and capabilities of the Department and the courts, and recommends means to improve their effectiveness. Other chapters deal with enforcement issues as they arise in relation to specific fisheries and other activities. This chapter focuses on enforcement generally.

ENFORCEMENT OBJECTIVES AND CHALLENGES

Penal legislation can be designed to accomplish one or more of several aims: to punish those who perform a

forbidden activity; to satisfy society's desire for retribution against, or denunciation of, offenders; to rehabilitate the offender; and to deter potential offenders from performing the illegal activity in the future. For fisheries, where the Department's first responsibility is to conserve the resource, I have concluded that the most important objective of the enforcement effort must be deterrence.

Enforcement may be broken into two broad categories: one is detecting and apprehending offenders; the other is prosecuting offenders and assigning penalties. An effective deterrent requires potential offenders to perceive that action from both categories will be certain and severe if they break the law. Detecting and apprehending offenders is futile if the penalty that results fails to counterbalance the rewards of the illegal activity. Similarly, enacting severe penalties is futile if the risk of detection and apprehension is minimal.

In the Pacific region, the dimensions of the Department's regulatory responsibilities are vast. Regulating commercial fisheries involves such things as vessel licensing, restrictions on gear, the manipulation of open and closed areas and of fishing times, and fish quality standards. The Department is faced with ensuring that these often technical and complex provisions are complied with by thousands of commercial fishermen. Regulating the sport fishery involves ensuring that bag and size limits, gear restrictions, licensing requirements and area closures are complied with by over 300 thousand anglers. Regulating the Indian fishery calls for, among other things, enforcing limits on fishing times and preventing the illegal sale of fish. The Department's responsibilities also include protecting fish habitat in the face of large scale development of other resources in the Pacific region.

The task of rigorously enforcing these laws is complicated by a number of factors. First, the area policed is enormous. The Pacific region covers all of British Columbia and Yukon, as well as the Pacific Ocean to 200 miles offshore. The coastline and rivers of British Columbia present literally thousands of points for clandestine fish landings and other illegal activities; and potential offenders can use small and highly mobile vessels and vehicles. The difficulties of creating a sufficiently visible enforcement effort over such a wide area are obvious.

Second, the economic incentive to fish illegally has risen dramatically in recent years. For example, recent estimates indicate that one day's illegal fishing can yield up to \$800 for a commercial troller or gillnetter and up to \$10 thousand for a seiner. For herring fishermen the rewards may be three times as high.³ This pattern of potentially high rewards is repeated for other commercial fisheries, such as halibut longliners and trawlers, and for unlicensed poachers of abalone and salmon. In addition

to commercial fishery offences, other areas of illegal fishing present strong economic incentives. Illegal fixed gillnets in rivers can produce in a single day a yield of over \$500, while the cost of the net varies from only \$30 to \$100. If enforcement efforts are to be effective, penalties must be high enough to counteract the financial rewards of such illegal fishing activity.

Third, the expanded fishing power places extra pressures on the Department's enforcement staff. To counter the excess capacity that has plagued commercial fleets, the Department has reacted with tighter and tighter restrictions on fishing effort. This requires greater and greater enforcement effort, particularly since the financial incentive to resort to illegal activities is strong.

Fourth, fish habitat is threatened by the increasing size, variety and dispersal of industrial operations, whose illegal activities are often difficult to detect. These enterprises, too, have strong financial incentives to violate the law.

Finally, the Fisheries Act and the myriad regulations that have emanated from it during the century since its inception present a complex and unwieldy basis for enforcement. The difficulty that fishermen, fishery officers and the courts have in interpreting and applying the legislation further undermines the enforcement effort.

All of these factors make it difficult for any enforcement effort to create a deterrent effect sufficient to combat the financial lure of illegal fishing and other unlawful activities.

If, in addition, the Department fails to recognize these problems and to meet them with strong and highly visible enforcement strategies, the likelihood of illegal activities rises. Thus, the Department must assign a high priority to enforcement if it is to achieve the primary aim of protection and management of the resource.

ENFORCEMENT PROCEDURES

The procedures followed to enforce the Fisheries Act and regulations are common to most punitive legislation. Offences may be detected by fishery officers or by other law enforcement officers who, under normal circumstances, decide whether or not the infraction is serious enough to warrant a charge. Offences observed and reported by members of the public may also result in charges.

If a charge is laid, the accused is required to appear in court and plead either guilty or not guilty. Where a plea of not guilty is entered, a lawyer representing the Department is required to try the accused, produce evidence in court and satisfy the judge, beyond a reasonable doubt, that the accused committed the offence. If he is unable to, the accused is acquitted. But if the accused pleads guilty,

or if the judge convicts him on the basis of the evidence, the judge sets a penalty, which is specified, to some degree at least, in the Fisheries Act. For most offences the judge has a broad range of discretion to levy a fine up to some maximum level, depending on the nature of the offence. When a fine is levied, the offence is entered in the criminal record of the offender.

Alternatively, the judge may choose one of three other remedies. He may release the offender without penalty or a criminal record by granting him an absolute discharge. He may give the offender a conditional discharge and put him on probation only; if the offender completes the probation period successfully he will have no criminal record and no fine. Or else the judge may give him a suspended sentence and place him on probation. The offender will have a criminal record, but if he completes the probation successfully he faces no further consequences. If he breaches probation, he may be brought back before the sentencing judge, who may impose a more serious penalty.

The court rules followed for most offences under the Fisheries Act are characterized as summary conviction procedures. These are always tried before a provincial court judge and, in sentencing an accused on conviction, the judge may not impose a fine that is higher than a maximum set out under the Act. Under sections 31(3) (habitat protection) and 38 (obstructing a fishery officer), the Crown prosecutor may elect to "proceed by way of indictment" instead of trying the case according to the usual summary conviction procedures. This has two effects: the accused may be tried before a superior court if he wishes; and, if he is convicted, the judge may impose a higher fine than is stipulated in the legislation for summary convictions. By electing this procedure, the Crown incidentally alerts the judge to the seriousness with which the Crown views the offence and this, in itself, can prompt him to impose stiffer penalties.

This, then, is the procedural framework within which the Fisheries Act and regulations are enforced. In the rest of this chapter, the issues will be explored and recommendations advanced in three broad areas that correspond to this framework: detection and apprehension of offenders, prosecution in the courts, and penalties.

DETECTION AND APPREHENSION

The performance of the Department of Fisheries and Oceans in detecting and apprehending offenders is difficult to assess. The incidence of violations under the Fisheries Act and regulations and their associated costs cannot be determined accurately because not all of them are observed and reported.⁴

As a result, my proposals in this area are confined to the organization of the enforcement effort and associated

policy features. The appropriate intensity of policing in the field is best left to the Department to decide in light of the incidence of crime perceived in various parts of the region.

Levels of Activity

Table 16-1 depicts the charges laid over the past seven years and their results. The numbers of charges rose sharply in 1978 and 1979 and has declined slightly since then. These figures are not firm evidence of trends in illegal activity, however, because they may be explained by variations in the intensity of the enforcement effort from year to year. Indeed, the inception of a special R.C.M.P. training course for fishery officers in 1977 (described below) alone might explain the subsequent surge in charges laid.

Table 16-1 Prosecutions and convictions

Pacific Region
1975-1981

year	charges	convictions	acquittals	stayed	outstanding
1975	603	521	36	46	0
1976	887	776	42	69	0
1977	753	583	82	88	0
1978	1050	683	89	130	148
1979	1293	756	75	154	308
1980	1082	575	54	107	346
1981	1014	492	47	140	335

Source: Department of Fisheries and Oceans.

Table 16-2 lists the number of charges laid in 1981 by category of offence. Over 60 percent were laid under three categories: sportfishing, shellfish fisheries and general. Tidal sportfishing violations include exceeding bag and possession limits, and violating size limits. Offences under the shellfish regulations include size and bag limits

Table 16-2 Charges laid under the Fisheries Act and regulations in the Pacific Region in 1981

offence	number	percent
Fisheries Act		
habitat	34	3
other ^a	35	4
Regulations		
general	303	30
shellfish	194	19
tidal sportfishing	129	13
commercial salmon	84	8
nontidal sportfishing	73	7
commercial licensing	60	6
commercial herring	34	3
Indian fisheries	33	3
other	35	4
total	1014	100

^a Primarily, possession of fish in closed areas (Fisheries Act, section 19).

Source: Department of Fisheries and Oceans.

of oysters, crabs and other invertebrates. The general regulations prohibit such things as fishing in closed areas, during closed seasons for certain species, and illegal fishing in rivers and at sea. They also prohibit Indians from fishing without permits or in contravention of their time, area or gear conditions. The Indian fishery regulations are confined to the illegal sale of fish by Indians and purchase by non-Indians.

Public Involvement in Enforcement

While primary responsibility for fisheries enforcement is shouldered by the Department, field staff receive support from the public under the Observe, Record and Report Program and through bounty arrangements.

Observe, Record and Report Program In June of 1979 an Observe, Record and Report Program, sponsored jointly by the B.C. Wildlife Federation, the Department of Fisheries and Oceans and the provincial Fish and Wildlife Branch, was developed to encourage the public at large to report violations by telephoning a toll-free number. In 1980, this number was manned 24 hours a day, seven days a week.

The B.C. Wildlife Federation provided the initial impetus to set up the program and to keep it functioning. The province provided a public education element, consisting of a slide-tape show to inform the public of the program and to explain how to report infractions. Since the first year of operation it has fallen to the Department of Fisheries and Oceans alone to provide the funding required to maintain the program, including the manning of the toll-free number to which infractions are reported.

When the service was initiated, the complaints received were approximately evenly divided between the Department of Fisheries and Oceans and the provincial Fish and Wildlife Service. During 1980, when the toll-free number was maintained around the clock, 61 percent of the calls received were referred to the Department of Fisheries and Oceans, 36 percent to the Fish and Wildlife Branch, and 3 percent to other organizations.

Table 16-3 Observe, Record and Report Program

Incident Reports 1980		
	number	percent
weekdays		
8:00 a.m. to 4:00 p.m.	185	40
other hours	123	27
weekends and holidays	152	33
total	460	100

Source: Department of Fisheries and Oceans.

Early in 1981, the hours of operation were curtailed to Monday to Friday from 8:00 a.m. to midnight. Table 16-3 indicates that, by eliminating manning on the Zenith number over weekends and holidays and evenings, it misses over one-half of potential callers. Therefore, I make the following recommendation:

1. **To encourage and facilitate reporting of violations by the general public, the Observe, Record and Report Program should be expanded with appropriate publicity, to seven days a week, eight a.m. to midnight daily.**

With a 24-hour radio service in place to support the fishery enforcement officers (recommended below) there should be no need for specialized telephone operators to take these calls, and the program could be expanded to 24 hours a day. Radio operators could take them, or at least those during the afternoon and graveyard shifts.

Bounties Under a long-standing federal regulation, when information from a nongovernmental informant leads to successful prosecution and conviction under the Fisheries Act or regulations, the informant is entitled to half of the proceeds from any penalty or forfeiture arising.⁵ The Department has not publicized this regulation widely, perhaps because they fear that publicity would encourage over-zealous citizens to abuse the legislation; but since a bounty is paid only upon a conviction, fears of this nature are unfounded. This is a useful tool, and therefore should be retained.

2. **Bounties for fisheries prosecutions should be retained and the public should be encouraged to report violations.**

Voluntary Compliance

Under current policy, the Department of Fisheries and Oceans relies heavily on what it calls "credible voluntary deterrence" as a vehicle for enforcement:

The policy of the Department is to effectively protect fisheries resources in line with national and regional conservation requirements. Present policy calls for the controlling features of the management plan to be developed in cooperation with the fisherman/user ... whenever practical. In this way a set of credible voluntary deterrents will be the first line of control. When ignored or when these deterrents fail to produce the desired results, the plan will of necessity fall back on statutory controls. The application of these controls becomes the responsibility of the department through its enforcement staff.⁶

The Department's reliance on this vehicle to fulfill its enforcement mandate is misplaced, overly optimistic and

premature. It will work only among individuals who are predisposed to obey the law, whether through fear of punishment, social pressure, or moral obligation. At this time, none of these conditions prevail. The enforcement effort mounted by the Department is insufficient to produce any significant fear of punishment. And many fishermen do not consider illegal fishing activity to be wrong, partly because they believe fish are cheap and plentiful. So they feel no moral obligation to obey the law nor are they responsive to public pressure. Accordingly, I have concluded that heavy reliance on voluntary compliance is misplaced.

3. **The Department should abandon its vague and inappropriate credible voluntary deterrence policy as its primary aim in enforcement and replace it with a vigorous and well-organized enforcement capability in line with the recommendations made below.**

Enforcement Personnel and Organization

One hundred and twenty-five fishery officers, posted throughout British Columbia and Yukon, are responsible for the day-to-day enforcement activities in their areas. Since 1977, many of these officials have received one month of special enforcement training at the R.C.M.P. Training Academy in Regina. In addition, 19 inspection field officers are concerned with enforcing fish processing standards as described in Chapter 13. Up to 50 patrolmen and fish guardians are hired each season, and 150 ship's officers and crew are employed as support staff for enforcement at sea and in rivers and estuaries near the coast.

Fishery officers are accountable to their respective district supervisors, and each of the 10 supervisors is in turn accountable to one of the 3 area managers. These area managers report to the Director of the Field Services Branch in Vancouver headquarters.

Enforcement personnel at Vancouver headquarters provide support services to fishery officers and others who are concerned with enforcement activities, but they have no direct responsibility for, or control over, enforcement in the field. They include a chief of field services systems, a staff officer in fisheries regulations, a chief enforcement officer, an intelligence officer and a court liaison officer. A ticketing offences coordinating officer may join them in the near future. This unit is responsible to the Chief of the Management Services Division, who in turn reports to the Director of the Field Services Branch. Thus, the director provides the formal organizational link between headquarters enforcement personnel and field staff.

In Ottawa, a National Director of Enforcement was appointed in 1979, whose main role is to assess regional enforcement activities with a view to developing national

policies for use in the regions. His responsibilities also include developing fishery officers' career paths and opportunities for promotion within the Department.

Until March 1981, when it was disbanded, the enforcement effort in the Pacific region was supported by a General Investigation Unit. It was established in 1975 in response to the need for specialized enforcement staff to carry out detailed investigations of complicated violations in all divisions. The unit expanded to six members in 1979 and investigated such matters as the illegal transport of fish out of British Columbia, the illegal sales of fish locally, the illegal market in herring and salmon roe, and the illegal sale of fish caught by sport fishermen and river poachers. Their investigations resulted in a number of successful prosecutions against some of the more sophisticated offenders in these fisheries. The group was disbanded in 1981 on the grounds that its expense could not be justified in the face of more demanding financial priorities. There were also some concerns within the Department about the safety of the members of the units while they were engaged in covert investigations and the lack of cooperation from local field officers.

In its absence, the Department calls on the R.C.M.P. and other police forces when fisheries personnel encounter circumstances that could lead to serious confrontation. However, this is not entirely satisfactory since the availability of local police varies according to their priorities and other demands on their time, and because most are understandably unfamiliar with the intricacies of fisheries law.

Thus, the Department depends primarily on the 125 fishery officers as their front line enforcers, but this approach suffers from serious shortcomings. Because the fishery officers have other demands on their time, they frequently have to use a firefighting approach to enforcement, responding to emergency situations as they arise. In addition, some officers put a low priority on enforcement. A recent study indicated that only 19 percent of the fishery officers in this region saw themselves primarily as enforcement officers; and almost 50 percent saw themselves as resource managers.⁷ This might account for almost 25 percent of fishery officers in the Pacific region laying no charges at all under the Act or regulations in 1979.

There are a number of explanations for the reluctance of so many fishery officers to carry out enforcement duties, even though enforcement is such an important part of protection of the resource. First, most are primarily resource managers by training and by inclination. Enforcement to them is viewed as distasteful and sometimes hazardous work that interferes with their management and conservation activities. It is essentially police work requiring specialized training and knowledge of the complexities of the law to be administered, and willing-

ness to get involved in investigations, interrogations and, occasionally, potentially dangerous situations. For those with a resource management orientation all of these activities are unfamiliar and often unpleasant. It may also generate ill will toward them in the communities in which they work and live. Since individual fishery officers themselves are apparently left to determine their own priorities between enforcement and management functions, it is enforcement that often suffers.

Second, headquarters apparently does not require fishery officers to emphasize their enforcement functions. According to testimony at the Commission's hearings, reluctance to perform them has never led to the dismissal of an officer. Even when charges are laid, they often take years to proceed through court; almost a quarter of the charges laid in 1979 are still in limbo. The reasons for these long delays are unclear, but one possible explanation is that fishery officers who lay charges are not required to adequately follow them up.

These considerations have led me to conclude that the Department is operating under a serious misconception in implementing its enforcement policy. It assumes that, because resource management and enforcement share the same goal of resource protection, the management of the resource and the regulation of its users require the same kinds of specialized knowledge and skills. In fact, enforcement demands entirely different sorts of knowledge and skills from resource management. If the enforcement efforts of the Department are to be effective, the organization of the Pacific region must reflect this distinction by allocating the responsibilities for these two functions to different groups.

The idea of separating management and enforcement functions of conservation officers is not new. The Director of the Alaskan Division of Fish and Wildlife Protection stated the issue as follows:

Law enforcement is a full-time profession and wildlife law enforcement even to a greater degree because of the greatly diminished public participation in reporting and the unusual and remote locations where violations occur. Effective enforcement requires planning, it requires a person selected for his sincere interest in enforcement as a profession not as a missionary to save animals or fish, not as a part-time officer and part-time biologist/manager. But a real honest to goodness employee that has a sincere desire to become professional within the entire justice system. He must be willing to assume the identity of a police officer as much as the name may bother some managers both physically, morally and philosophically. And he must leave behind the outdated philosophy that ade-

quate compliance can be achieved because of enlightened self-interest growing out of a program of public information. A tolerable level of compliance can only be achieved when the community is fully aware that the prime goal of the local wildlife law enforcement officer is law enforcement. And they respect him and his mission, convinced that violators will be apprehended, that laws apply equally to all and that the system is creating a deterrent by removing the benefits from misuse of resources.... Certainly the officer's obligation to resources remains the first consideration and number one priority, but his training, his equipment and his attitude must reflect a law enforcement strategy.... People management and biological management of resources are not totally in harmony as each has its own peculiar need for competence and professionalism. That need can only be accomplished if neither is diluted to the point of inefficiency. A Departmental separation of both functions is the only means to secure a maximum benefit to resources.⁸

A study commissioned by the B.C. Ministry of Recreation and Conservation in 1977 also recommended that the management and enforcement functions of the departmental conservation officers be separated. I understand that these recommendations have been carried out with considerable success.

From time to time the Department itself has recognized the need for a specialized enforcement unit. In 1979, a study prepared for the Pacific region on a licensing and resource royalty program recognized the different specialties required of an investigating officer as opposed to a landings verification officer.⁹ More recently, in 1982, a regional review of inshore patrol vessels in the Pacific region expressed the need for a special enforcement squadron to be established in each division for the purpose of providing a "high profile enforcement presence that has been lacking."¹⁰ And at the Commission's hearings on enforcement, Departmental personnel indicated that, since 1979, the Department has recognized the need to separate management and enforcement functions to a limited extent in the roe-herring fishery.

However, despite this apparent support for a specialized enforcement unit, the recent disbandment of the General Investigation Unit suggests that enforcement is still relegated to a position of low priority by the Department. Given the aim of conserving the resource and the increasing threats made to the resource by illegal fishing activity, the Department must reassess its view that such specialized enforcement activity is a luxury.

What is needed is a well-equipped, highly trained, mobile team of fishery enforcement officers to supplement field staff. The mere presence of an aggressive, highly visible enforcement team on the fishing grounds would increase the perceived risk associated with illegal activity and would thus have a significant deterrent effect.

My recommendations are geared to this need. In designing them I have considered the specialized needs of the fisheries resource, training and equipment requirements, the vast area to be policed, the inevitable budget and manpower constraints faced by the Department and implications for administration. The range of alternatives put forward and discussed at the Commission's hearings covered a number of possible combinations of these factors. The following recommendations are an attempt to incorporate the best aspects of each.

4. **In the Pacific region a special enforcement unit should be created whose *exclusive* responsibilities will be enforcement. Their duties should *not* include resource management.**

The unit should be primarily responsible for enforcing the Fisheries Act and all regulations except those relating to fish quality, processing plants and vessel sanitary standards, which should continue to be enforced by the Inspection Division.

Members of the unit should receive rigorous training in all relevant enforcement techniques in the context of the special needs of the fisheries resource. The current training arrangements with the R.C.M.P. should be expanded or else arrangements made with the B.C. Justice Institute in Vancouver, which now trains provincial conservation officers. Enforcement skills of members should be updated regularly through refresher courses. With special training and supervision, a revamped enforcement capability should be able to handle most, if not all, offences.

Members of the special enforcement unit should wear uniforms to engender a professional image. Side arms should be available to them, to be worn when their safety or that of others is threatened. And they should be properly equipped with vehicles and have access to well-equipped vessels for patrols at sea and in the estuaries and rivers. They should be linked to headquarters and field offices 24 hours a day by short-wave radio services.

Fishery enforcement officers should be stationed in each of 10 districts in the Pacific region. The number to be assigned to each district will vary by district, depending on local needs. To the extent that they are qualified and have a keen interest in enforcement, fishery officers now employed in the region should be posted to the enforcement unit. If necessary, these personnel should be supplemented by others hired from outside the Depart-

ment. The remaining fishery officers should be assigned to resource management positions. However, they should retain legal status as fishery officers to enable them to deal with infractions they observe incidentally in the field, and they should be encouraged to do so. During particularly hectic fishing seasons, management officers should play an active role in enforcement activities to supplement fishery enforcement officers.

The transition from the existing organizational framework for fishery officers to the creation of a specialized enforcement unit in the region should be undertaken gradually, district by district, to minimize disruption of staff and to dovetail with the redefined management responsibilities of fishery officers.

In order to ensure that high-calibre personnel are recruited and trained and that uniform policy procedures and techniques are applied in the field, the enforcement unit should have a reporting line that is independent of resource management in the field:

5. **At Pacific region headquarters in Vancouver, a senior enforcement officer and support staff should be appointed and placed directly in charge of all fishery enforcement officers. The enforcement officers should be responsible directly to headquarters, rather than through area managers as they are now.**

When the enforcement unit is working smoothly, consideration should be given to shifting the reporting line of enforcement officers through area managers, in line with the trend toward greater decentralization in the Pacific region.

6. **If the need arises, a special task group operating from headquarters should be created, along the lines of the disbanded General Investigation Unit, to supplement district enforcement officers during hectic periods and to investigate complex crimes when necessary.**

If in future the field enforcement officers report to area managers under a decentralized organizational framework, the special task group should work in close cooperation with area managers.

Legislative reform should be undertaken to clarify the status of enforcement officers and to facilitate convictions. Currently, fishery officers are included in the definition of peace officer under the Criminal Code of Canada and have their powers. But the Fisheries Act does not refer directly to this designation and in fact mentions only that fishery guardians have the powers of a "police constable," a meaningless designation. Further, the Act provides a separate offence for obstructing a fishery officer, even though the Criminal Code includes a parallel provision. I therefore make the following recommendations:

7. **The Fisheries Act should clearly confer peace officer status on enforcement officers, other fishery officers and fishery guardians.**
8. **The provisions of the Fisheries Act that deal with obstructing fishery officers should be eliminated or redrawn to conform with the powers and rights they have under the Criminal Code as peace officers.**

Under current policy, fishery officers must identify the person in charge of a vessel fishing illegally and this requires boarding. Frequently, it is impossible for officers to follow these procedures, when, for example, many vessels are fishing illegally, when seas are rough, or when such vessels are spotted from the air. The following recommendation should meet these shortcomings.

9. **The owner or registered charterer of a vessel should be made liable to prosecution for any illegal fishing activities carried out by the vessel regardless of whether or not he is actually on board when the offence is committed, unless he is able to prove that the skipper of the vessel was in control without his consent.**

This expanded concept of owner liability for an illegal activity has worked satisfactorily with regard to certain provincial motor vehicle offences such as hit and run;¹¹ and there are three advantages to such a scheme for fisheries. First, it would permit a larger number of offenders to be detected by removing the need to board and identify the crew of each one. Second, it would eliminate the need to prove the identity of the individuals in court months after the event. Third, it should encourage owners to participate in the enforcement effort to a greater extent by providing them with an incentive to police their skippers and crews.

PROSECUTION AND THE COURTS

While detection and apprehension are the essential first steps in any enforcement program, they must be followed by strong action in the courts if the deterrent effect is to be maintained. Although 75 percent of the charges laid under the Fisheries Act or regulations result in convictions (see Table 16-2), this apparently high rate of success is misleading: since penalties are low, many offenders plead guilty. The high success rate could also indicate that charges are laid only when prospects of success are high. As I show below, both the quality of prosecutorial services available to the Department of Fisheries and Oceans and the attitude of the judiciary toward fisheries offences need to be markedly improved.

Crown Prosecutors

Prosecutions under the Fisheries Act and regulations are the responsibility of the federal Department of Justice. For most prosecutions the Department of Justice

engages lawyers in private practice in the locality where the trial is to be held.

Names of private practitioners who are available to prosecute fisheries offences are supplied by the Department of Justice, apparently without regard to whether the lawyers have experience in prosecuting in that field. The Department of Fisheries and Oceans has no influence in the choice of names that appear on the list.

Department of Justice staff lawyers handle some prosecutions, particularly those in larger centres such as Vancouver. They also prosecute many offences against the habitat protection and deleterious substance provisions of the Fisheries Act elsewhere in the region.

The Department of Fisheries and Oceans carries out some informal training of prosecutors in the different regions by familiarizing them with vessels, fishing gear and so on. The Department also employs a court liaison officer for fisheries prosecutors, whose main activity is disseminating recent decisions and applicable law to fisheries prosecutors throughout the region.

The quality of fisheries prosecutions depends on the availability of lawyers who have a high level of legal skill and a specialized knowledge of the resource. Ideally, the prosecutor should be available to the investigators throughout an investigation to answer questions that might arise about the evidence required to lay a charge, whom to proceed against and the choice and wording of the charge. The same prosecutor should then be available to take the case to court and follow through until it has been disposed of.

However, the Department has had difficulty in obtaining and maintaining prosecutors with the necessary time and skills for two reasons. First, a change in government usually produces a change in the appointment of the private lawyers who are to perform fishery prosecutions. It is a regrettable fact of political life that the federal government typically appoints lawyers who are sympathetic to the party in power. Thus, the Department is often unable to retain lawyers that they know could do a good job in prosecuting a case because their names have been taken off the list supplied by the Department of Justice. They have pressed the issue with the Department of Justice, but with no success:

The response is that you have to live with the system that's in place, and we've had no co-operation in getting the Department of Justice to push for us in terms of getting a lawyer that we know is competent in a certain field. While he may be outside of the political system in terms of appointment of Crown counsels, he may have been available a few years back under another government, but I know we've tried and haven't (had) any success.¹²

Second, lawyers in the Department of Justice who are assigned to fisheries cases are often young and relatively inexperienced counsel. As they gain more experience, many of them leave the Department to go into private practice. The result is that fisheries personnel, having expended time and effort in acquainting a prosecutor with the peculiar problems of the fishery resource, are often faced with having to start this training process all over again with a new prosecutor.

I recommend that the current arrangements be changed as follows:

10. The Department of Justice should designate a senior staff lawyer in its Vancouver regional office to oversee all prosecutions under the Fisheries Act.

He would be available for consultation and advice to fisheries investigating officers and prosecutors throughout the Pacific region, to take test cases to courts, to review appropriate cases for appeal and take them to appeal, to implement uniform practices throughout the region, to ease problems with evidence, and generally to increase the quality of fisheries prosecutions. He should also be available to assist the Pacific region in formulating and drafting regulations to shorten delays in enacting them, and to ensure that they will be enforceable in court. This individual would be better situated in the Department of Justice than as an internal Department of Fisheries and Oceans counsel, since his association with other Justice Department lawyers would keep him abreast of current developments in the law and give him a clear perspective of the way fisheries prosecutions fit into the administration of justice generally.

11. In consultation with the Department of Justice, the Department of Fisheries and Oceans should have the power to choose and appoint the lawyers who will act as prosecutors under the Fisheries Act and regulations.

This would allow the most experienced and competent practitioners to be appointed regardless of their political affiliation. The appointment of senior high profile lawyers to conduct fishery prosecutions would also provide a means of indicating to the courts the severity with which offences under the Act should be viewed.

12. The court liaison service should be maintained and if necessary expanded to ensure that all useful information about developments in fisheries law is disseminated throughout the province to enforcement officers and prosecutors, including statistical information for use in sentencing.

Private Prosecutions

Some citizens have recently instigated successful investigations and prosecutions under the habitat protection sections of the Fisheries Act. On two occasions, govern-

ment laboratories have been used to test samples provided by interested citizens, and on both occasions the results led to successful prosecutions. In several other cases, citizens have laid private informations under the Act and either pursued them successfully themselves or convinced Department of Justice prosecutors to take over the prosecutions.

While the Department claims it is willing to cooperate with citizens having well-documented cases, some participants at the Commission's hearings stated that the reverse is true and that government laboratories do not accept samples for testing from citizens. Judging from the small number of cases citizens have been involved with thus far, it appears that, if the Department had fears of becoming an accomplice to strident vigilante groups, those fears are unfounded. Citizens have generally provided valuable information and assistance and should be encouraged to continue to do so.

13. **The biological laboratories of the federal government in the Pacific region should accept and test properly collected samples presented by citizens, and the Department of Justice should be available to assist with legal proceedings.**

The Courts

Virtually all prosecutions under the Fisheries Act and regulations take place in the Provincial Court of British Columbia. Because most cases heard in that court deal with charges laid under the Criminal Code, a provincial court judge may be inclined to treat a fisheries charge as relatively unimportant compared to the other criminal matters he regularly hears.

The judiciary must be fully educated about the threats facing the fishery resource as a result of illegal fishing activity and habitat destruction. The judiciary can be educated in two ways. First, effective Crown counsel can teach judges a great deal about the resource and the threats facing it by eliciting evidence from knowledgeable witnesses and making full submissions. Implementating the recommendations made earlier in this chapter concerning the appointment of knowledgeable prosecutors should assist here. Second, the judicial conferences held for the ongoing education of provincial court judges could be a medium for disseminating relevant information. Recently, a professor in environmental law presented a paper on the habitat protection sections of the Fisheries Act to a group of judges at such a conference.¹³ This is an encouraging sign that the provincial court judges in British Columbia are becoming increasingly aware of their obligations to the fisheries resource and this trend should continue.

14. **The education of the judiciary in fisheries law and policy should be encouraged through the appropriate channels of the provincial court system.**

PENALTIES

The Fisheries Act, regulations and licences are enforced through fines, jail sentences, the seizure and forfeiture of illegally caught fish and equipment used to commit the offence, and the suspension and cancellation of fishing licences. To complement a more effective detection and apprehension capability and an improved prosecution process, these sanctions must serve as effective deterrents.

Fines

Table 16-5 sets out the pattern of penalties for various infractions under the Act. Most offences involving illegal activities are covered by the general penalty provision in section 61, which sets a maximum \$5,000 fine but no minimum level. However, as Table 16-4 indicates, the levels of fines imposed by the courts have tended toward the lower end of this range. In the last four years more than 90 percent of convictions have resulted in fines of less than \$500 or in no fines at all.

Table 16-4 Penalties imposed under the Fisheries Act

	1978		1979		1980		1981	
	number	percent	number	percent	number	percent	number	percent
suspended sentences, absolute and conditional discharges	62	10	64	9	69	12	22	5
fines of less than \$100	352	54	402	54	255	45	229	49
fines of \$100-\$499	201	31	204	27	213	37	209	44
fines of more than \$500	24	4	74	10	36	6	11	2
jail sentence	9	1	1	0	2	0	2	0
total	648	100	745	100	575	100	473	100

Source: Department of Fisheries and Oceans.

The current scheme of financial penalties under the Fisheries Act is replete with ambiguities, inconsistencies and anachronisms. For example—

- i) Section 38 of the Act, which deals with the obstruction of fishery officers in the execution of their duties, stipulates a penalty on summary conviction of a fine of up to \$100 or imprisonment of up to six months, incredibly, *with hard labour*. The latter has had no place in Canadian penal law for decades and, in any event, is completely misplaced as a penalty for an offence which merits a fine of only \$100.
- ii) The penalty for failing to remove obstructions from streams or provide a sufficient flow of water over a spillway after three days' notice defies comprehension. It states that an offender "is liable to a penalty of not less than \$4.00 and not more than \$20.00 for

each day or part of a day during which such notice is not complied with is guilty of an offence and liable on summary conviction to a fine of not exceeding \$5,000 for each day or part of a day during which such notice is not complied with" (sic). The ambiguity created by what is apparently a drafting error makes it impossible to ensure convictions under this section.

- iii) Section 54, which deals with the use of rockets and explosives to hunt for or kill fish, exacts a fine of between \$100 and \$300, or imprisonment of not less

than three months and not more than six months. This means that if a judge wanted to give an offender a heavier sentence than a \$300 fine, he would have no option but to sentence him to at least three months in prison.

- iv) Most fines for illegal fishing are imposed under section 61, which stipulates a maximum fine of \$5,000. However, this general provision does not distinguish between illegal fishing with commercial gear, which could wipe out a fish stock (for example, "creek robbing"), from failure of a sport fisherman to meet the size limit on a crab.

Table 16-5 Penalties under the Fisheries Act

Table 10-3 Penalties under the Fisheries Act		maximum penalty	
section	infraction	first offence	subsequent offences
habitat and deleterious substance penalties			
31(3)	damaging fish habitat ^a	\$ 5,000	\$ 10,000
33(5)(a)	throwing deleterious substances overboard or depositing slash, stumps, etc. in streams ^b	\$ 5,000	\$ 10,000
33(5)(b)	depositing deleterious substances into water frequented by fish	\$50,000	\$100,000
33.4(1)(a), (b) and (c)	failing to provide information to the Minister about a work or undertaking that results in the deposit of a deleterious substance or damage to fish habitat, or failing to report the deposit of a deleterious substance	\$ 5,000	\$ 10,000
33.4(1)(d), (e) and (f)	carrying out such a work or undertaking contrary to information submitted to the Minister or contrary to any order of the Minister, failing to take reasonable measures to prevent or mitigate the deposit of a deleterious substance or to comply with an order specifying such action.	\$25,000	\$ 50,000
33.4(1)(g)	obstructing an inspector or providing false information to an inspector	\$25,000	\$ 50,000
other penalties			
38	interfering with fishery officer in execution of duty ^a	\$100 or six months' imprisonment with hard labour	
50	failure of owners and managers of lobster factories or canneries to provide certain information to the Minister	at least \$100, but not more than \$400	
51(1)	fishing with an otter trawl without a licence	at least \$100, but not more than \$2000 and court costs	
52	refusal to provide fishways or diverters around an obstruction in a stream where required by the Minister	at least \$4 but not more than \$20 per day, and not more than \$5000/day ^c	
54	using rockets or explosives to fish	at least \$100 and court costs or 3 months' imprisonment, but not more than \$500 and court costs or 6 months' imprisonment.	
55	failing to provide screens on water intakes	\$5,000 per day	
56	damaging fish propagation facility or fishing there	at least \$50, but not more than \$200 and court costs; in default of payment, at least 6 months' but not more than 12 months' imprisonment; or both fine and imprisonment	
58(1)	using vessel or equipment contrary to Act or regulations	seizure of vessel, equipment or fish	
58(5)	conviction for any offence under the Act or regulations, where vessel, equipment or fish have been seized	forfeiture to the Crown of the vessel, equipment or fish, or of the proceeds of sale of them	
61(1)	contravening any provision of the Act or regulations, where specific penalty is not provided	\$5,000 or 12 months' imprisonment or both	
63	fishery officer or guardian violating the Fisheries Act or regulations	at least \$100 and court costs or 3 months' imprisonment, but not more than \$500 and court costs or 6 months' imprisonment	

^a On indictment, unlimited fine or two years' imprisonment.

^b The courts have declared the offence prohibiting the deposit of slash, stumps, etc. to be beyond the power of Parliament, so this penalty is not available.

^c There appears to be a drafting error in this section.

In addition to the difficulties presented by such obvious inconsistencies and ambiguities, numerous concerns were expressed at the Commission's hearings about the lack of any meaningful scale of financial penalties in view of the financial rewards of illegal fishing.

In a recent study, it was estimated that, if there is a 15 percent chance that a vessel will be boarded each month, the potential legal penalty (including fine, confiscation and lost fishing time) must be about ten times the value of potential gains from violations over a two-week fishing trip.¹⁴

Considerable support was expressed for simply raising the maximum level of fines that a judge may award for offences under the Act. However, the problem with raising the maximum alone is that judges might continue to award penalties in the lower ranges of the sentence. It appears that something more is required to ensure that sentencing will be severe enough to adequately deter offenders.

In view of these deficiencies, I recommend that financial penalties for offences under the Fisheries Act and regulations be reformed, as follows:

15. **The penalty provisions in the Fisheries Act should be thoroughly reviewed to eliminate all anachronisms, inconsistencies and ambiguities.**
16. **For illegal fishing the Act should provide for a higher scale of fines. The maximum fine for commercial violators should be raised from \$5,000 to \$10,000.**
17. **For all offences that seriously threaten fisheries or habitat the Crown should be able to proceed by way of indictment instead of only summarily as is presently the case for most, and judges should be authorized to impose fines that are higher than the upper limits stipulated for summary convictions.**
18. **To discourage repeat violators, second and subsequent offences of all kinds should draw high mandatory minimum levels of fines, which should vary according to the kind of offence: commercial, sportfishing, pollution, habitat destruction, and so on.**
19. **Through its court liaison program and its prosecutors, the Department should systematically review all court decisions and report to the Department of Justice those where sentences are abnormally low and should be appealed to higher courts.**

Seizure and Forfeiture

Under the Fisheries Act, a fishery officer has the power to seize vessels, vehicles, gear or fish when he has reasonable grounds to believe they have been used in or obtained by an offence under the Act or regulations. Under these procedures, the government may hold the

seized articles until they are ordered forfeited to the Crown or released to the accused. The Act provides for the return of these items before trial if the accused posts a bond in an amount ordered by the court. Normally, the Crown does not oppose these requests for a bond. If the owner of such items is convicted, the Minister or the convicting judge, in addition to any other penalty imposed, may order the items to be forfeited to the Crown. Forfeited property is normally sold, and the proceeds are paid into the public treasury.

Despite a Department policy directive in 1979 urging that seizure be seriously considered for all violations, the powers given under this section are not always exercised. In 1981, of all charges laid, seizures were made in about 70 percent of the cases; but for many, only illegally caught fish were seized and not the more valuable vessels and equipment. Forfeitures are limited to seized fish and sometimes to illegal nets or motor vehicles used to transport poached fish.

These powers provide one of the most effective weapons against illegal fishing, but they are effective only when vessels or equipment more valuable than the fish are seized. By seizing vessels or equipment on the fishing grounds, a fishery officer temporarily removes the offender's ability to pursue his livelihood, and provides a dramatic example to those who are tempted to break the law. Ultimate forfeiture has an even greater financial impact on the offender.

I therefore make the following recommendations:

20. **The Department should pursue an aggressive policy in seizing vessels and equipment when offenders are caught and charges are laid.**
21. **In flagrant cases, Crown counsel should oppose applications to court by the accused for the release of equipment pending trial. For others, where circumstances warrant, they should argue for substantial bonds, approximating the market value of the vessel and equipment under seizure.**
22. **Illegally caught fish and illegal equipment should be forfeited to the Crown, as at present.**

I see no need for the forfeiture of vessels or legal nets and equipment if the level of fines is increased, as I have recommended earlier.

Licence Suspension and Cancellation

The regulations under the Fisheries Act allow the Minister to cancel, suspend or refuse to re-issue a commercial licence when its holder has been convicted of illegal fishing. (Under the Act, the Minister may cancel a licence when a provision of the licence itself is violated. But in the Pacific region, at least, this authority is ineffectual because licences do not include terms and conditions

regarding fishing activities.) The current Departmental practice is to recommend that the Minister suspend a licence only when a person is convicted of a third offence. Although the Department does not keep specific records of the use of this power, it is estimated that about half a dozen commercial licences have been suspended over the last five years. Evidently, none have been cancelled outright.

In Chapter 10 I recommended that individual quota licences be adopted for a wide range of commercial fisheries, including halibut, groundfish, food and bait herring and abalone. The keystone to successful implementation of these programs will be the systematic reporting and recording of the catch of individual fishermen, to ensure that they do not catch more than their quota and that the total allowable catch of a species is not exceeded. As well, a quota system will enjoy the confidence of fishermen only if all are assured that violators do not stand to profit from their excesses.

The suspension or cancellation of a licence removes the offender from the fishing grounds, whether he be engaged in the commercial, sport or Indian fishery. The fishing industry itself has advocated strongly and unanimously its support for licence suspension.

I am convinced that more vigorous use of this enforcement technique would act as a powerful deterrent to illegal fishing activities. Accordingly, I make the following recommendations:

- 23. All categories of licences — commercial, sport and Indian — should be liable to suspension for a violation of the terms of the licence, the Fisheries Act or the regulations, upon the conviction of the licence holder.**

The length of the suspension should be substantial, and should vary according to the nature of the fishery and the length of the fishing season. For second and subsequent offences, the period of suspension should be lengthened.

- 24. Licence cancellation should be invoked for the most flagrant of violations and recalcitrant repeat offenders.**
- 25. The holder of a quota licence who exceeds his annual quota by five percent or less should be required to pay a royalty surcharge on the excess. The surcharge should be fixed approximately at the average landed price for the species during the month in which the infraction occurs. Where the licensee exceeds his quota by more than five percent, the Minister should be authorized to deduct the full amount of the excess from the licensee's quota eligibility in the following season, and impose the surcharge. For flagrant and repeat violations the Minister should be authorized to suspend the licensee's right to exercise his quota in the fishery for the following season or to cancel it permanently.**

Quota holders will have incentives to land their full quotas over the course of the season according to stock availability, market conditions and so on. Inevitably, individual fishermen will exceed their quota entitlements inadvertently due to time lags in receiving data on landings, unexpectedly large catches late in the season, and so on. These proposals concerning quotas are designed to make allowance for such contingencies, but to deal more harshly with offenders who seriously abuse their privileges.

CONCLUSION

On the basis of submissions at my public hearings and the Commission's review of the Department's enforcement policies and procedures, I have concluded that a major restructuring and reorientation is required if illegal activities that threaten fish and their habitat are to be successfully deterred. The most significant change would be the creation of a specialized fisheries enforcement unit to strengthen the Department's ability to detect and apprehend offenders. Improved service by prosecutors and a reformed scheme of penalties under the Fisheries Act should buttress such a change.

Later in this report I recommend that the legislation and regulations governing fisheries in the Pacific region be totally overhauled, eliminating the anachronisms, inconsistencies and ambiguities that now confine and hamper effective enforcement. These reforms should provide a valuable supplement to the move toward an improved enforcement regime in the region.

We must bear in mind, though, that the nature of policy itself determines the nature of an effective enforcement effort. Thus, changes recommended in other chapters will reshape demands on enforcement. Smaller, rationalized commercial fishing fleets should be more manageable and thus ease the pressure on enforcement. Quota arrangements will, to a large degree, shift the focus of enforcement from surveillance of vessels on the fishing grounds to ensuring that catches are accurately recorded and reported. Recommendations concerning Indian fisheries in Chapter 14 should go a long way toward eliminating the long-standing friction that has plagued the relationship between the Department of Fisheries and Oceans and Indian fishermen. As well, the changes in approach to habitat management, recommended in Chapter 3, should lead to a more consistent application of the law to other resource users.

The challenges facing the fisheries enforcement capabilities across Canada and the organizational frameworks appropriate to meet them within the Department of Fisheries and Oceans will no doubt vary from region to region. Special demands are placed on enforcement in the Pacific region because of its long coastline, vast river systems, sensitive freshwater habitat and valuable spe-

cies. Therefore, in any national approach adopted for fisheries enforcement in future, the Department must tailor its policies and priorities in the Pacific region to suit its unique character.

FOOTNOTES

1. Department of Fisheries and Oceans, Exhibit #190, p. 8.
2. B.C. Wildlife Federation, Exhibit #30, p. 4.
3. These estimates and those that follow are reported in Donald Clough, "Compliance Analysis for B.C. Fisheries Licensing and Resource Royalty Program." Prepared for the Department of Fisheries and Oceans, 1979.
4. One study estimated that illegally caught fish in the major fisheries could account for as much as 10 to 15 percent of all value of reported landings: Clough, "Compliance Analysis."
5. Canadian Consolidated Regulations, 1978, c. 827, s. 5.
6. Department of Fisheries and Oceans, Exhibit #190, p. 3.
7. Department of Fisheries and Oceans National Enforcement Program. Primary Data Drawn from the Questionnaire for Fishery Officers (GT), Table 2.
8. Fred M. Woldstad, "Law Enforcement is a Fulltime Profession." Paper presented to the Western Association of Fish and Game Commissioners, Portland, Oregon, 1977.
9. Clough, "Compliance Analysis."
10. Department of Fisheries and Oceans, Regional Review of Inshore Patrol Vessels - Pacific, 1981, p. 3.
11. Motor Vehicle Act, RSBC 1979, c. 152, s. 76.
12. Mr. A. Gibson, Chief of Management Services, Field Services Branch, Department of Fisheries and Oceans, transcripts of public hearings, Volume 65, p. 13554.
13. Murray Rankin and Tim Leadem, "The Fisheries Act and Water Pollution." Paper presented to the Provincial Court Judges Association of British Columbia, 1981. pp. 19-20.
14. Donald Clough, "Optimization and Implementation Plan for Offshore Fisheries Surveillance." Prepared for the Department of Fisheries and Oceans, 1980.

CHAPTER 17

CONSULTATIVE ARRANGEMENTS

We're responsible for enforcing laws and regulations, and I suggest that we must do that with flexibility and understanding; the sort of understanding that comes from knowing the local conditions; knowing the local fishermen, their problems, and the problems of that fishery.

D.D. TANSLEY¹

Participation by the public and special interest groups in the decisions of public agencies is becoming an increasingly important part of the governmental process. Formal structures and informal channels for consultation and advice have proliferated in wide variety. This phenomenon is undoubtedly due in part to the natural evolution of the democratic system and reactions against authoritarian government, and in part to the growing complexity of governmental regulation, which create a need for outside advice, specialized knowledge and cooperation.

Effective consultative and advisory processes are especially important for the fisheries for several reasons. First, the public policy makers, managers and administrators make decisions that have a direct impact on the welfare of thousands of individuals and companies; and the government, through fishing licences, has legal relationships with far more people than in most other spheres.

Second, fisheries management, catch regulation and allocation, habitat management and other aspects of fisheries policy are exceedingly complicated (as this report reveals). This calls not only for mutual understanding on the part of the regulators and those being regulated of the problems faced by each, but also for the pooling of expertise.

Third, the fisheries are characterized by conflict. Fishing groups compete vigorously for the same resources, and their collective interests are pitted against those of others whose activities impinge on fish. Strident claims and friction can be moderated through effective consultative processes. Without them the regulatory agency

becomes the centre of criticism and, facing opposition on all sides, finds it difficult to make needed changes.

Finally, the nature of the fisheries is such that a government cannot hope to properly manage the resource and fishing activity without cooperation in providing information, help in designing effective regulations, and willing compliance with the rules. In a period of policy reform, cooperative relationships are even more critical.

During the last decade or so, the Department's Pacific region has responded to these needs by creating a host of consultative committees, advisory boards, task groups and other channels for liaison with the interested public. These provisions now consume a good deal of valuable time and effort on the part of both public officials and private participants. Yet they have come under heavy and widespread criticism at my public hearings and are being undermined by a lack of confidence. Unless they receive more support from those involved and more credibility in the eyes of the public, the effort may not be worthwhile.

I have therefore made a special effort to investigate the deficiencies of the present consultative arrangements, and participants have responded generously with commentary. The challenge now is to design a more coherent and effective system, which is the purpose of this chapter.

In other chapters, I have dealt with organizational arrangements for specific purposes that involve external advice and consultation. My proposals for improving consultation and accountability in resource management (in Chapter 4), for improving channels for public participation in resource enhancement (in Chapter 5), to create a new body with responsibilities for commercial licensing and fleet development (in Chapter 8), to create special advisory committees to assist with licensing reforms (in Chapters 9 and 10, among others), all touch on the consultative process. Here, my concern is with consultative policy generally, and how to design an organizational framework that will efficiently channel information, advice and criticism between the Department and the interested public.

CURRENT CONSULTATIVE ARRANGEMENTS

The Department now has about 20 advisory bodies.² Three are linked with international fisheries commissions, one has national responsibilities, but most are concerned with particular interests or programs in the Pacific fisheries. Their structure, procedures and lines of communication vary widely.

Consultative Bodies

The senior consultative body for the Pacific region is the Minister's Advisory Council, consisting of representa-

tives of fishing organizations who give general advice to the Minister and serve as a sounding board for policy proposals. This is a large body, comprising 17 members. It has apparently eclipsed the Pacific Region Fisheries Management Advisory Council, which was established to assist the Director General in the Pacific region, but has been inactive in recent years.

The Field Services Branch of the Pacific region has 5 regional committees, each consisting of about 10 members, to assist with fisheries management problems in specific areas, namely the Skeena River, Queen Charlotte Islands, Central Coast, Johnstone Strait (for chum salmon) and the Fraser River.

Other committees are concerned with particular fisheries. The Sport Fish Advisory Board consists of 20 representatives of commercial sportfishing and recreational interests, and provides advice on sportfishing policy. The Herring Industry Advisory Board and the Herring Spawn-on-Kelp Committee assist with planning, managing and developing herring fisheries. The Groundfish Advisory Committee performs similar functions for groundfish. A temporary committee has been advising the Minister this year on implementing changes to the halibut licensing system stemming from this Commission's Preliminary Report, and another such committee is deliberating on the reforms proposed for the food herring fishery.

Subcommittees of advisory committees have been established from time to time to deal with specific issues such as catch allocation. Conspicuously lacking is an advisory group for either the Indian fishery or habitat management.

Advice on fisheries research is channelled through the national Fisheries and Oceans Research Advisory Council. In the Pacific region, the Salmonid Enhancement Board and the Task Group (described in Chapter 5) are concerned with the enhancement program. The Vessel Licence Appeal Board (described in Chapter 8) handles appeals. A special committee was established to advise on proposals for fleet reduction following publication of this Commission's Preliminary Report. And, of course, this Commission itself has involved intense consultation.

The International Pacific Halibut Commission has an advisory board of fishermen and vesselowners, and the International Pacific Salmon Fisheries Commission has advisory groups from both the United States and Canada. The Department also calls on interested fishermen for advice in negotiating international fisheries matters such as the salmon management arrangements with the United States and the offshore tuna fishery.

While these groups serve as forums for discussion, frequently recommending courses of action to the Minister

or regional officials, none of them has the authority to make binding decisions, nor do they comprise any structured consultative system. And, most are chaired by an officer of the Department.

In addition to formal consultative forums, a good deal of informal discussion takes place between Departmental officials and fishermen at meetings and conventions, in private interviews and in the field.

SHORTCOMINGS

My comments in the remainder of this chapter are directed to only some advisory and consultative bodies. I set aside those associated with the international commissions because they relate to Canada's arrangements with foreign countries, which are beyond my terms of reference. The research advisory council was appointed only a few months ago and cannot yet be evaluated. I have dealt with external participation in administering commercial licensing and appeals, and in directing the enhancement program in earlier chapters. A role for public hearings is described in Chapter 3. I do not attempt to assess any of the temporary advisory bodies. Thus I focus on the arrangements for consultation and advice on general policy affecting the management of Pacific fisheries and on the problems relating to particular interests.

With a few exceptions, most commentators are distressingly critical of the consultative process, describing it in such terms as an "exercise in frustration,"³ "window dressing"⁴ and a "dialogue of the deaf."⁵ Although specific criticisms vary, many who have served on advisory committees complain that they lack direction, clear terms of reference and orderly procedures. Insufficient advance notice of issues to be discussed and inadequate information for informed discussion are also common complaints. Others have charged that consultations are a public relations exercise on the part of the Minister or the Department, only rubber-stamping decisions already made. And most worrisome, in my opinion, is the widespread perception that advice is not seriously sought or listened to.

Here in the Pacific region we currently have a consultative process made up of a staggering number of representative sections, industry committees, governmental agencies, etc, all theoretically participating in the ongoing mechanisms of fisheries management. In reality we have near paralysis made up of endless bureaucratic reorganization, plain inertia, empire building, and, on the part of all - endless posturing. Positions are usually polarized and entrenched with a pervading reluctance to make positive proposals for fear they will be viewed as a sign of weakness. The D.F.O.

actually seems to favour these fractionate conditions within the industry. The resulting frequent lack of consensus has repeatedly seen D.F.O. officials making arbitrary regulations that often are poorly thought out, poorly implemented and on occasion having no foundation in law.⁶

But while the Department is often harshly criticized, it does not bear the whole responsibility for unrewarding consultations.

Fishermen, user groups, etc. are themselves not totally guiltless, if for nothing other than manifestations of human nature such as greed, lack of concern for the resource and the aforementioned posturing on issues. There is unquestionably a need to raise the level of responsibility assumed by all participants....⁷

Clearly, we have some distance to go to overcome the present lack of confidence in the consultative process and to create a system that will generate and channel constructive communications between the fisheries authorities and the interested public. Bureaucratic resistance to the often irksome task of consulting outsiders must be overcome. The approach of private participants must become less critical and self-serving, and more compromising and constructive. These changes will take time and effort. But they will be promoted by a suitable organization and procedures, and these need fundamental reform.

TOWARD IMPROVED CONSULTATION

The present plethora of consultative bodies has evolved over time through *ad hoc* responses to apparent needs and circumstances, and consequently now lack order and coherence. The Department has apparently never sought professional advice on how to organize and conduct public participation, so, not surprisingly, present arrangements fail to satisfy the parties involved.

The first requirement for improving the consultative system is a coherent policy on the subject. The Department should therefore articulate a general policy on the issue of external consultation and advice. This should take the form of a document for public circulation, outlining the Department's consultative structures and procedures and arrangements for participation.⁸ Meanwhile, some guidelines and basic principles are called for. I therefore recommend —

1. **The Department should articulate general policy and procedures for effective consultation with the interested public. This should provide for the following:**

- i) **A consultative or advisory body should be appointed to deal with each branch of fisheries policy in which there is a distinct and focused public interest.**
- ii) **Each consultative body should have clear, written terms of reference to govern its deliberations and a specified line of reporting and accountability.**
- iii) **Members of consultative bodies should be formally appointed by the Minister or an official delegated by him for specific terms. They should be reimbursed for the expenses they incur in participating in meetings.**
- iv) **The membership of any consultative body intended to provide advice on policies that require balancing conflicting interests should not include delegates who are answerable to the interested groups.**
- v) **The number of members should be the minimum required for balanced understanding of the issues.**
- vi) **A Departmental official should be appointed as a nonvoting member to each consultative group to serve as its secretary and to provide information and technical assistance.**
- vii) **Each group should design and put in writing its own procedural guidelines for conducting its deliberations.**
- viii) **Minutes should be kept of all meetings and, except for the record of deliberations that are agreed to be confidential, they should be available to others.**
- ix) **Agendas should be circulated well in advance of meetings, together with supporting documentation.**
- x) **Every consultative group should be responsible for preparing a written report on its deliberations at least annually.**

Other structural and procedural arrangements (whether nominations for members should be solicited, how chairmen are to be selected, who will draft agendas and so on) will vary according to the responsibilities and needs of different groups.

I emphasize the importance of periodic reporting. Reports provide the essential medium of accountability for a group's effort and conclusions, and help to focus discussion at meetings. Reports are also needed to communicate conclusions and advice. Without this communication, the effort provides little more than therapy for those involved.

Careful preparation and documentation in advance of meetings also facilitate deliberations. Hard facts can cut through speculative and unproductive argument, and explicit propositions focus discussion. While some have criticized the Department for formulating policies before discussions, the criticism is justified only if decisions have already been made, so that ensuing debate will have no influence.

In designing consultative structures, I am concerned first, that they maximize the effectiveness of consultations; second, that existing structures be preserved and adapted where possible to minimize disruption; and third, that the system will funnel representations to public officials in an orderly way. In this connection I am particularly concerned about the representations and lobbying that circumvent the consultative system, through delegations to the Minister, meetings and interviews with senior officials, and endless phone calls with demands and complaints. The Department apparently tries to follow an open-door policy, accommodating all these representations; but the appeal of this approach is superficial. The Department should, of course, respond to private concerns, but by tolerating and encouraging all these informal representations, which are usually not public and are often between acquaintances, the consultative structure is undermined. It also exhausts the time of senior public officials, who seem to spend an inordinate proportion of their time in meetings.

These methods cannot provide the Department with balanced advice. Clearly we need a consultative system that will relieve officials of the flurry of unstructured lobbying so they can attend to their responsibilities in the context of publicly articulated advice from interested private groups. For this to work, interested individuals and groups must have confidence that the channels provided for this purpose offer the most effective means of exercising influence.

In the present context of fisheries policy, reforming the consultative structures is especially critical; they must be flexible and adaptive, but they should also be as simple as the varied requirements permit. My proposals incorporate a number of suggestions made by participants in the Commission's hearings.

A Pacific Fisheries Council

The highest-level consultative structure needs to be reorganized urgently. The existing Minister's Advisory Council is far too large to analyze and reach conclusions on complicated problems. It is also badly constituted; although individual members are knowledgeable leaders in the fishing community, they are, in effect, delegates of special interest groups. So it is difficult for them to avoid defensive posturing, to agree to compromises without

"going back to the executive," and to discuss problems and proposals in confidence. Thus, the council cannot be expected to provide a consensus on complicated policy questions. Moreover, it has insufficient autonomy.

I therefore recommend that a new high level council be appointed:

2. The government should replace the existing Minister's Advisory Council with a new Pacific Fisheries Council with the following characteristics:

- i) **The council should be provided for in legislation.**
- ii) **The council's terms of reference should embrace all matters that fall within the responsibility of the Minister of Fisheries and Oceans as they relate to Pacific fisheries, and it should be empowered to consider industrial policies, international arrangements or other questions when they are referred to it by the Minister.**
- iii) **It should consist of not more than eight members, appointed by the Minister for staggered three-year terms. They should be appointed in their personal capacities and selected for their knowledge, experience and judgement, and not for their affiliations. Membership should not be restricted to those who have a special interest in fisheries. The chairman should not be a public official. Members should be reimbursed for their expenses and paid an honorarium for the time they spend on council business. Adequate office and secretarial facilities should be available to the chairman.**
- iv) **A senior official of the Department should be appointed as a participating but nonvoting member of the council, and to provide administrative support and information.**
- v) **The council should determine its own agendas, taking account of any matters referred to it by the Minister. It should meet as frequently as it deems necessary, but not less than four times each year.**
- vi) **It should be required to issue a public report to the Minister at least annually, and it should make other reports to the Minister as appropriate.**

Balance and perspective in the council's deliberations are likely to be enhanced by including one or more members whose interests and experience are not narrowly focused on fisheries. The Salmonid Enhancement Board (among many other consultative groups in other fields) has demonstrated the value of broader public viewpoints.

I intend that this council be given a high status, that it become the central forum for consultations between the Minister and public interests, and that it be the channel

for coordinating communications with the more specialized advisory committees recommended below.

The new council should be involved in other policy changes, so I strongly urge the government to establish it immediately. (Pending legislative changes, the members should be appointed less formally.) Once the new council is established, the Minister's Advisory Council should be dissolved and the dormant Pacific Region Management Advisory Council should not be rejuvenated.

The new council should be consulted regarding the structure of the other advisory groups I recommend below. The existing temporary advisory committees should be asked to complete their work as quickly as possible, and no new ones should be struck without prior consultation with the council.

Specialized Advisory Committees

In addition to the Pacific Fisheries Council, more specialized consultative bodies are needed to deal with the narrower, but often complicated, problems associated with particular fisheries, regions and interest groups. Many such groups already exist, and require only some modifications in structures and procedures to fit into the consultative system I propose; others should be established. The advisory committees fall into distinct categories.

Fisheries advisory committees These are committees to address the problems of managing particular fisheries, such as salmon, herring, abalone and the mariculture industry. The number and variety of these specialized groups will depend upon interests, needs, and developments in related policies; they need not be permanent committees in all cases.

3. **A special advisory committee should be appointed for each of the significant fisheries that have special regulatory policies, including the sport and Indian fisheries, the separately licensed commercial fisheries and mariculture.**
 - i) **These committees' terms of reference should direct their attention to the coastwide problems of managing the specific fisheries.**
 - ii) **Members should be appointed by the Minister (or, at his discretion, by the Director General) for definite terms, drawing upon (without being limited to) representatives of organized groups. They should be reimbursed for expenses associated with committee activities.**
 - iii) **Each committee should choose its own chairman, establish its own working procedures within general policy guidelines, and determine its own agendas taking account of matters referred to it**

by the Director General or the Pacific Fisheries Council.

- iv) **The Director General should appoint a Departmental official with special competence in the relevant fishery to serve as a participating but non-voting member of each committee, and to provide information and technical assistance.**
- v) **Each committee should report in writing to the Minister through the Pacific Fisheries Council at least annually.**

The existing Sport Fish Advisory Board received mixed appraisals at the Commission's hearings. Apparently it is too large, and the representation of recreational and commercial sportfishing interests unbalanced. These concerns should be considered when the committee is reconstituted.

In Yukon, sportfishing interests are geographically separate and different in kind from coastal sportfishing interests, concentrating mainly on freshwater fishing. For these reasons, they should be represented in a separate Yukon sportfishing advisory committee as I propose in Chapter 20.

Some other fisheries call for regional representation as well. I have discussed this need in connection with salmon and herring management in Chapter 4. The area-based licensing arrangements proposed in Part III might generate a need for regional consultative groups for other commercial fisheries also. Such supplementary arrangements should be decided in consultation with the relevant fisheries advisory committees.

Two related points should be made especially clear in specifying the scope of these committees' functions. First, they should not concern themselves with the fractious question of catch allocations among competing groups. The general policy on this issue should be established at a higher level in consultation with the Pacific Fisheries Council, and specific arrangements should be laid out in pre-season fishing plans as proposed in Chapter 4. However, these committees should be involved in setting objectives for resource management and appraising the results achieved. Second, these committees should not concern themselves with day-to-day in-season management, but rather with policy, planning and results.

The Pacific Fisheries Council should append the reports of fisheries advisory committees to its own reports to the Minister, and should be encouraged to comment on the committees' conclusions, put them into a broader context for the Minister, and add supplementary advice.

Fisheries conservation committees In Chapter 5 I noted the unsatisfactory structure of the Salmonid Enhancement Task Group and suggested that it should

be reorganized into three regional advisory groups with terms of reference expanded to include habitat management. The Department has hitherto had no advisory group concerned with habitat management, though this probably attracts the widest public interest of all of the Department's responsibilities. Many of the people and organizations with this interest (for example, fishing and environmental groups, Indians, and other resource industries) are also interested in enhancement and indeed they are represented on the present task group. Because habitat management and enhancement are inextricably linked, it is logical for one advisory group to deal with them both.

This organization should be regionally based to focus local public concerns and to facilitate participation. I propose that it consist, initially at least, of three groups.

4. Three regional Fisheries conservation committees should be appointed, one each for the north, south and Fraser River administrative areas.

- i) These committees' terms of reference should direct their attention to matters relating to enhancement and habitat management in the relevant area.
- ii) They should consist of not more than eight members appointed by the Minister (or, at his discretion, by the Director General) for definite terms, drawing upon (but not being limited to) representatives of organized groups with relevant interests in the region.
- iii) The Area Manager should appoint one of his staff to serve as a participating but nonvoting member of the committee and to provide technical advice and documentation.
- iv) Each committee should choose its own chairman, establish its own working procedures within general guidelines and determine its own agendas, taking account of any matters referred to it by the Director General, Area Manager or Pacific Fisheries Council.
- v) Each committee should report at least annually to the Minister through the Pacific Fisheries Council.

These regional groups will focus public concerns and advice in each of the three regions, which are to some extent complemented by the regional organization of the provincial resource management agencies, the Department itself, and its geographic working groups. I suggest that in addition to their regional activities, the Department support a joint annual meeting of the committees at which time they can review with the planners and the Salmonid Enhancement Board the general direction of

the enhancement and inventory programs as well as habitat management policy, and communicate their conclusions and comments in a report to the Minister. These groups could also channel public advice on the use of the Fisheries Conservation Fund recommended in Chapter 3.

Special regional management committees The Department has already established special committees for consultation on fisheries management in certain areas, referred to earlier. From time to time other special advisory groups will be needed to channel public concerns and advice in particular areas. For these I recommend —

5. Local advisory committees should be appointed to deal with special fisheries habitat or management problems in particular areas where these problems cannot be adequately dealt with by the fisheries advisory committees or the fisheries conservation committees.

- i) These committees' terms of reference should be defined geographically as well as with respect to the specific problems to be considered.
- ii) The chairman and members of these committees should be appointed by the Minister (or, at his discretion, by the Director General or Area Manager) for definite terms, drawing upon (without being limited to) representatives of local interest groups. They should be reimbursed for expenses associated with committee work.
- iii) The Area Manager should appoint one of his staff to serve as a participating but nonvoting member of each committee and to provide technical advice and documentation.
- iv) Each committee should report at least annually in writing to the Minister through the Pacific Fisheries Council.

Within these guidelines, arrangements for consulting with local interest groups should be adapted to specific needs. In the long term, I foresee a general shift from coastwide consultative structures to regional and local bodies capable of providing more intimate communication between regulatory authorities and local interests.

Several participants in the Commission's hearings suggested that the government should establish formal river-basin boards to focus public concerns about the management of particular river systems.⁹ Some proposals involve delegating regulatory powers to these boards along the lines of Conservation Authorities in Ontario,¹⁰ or the river boards in the United Kingdom and some European countries.¹¹ The proposed scope of these boards goes well beyond fisheries policy to include regulating other resource activities, industrial development and regional planning. Here, the province has responsibility for most

of these activities and so any initiatives toward formal planning structures along these lines should come from it, and I hesitate to suggest that the federal government should take a leading role. However, if they are established, the federal government should press for representation by the Department of Fisheries and Oceans on those established for rivers that support salmon.

Direct Communications With the Public

A few years ago, the fisheries were mainly the concern of enclaves of commercial fishing interests in coastal communities, and fisheries policy was directed accordingly. Today, in contrast, interest extends broadly to hundreds of thousands of commercial, sport and Indian fishermen, environmental organizations, businesses and the public at large. This burgeoning interest should be encouraged because it supports advances in fisheries policy. But, with the notable exception of the Salmonid Enhancement Program's public information effort and its publication Salmonid, the government has not responded to this interest in an organized way. A periodical, The Sounder, reports current developments in fisheries administration, but its audience is the public service itself. And a Fishermen's Newsletter has been published only sporadically in recent years.

It is too much to expect members of consultative groups to regularly communicate to the fishing community the current developments in management and policy. And the newsletters of organized groups cannot be counted on to present the issues in a comprehensive and balanced way.

This Commission's hearings have revealed a great deal of misunderstanding about fisheries matters and a thirst for information. The latter is reflected in the media's recent attention to fisheries and in one west-coast newspaper's sponsorship of a significant fund-raising effort for salmonid enhancement. The government should recognize a responsibility to inform the public about the resources under its stewardship, to explain management problems and to provide current information about policy developments.

I therefore propose a new and vigorous public information program, centered on a high-quality periodical for wide distribution. This magazine should combine and absorb the Department's existing publications mentioned above. Thus—

6. **The Department should replace its existing publications with a single high-quality, readable periodical for wide distribution to inform the public about fish resources, management problems and policy developments.**

The publication should stimulate interest with feature articles and photography. A good example is the highly successful periodical, ForesTalk, published quarterly by British Columbia's Ministry of Forests.

CONCLUSION

The Department has made an impressive effort to develop consultative mechanisms; but, with some exceptions, it has not been highly successful. Badly structured advisory groups and faulty procedures have undermined confidence in the process, the essential element of its success. The arrangements need thorough reorganization within an orderly framework, as I have proposed.

Consultation, like democracy, is hard work, but no satisfactory alternatives exist. If the government demonstrates a commitment to the process by putting suitable structures in place and inviting meaningful participation in policy making, I have no doubt that the response will be rewarding. As one participant pointed out, fishermen—

...collectively possess a vast body of knowledge about the fishery and local conditions germane to its management. Their potential to offer good data and management advice is considerable.¹²

I should add that governments have the responsibility to govern, and they cannot delegate their responsibilities to private groups. More specifically, the Department is responsible to Parliament for managing the fisheries, and while it should systematically consult and listen to advice as I have proposed, it must make final decisions and stand accountable to Canadians as a whole. Moreover, the Department's obligations to consult are not infinite; it should feel obliged to give consultative groups timely information and a reasonable period to provide advice, but having done so and seriously considered the advice received, it should not delay action because of lethargy or a lack of consensus on the part of advisors.

Finally, because any private interest group's knowledge and experience is specialized, consultations on some matters are more appropriate than on others. For example, who should have the right to obtain fishing privileges is a favourite topic among fishermen. But the allocation of rights to use public resources is a question of high public policy, which must be settled with reference to legal, social and political considerations. Thus, it should be dealt with in legislation and provisions for allocating fishing licences (as I propose). And any unfairness or hardship that results should be referred to the appeal process. Consultative groups with vested interests in the fisheries should not be encouraged to dwell on this issue.

Everyone familiar with the fisheries knows that the commercial, sport and Indian fishing communities contain at least the normal share of unconciliatory people. Some refuse to recognize opposing positions even in the face of reasonable evidence, and others simply do not want to face the need for change. Some organizations

have adopted uncompromising positions and carry deep animosities fuelled by years of fractious disputation. But this Commission's hearings have revealed that within the fisheries are many thoughtful, public-spirited and well-informed people. If the government calls on these people, consultation will be constructive.

FOOTNOTES

1. D.D. Tansley, Deputy Minister, Department of Fisheries and Oceans, transcripts of the public hearings, Volume 67, p. 13824.
2. The number is not altogether clear because some bodies are temporary or inactive. The 1982 Commercial Fishing Guide lists 16, including three attached to international commissions.
3. Pacific Coast Fishing Vessel Owner's Guild, Exhibit #194, p. 1.
4. Central Native Fishermen's Cooperative, Exhibit #139, p. 2.
5. D.A. Pepper, Exhibit #28, p. 12.
6. A.H. Meadows, Exhibit #46, p. 18.
7. Exhibit #46, p. 19.
8. For an example of the kind of well-defined policy statement I have in mind, see the recently published Public Involvement Handbook. Province of British Columbia, Ministry of Forests, Victoria, 1981.
9. See, for example, Save the Bulkley, Exhibit #53.
10. R.S. Campbell, P.H. Pearce, A.D. Scott and M. Uzelac, Water Management in Ontario: An Economic Evaluation of Public Policy, Osgood Hall Law Journal, Volume 12 No. 3, 1974. pp. 475-526.
11. W.R. Derrick Sewell and Mary L. Barker, Water Problems and Policies. Cornett Papers, Victoria, 1981, Vol. 1.
12. The Victoria Charter Boat Association, Exhibit #175, p. 2.

CHAPTER 18

FEDERAL ARRANGEMENTS WITH BRITISH COLUMBIA

The management of the fisheries resource has a serious jurisdictional problem at its very center. Jurisdiction over fisheries by the British North American [Act] is federal, while jurisdiction over competing resource users, a prime example being logging, is provincial.

THE PACIFIC GILLNETTERS ASSOCIATION¹

Repeatedly, during the course of this inquiry, my attention has been drawn to the interface of federal and provincial responsibilities in fisheries matters. The impact of one government's policies on those of the other has emerged piecemeal in relation to commercial fisheries administration, processing and product regulation, sportfishing, enforcement, enhancement, and most importantly, habitat protection. Altogether, this interdependence is crucial to the way fish resources are managed and used.

Yet explicit arrangements to govern the way the two governments will reconcile their separate and sometimes conflicting interests and responsibilities are surprisingly lacking. This has led to uncertainty, confusion and even suspicion between the two public services, and has resulted also in wasteful duplication of effort, frustrations for third parties and occasional political crises. For these reasons, the absence of a formal working relationship between the two governments has emerged as a most serious deficiency in the existing policy framework for the Pacific fisheries. This has led me to the inescapable conclusion that a formal intergovernmental agreement between the governments of Canada and British Columbia is needed to ensure their activities in fisheries matters are harmonized, duplication of effort is reduced and conflicts are minimized.

The need to reconcile the policies and practices of the federal and provincial governments was emphasized in my public hearings by participants with interests ranging widely from mariculture to environmental protection, forestry, mining, and resource enhancement. And nearly

all of those involved in fishing — commercial, recreational and Indian alike — expressed concern about the interdependence of federal and provincial authority especially in managing fish habitat.

The reforms proposed in this chapter could not be discussed with the two governments directly in public hearings, since, understandably, they were not disposed to speculate officially and publicly about possible new arrangements and reallocations of responsibilities which, in this country, are normally subjects of political negotiation. However, I believe my proposals offer a feasible framework for reconciling the interests of the two governments on a range of important fisheries problems.

In this chapter I propose a comprehensive agreement between Canada and British Columbia on fisheries matters, clarifying their respective roles, responsibilities and authority in various aspects of fisheries administration as well as their joint working arrangements. The agreement would incorporate existing joint undertakings, most of which are informal, obsolete or based on inadequate documentation.

None of the recommendations below imply alteration of the existing constitutional division of responsibilities; all can be effected through a contractual undertaking between the two governments in the form of the proposed agreement.

THE INTERFACE OF FEDERAL AND PROVINCIAL RESPONSIBILITIES

Under the Canadian constitution, legislative responsibilities for fisheries are divided between the federal Parliament and the provinces. In many respects the division of authority, as interpreted by the courts over the decades since confederation, has proved awkward for fisheries management, particularly for regulating fishing, mariculture, fish processing and marketing, and for habitat protection. Some of these difficulties have been resolved through arrangements between the federal government and British Columbia, and relatively smooth processes have resulted. For others, such arrangements are informal or altogether lacking, and serious problems have emerged.

The division of constitutional responsibilities for fisheries management is both tangled and subtle. Under the 1867 British North America Act (recently incorporated into the Constitution Act 1982), the federal parliament has jurisdiction over "sea coast and inland fisheries." This general authority enables federal regulation of fishing activities in both tidal and nontidal areas of the province, and is the basis for the Fisheries Act and its myriad regulations aimed at commercial, sport and Indian fishing. But as owner of most of the land underlying fresh watercourses in British Columbia and in vir-

tue of its constitutional jurisdiction over property and civil rights, the province may confer fishing privileges in nontidal waters and thus regulate fishing activities indirectly.

Collision between the two governments in this area of fisheries management has been averted for decades through intergovernmental arrangements. The federal government has retained responsibility under the Fisheries Act for managing all tidal fisheries and for managing salmon even in freshwater. But the province administers and enforces the conservation regulations for freshwater species (all trout, including anadromous steelhead and cutthroat), also enacted under the federal Fisheries Act. The province issues nontidal sportfishing licences under provincial legislation, and exercises complete control over oyster leasing. Although these arrangements have been in place for many years, they are not supported by formal agreements. The only modern and clearly articulated intergovernmental arrangement is the 1979 federal-provincial agreement to sponsor the Salmonid Enhancement Program.

A similar jurisdictional overlap occurs in mariculture. As the owner of most of the foreshore on the Pacific coast, the province controls access to mariculture fisheries such as oysters and clams in the intertidal zone. The federal government is the undisputed owner of the seabed underlying Canada's territorial waters off the coast, but ownership of the inside waters (east of Vancouver Island, the Queen Charlottes and a line joining them) is in dispute and before the courts. If the province is successful, its potential for engaging in mariculture management and leasing would broaden considerably. Similarly, both governments claim jurisdiction over marine plants. Since 1912, the province has had administrative responsibility for oyster culture under a formal agreement with the federal government, but arrangements between the two governments for other species and marine plants are informal or lacking.

A second area of constitutional overlap concerns fish processing and marketing. The provincial government is responsible for shore-based processing facilities and the sale of fish in the province. (These functions come under provincial property and civil rights responsibilities.) But because most fish produced commercially on the Pacific coast are shipped out of the province, the Department of Fisheries and Oceans is responsible for inspecting them under its jurisdiction over interprovincial and international trade. Through informal arrangements between the two governments, quality standards are applied to fish marketed in the province as well.

A third area of overlap concerns fish habitat protection. In this area, federal fisheries responsibilities are pitted against provincial ownership and control over land

and freshwater. No formal procedures are in place to guide the administrators of the two governments in this sphere, although recently, in the wake of the highly publicized incident at Riley Creek and the subsequent confrontation between the two governments, officials agreed to consult in an attempt to forestall such crises in the future. But these arrangements relate only to logging, they are informal, and they provide no system other than communication to resolve conflicts.

These fragmentary and inconclusive arrangements between the two governments are inadequate. In a few cases, the respective roles of the two governments are recognized and documented in a formal agreement; in others, the recognition is only tacit; while in many important areas, mutual responsibilities are completely undefined.

AN INTERGOVERNMENTAL FISHERIES AGREEMENT

To deal with matters of mutual concern to the governments of Canada and British Columbia relating to fisheries and fish habitat management, I propose a formal comprehensive agreement. This agreement, which I refer to as the Canada-British Columbia Fisheries Agreement, should clarify and harmonize administrative responsibilities, establish new cooperative programs, and set out procedures and working arrangements for the resolution of problems.

I suggest that the agreement be negotiated and signed by the federal Minister of Fisheries and Oceans and the provincial Minister of Environment on behalf of their respective governments.

Since some of the issues that should be included in the agreement are more or less separable, of varying complexity and likely to take differing times to negotiate, I propose a general framework agreement with a number of supplementary components. The framework agreement would set out a general commitment to cooperation and the scope of matters to be included. The supplementary agreements would deal with more specific matters. I thus recommend —

1. **The Government of Canada should invite the Government of British Columbia to join in a comprehensive intergovernmental agreement on fisheries matters. The agreement should consist of a master or framework agreement providing for supplementary agreements on the following:**
 - i) **A renewed Salmonid Enhancement Program.**
 - ii) **An inventory of aquatic habitats.**
 - iii) **Cooperative arrangements for habitat management and pollution control.**

- iv) **Provincial responsibilities in administering and regulating freshwater fisheries.**
- v) **Integration of freshwater and saltwater sportfishing licences and related administrative arrangements.**
- vi) **Division of administrative responsibilities for marine shellfish and plants, mariculture, and the gathering of statistical data on marine fisheries.**

I have explained the need for each of these in previous chapters. The issues to be dealt with in the agreement can be summarized briefly.

Salmonid Enhancement

I have made detailed proposals for a renewed inter-governmental salmonid enhancement agreement in Chapter 5. The present enhancement agreement, which will expire in 1984, requires only some modifications to incorporate the changes I have recommended. This document is well designed and might serve as a model for other components of the proposed agreement.

Aquatic Habitat Inventory

The urgent need for an inventory of freshwater and estuarial fish habitats, and the interest of both governments in this information, is explained in Chapter 3. The agreement should set out cooperative arrangements for an intergovernmental program of systematic field investigations, data collection and data analysis to provide the basis for strategic planning for the fisheries, and integrated resource management and development.

Habitat Management

In Chapter 3 I recommended that the Department should play a more aggressive role in integrated resource planning in cooperation with other resource management agencies, which in British Columbia are mostly ministries of the provincial government. The referral arrangements for assessing proposals for industrial projects and other developments are the pivot between the two governments in habitat management, and these should be addressed in the federal-provincial agreement. Because it is so heavily involved in allocating forest, water and other natural resources in areas that fish depend on, the province must be encouraged to accept responsibility for protecting habitat in planning and regulating upland activities. This need is particularly urgent for salmon habitat.

The agreement should set out explicit procedures to be followed by provincial agencies and the Department in dealing with proposed developments and projects affecting fish habitat. These should include referral arrangements and, where appropriate, means of delivering federal approvals through provincial authorizations such as

pollution control permits and resource tenure documents. The mitigation and compensation measures proposed in Chapter 3 also might be channelled through these provincial authorizations.

Finally, the agreement should deal with cooperative arrangements in responding to spills of oil and toxic chemicals. I explained in Chapter 3 that both governments have legislation on this matter. In 1981 an understanding between them provided for cooperation in maintaining a continuous capacity to respond to spills and to deal with crises. The agreement should incorporate these informal arrangements.

Freshwater Fisheries

As already explained, the province has assumed, over many decades, full responsibility for administering freshwater fisheries other than salmon (but including steelhead and other anadromous trout). These fisheries are almost entirely recreational with minor commercial operations. The province maintains staff and programs for the full range of freshwater fisheries management including fishing regulation, enforcement, fish culture, habitat management and information. Apart from licensing, the entire program operates under federal legislative jurisdiction through tacit agreements between officials of the two governments. Formal recognition of these arrangements should be provided in the agreement.

Sportfishing Licences

In Chapter 15 I proposed that the federal saltwater and provincial freshwater sportfishing licences be integrated. The agreement should provide for this and related administrative arrangements, including the appointment of agents to issue them, the collection of licence fees and the distribution of revenues between the two governments.

Marine Fisheries

The federal government has retained complete administrative responsibility for marine fishing offshore, but the province's role is significant in neritic, intertidal and aquacultural fishing operations. Earlier in this chapter I noted that the province has assumed responsibility for administering oyster culture and (under uncertain arrangements) clams within oyster leases and wild oysters elsewhere. The federal government has retained administrative authority for other shellfish.

Both governments are involved in administering other forms of mariculture. The province administers freshwater fish farms through a system of licensing and inspection, while the federal government administers marine salmon culture with provincial licensing of the freshwater propagation facilities.

Both governments claim jurisdiction over marine plants, though only the province has a stock-assessment program, a research program and a licensing system. Some years ago senior officials agreed that the province should manage the resource subject to a federal review of harvesting plans for their possible impact on fish habitat. Recently, however, disagreements have arisen over approvals of harvesting licences.

This division of responsibilities for shellfish is without apparent logic, and the overlapping responsibilities for marine plants and mariculture are unsatisfactory.² These matters should therefore be resolved and incorporated into the formal intergovernmental agreement.

The allocation of responsibilities for administering shoreline fisheries should be pragmatic. I suggest that the federal government concentrate on sea fisheries, which are its heaviest responsibilities in any event. The arguments for provincial administration are strongest for operations on the foreshore. Thus, the provincial responsibilities for oysters should be expanded to include other intertidal shellfish species. The oyster culture industry already markets most of the clams harvested and is diversifying into the harvesting and culturing of other shellfish, which call for the same kind of licensing arrangements. But even where the federal government is to take the lead in administering a species, the agreement should provide links to provincial government policies and programs, such as those for freshwater resources, small business development and Crown land allocation.

Finally, both governments are involved in regulating fish processing, with the province licensing and controlling the operation of facilities for landing and processing, and the federal government being concerned with quality standards. These joint interests offer an opportunity for constructive cooperation in collecting statistical data on landings and other matters, as I suggested in Chapter 8. Elsewhere I emphasized the importance of improving catch data for purposes of managing and administering royalties and quotas. Thus, collaboration in data collection and perhaps also in inspections and enforcement should be provided for in the agreement.

INTERGOVERNMENTAL LIAISON

The numerous and continuous joint interests of the two governments in matters of fisheries and fish habitat man-

agement call for a mechanism for regular consultation between them. Moreover, the cooperative ventures I propose above will require close communication, cooperative planning and supervision.

During the 1950s a Federal-Provincial British Columbia Fisheries Committee was established to bring together the two Deputy Ministers responsible for fisheries to resolve matters of mutual concern. But this body has met only once in the past five years, and there is now some question whether it still exists.³

A new consultative group is therefore required, and I recommend—

2. The Government of Canada should invite the Government of British Columbia to cooperate in establishing a Canada-British Columbia Fisheries Committee.

- i) The committee's responsibility will be to assist the two governments in negotiating an intergovernmental fisheries agreement, to coordinate and oversee the implementation of that agreement, and to provide for consultations on other fisheries matters of mutual interest.
- ii) The committee should consist of the Deputy Ministers responsible for fisheries in the two governments, who would act as alternate chairmen, and such other members as may be mutually agreed upon.

In view of its structure and responsibilities, this committee should report to the two governments at the political level. To maintain momentum in the negotiation and consultative process (which may be difficult in view of the broad and divergent responsibilities and geographical separation of those directly involved) and to ensure that decisions are carried through, consideration should be given to the provision of a permanent coordinator for this committee.

CONCLUSION

The governments of Canada and British Columbia both have a major influence on the management of Canada's Pacific fish resources. Explicit and mutually agreed arrangements for reconciling their interests are overdue. The steps I propose in this chapter are intended to provide a framework for smoother and more effective means of coordinating their responsibilities and activities.

FOOTNOTES

1. The Pacific Gillnetters Association, Exhibit #70, p. 4.

2. A new federal interdepartmental Marine Resource Industries Development Steering Committee recently produced a policy paper (Managing the New Frontier: Towards A Pacific Marine Economic Development Strategy) calling for a strategic develop-

ment of marine resources in British Columbia with participation by the province.

3. D.D. Tansley, Deputy Minister, Department of Fisheries and Oceans, transcripts of the public hearings, Volume 67, pp. 1384-45.

CHAPTER 19

ADMINISTRATION

...government often attempts to do too many things for too many people at the cost of neglecting its most serious responsibilities, and government often attempts to under-finance and under-staff those most important elements of its mandate which often have a low political profile.

THE FISHERIES ASSOCIATION OF BRITISH COLUMBIA¹

The government's success in fulfilling its mandate to manage fish resources and their use depends first on suitable legislation, regulations, policies and objectives; and second on the provisions for administering them. In this chapter, I address the latter. In particular, I am concerned with the Department's organization, financing and personnel.

Participants in the Commission's hearings expressed a wide range of views regarding administration of fisheries resources. Some saw administration as the main problem:

We believe that the quality of the administration by the Department of Fisheries and Oceans is the most critical problem in the industry today. All other problems are not only secondary, but in many cases are the direct result of poor administration.²

Others thought that the government was doing as well as could be expected given insufficient funds and manpower, and the lack of long-range policy.

With the funding, manpower, and mandate they are given, they do a commendable job of managing a very difficult industry.³

Many were complimentary and sympathetic to the Department's problems.

...almost all the staff of the D.F.O. with whom I consult are in my view, capable, well meaning and helpful. They absorb a great deal of misdirected abuse from the industry at large and still maintain cordiality and concern for our problems. It is my opinion that

criticism of the D.F.O. are due to an absence of vision and long-term planning and not to the quality of the individual personnel employed there. The problem is compounded by the lack of political will to follow through with the good management initiatives when they do appear.⁴

Basic Responsibilities

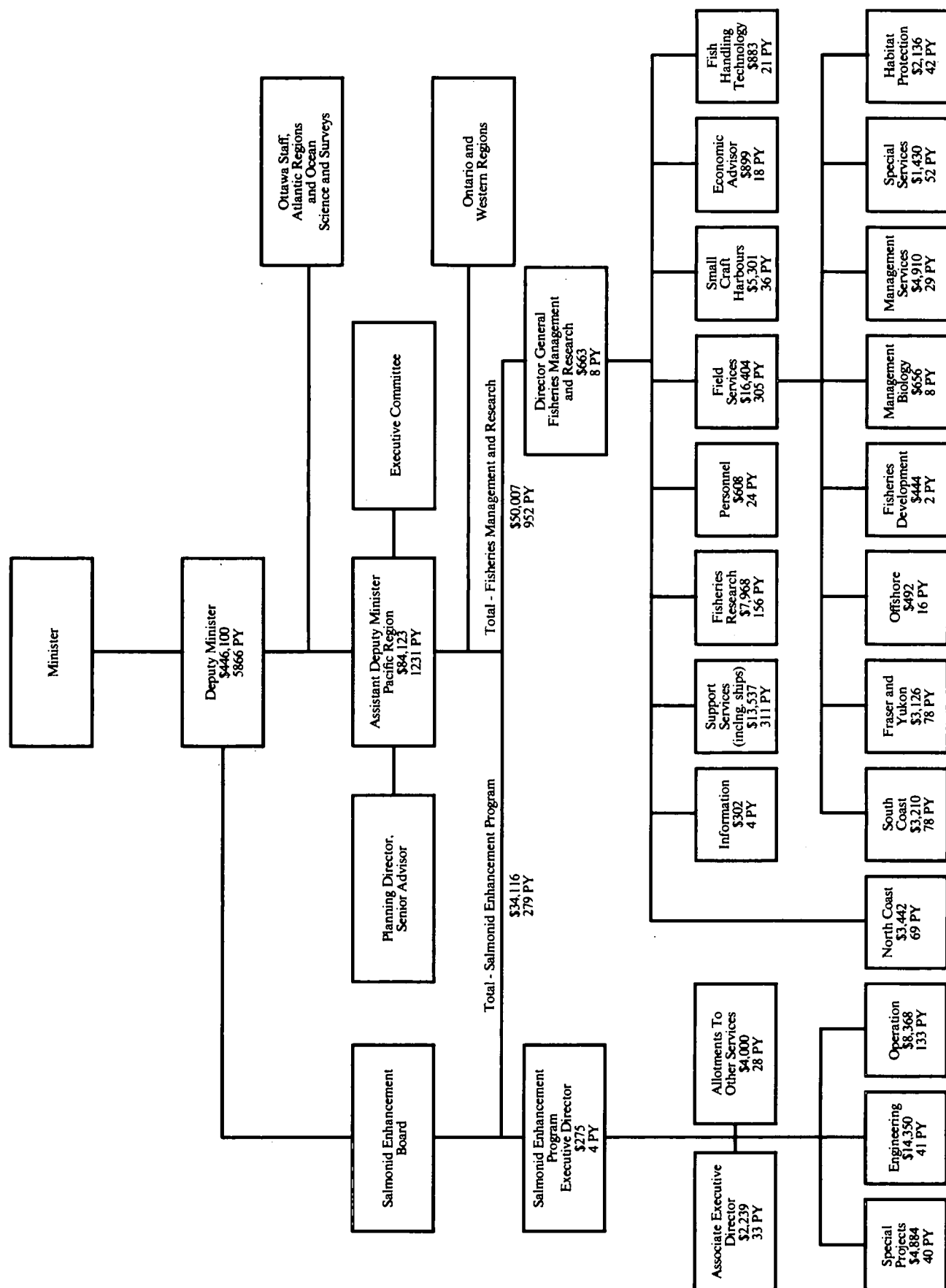
The Department of Fisheries and Oceans acts as Canada's principal steward of fish resources and of the aquatic habitat on which they depend. The Department's responsibilities for fisheries and ocean science extend throughout the Canadian provinces, the northern territories and coastal waters. The Pacific region's responsibilities encompass Canada's entire Pacific coast, including offshore islands to the 200 mile limit, and the mainland of British Columbia and Yukon. Through international fisheries treaties, the Department is also involved in managing fisheries in extraterritorial waters in the Pacific and Arctic Oceans and in the Bering Sea. Administration of freshwater fish (including the anadromous steelhead and cutthroat trout) and fishing has been delegated to the Province of British Columbia, leaving the federal authorities responsible for all other fisheries resources and for commercial, Indian and recreational fishing in this vast area.

The Department's basic responsibilities are set out in the federal Department of Fisheries and Oceans Act, under which it is directed to administer a number of statutes.⁵ On the Pacific coast, the most important of these are the Fisheries Act, Fisheries Development Act, Fish Inspection Act, Fishing Recreational Harbours Act, Coastal Fisheries Protection Act and the Fisheries and Oceans Research Advisory Council Act. In addition, the Department is involved in five international commissions on the Pacific: the International Pacific Salmon Fisheries Commission, the International Pacific Halibut Commission, the Inter-American Tropical Tuna Commission, the North Pacific Fisheries Commission and the North Pacific Fur Seal Commission. It also has a role in the Salmonid Enhancement Program, based on a federal cabinet order and a federal-provincial agreement, described in Chapter 5.

Organizational Structure

The Department is organized around six regions: the Pacific, Newfoundland, Gulf, Scotia-Fundy, Ontario and Western (the Prairie Provinces and Northwest Territories). Responsibilities for these regions are divided between two Assistant Deputy Ministers, one being responsible for Quebec and the Atlantic, the other for Ontario and western Canada including the Pacific region.

Figure 19-1 Department of Fisheries and Oceans, Pacific Region organization and resources in 1981-82
(budget figures in thousands of dollars; PY denotes person-years)



The ocean science and surveys component of the Department operates under a separate Assistant Deputy Minister more or less independently of fisheries in the Pacific region. The responsibilities of a fourth Assistant Deputy Minister include marketing, industrial policy and international matters.

The Pacific region is divided into two main organizational lines as shown in Figure 19-1, one for the Salmonid Enhancement Program and the other for Fisheries Management and Research. Operational policy in the region is coordinated through an executive committee consisting of the Assistant Deputy Minister responsible for the Pacific region; his senior advisor, the Director General; the Executive Director of the Salmonid Enhancement Program; and the Director of Regional Planning.

The development and functions of the Salmonid Enhancement Program are explained in Chapter 5. Its headquarters are in Vancouver, headed by an Executive Director, who is responsible to both the Salmonid Enhancement Board, chaired by the Deputy Minister,

areas: the south coast; the north coast; and the Fraser River, Northern British Columbia and Yukon. These areas are subdivided into ten districts. In addition, there are several other line and functional support groups as shown in Figure 19-1.

The geographical distribution of the region's 1231 personnel is heavily weighted towards headquarters and staff functions as shown in Table 19-1. Headquarters units in Vancouver and Nanaimo employ 689 people, more than half the region's total manpower. Of the 542 employed in the field units, 230 were involved directly with fisheries management, including 125 fishery officers. The remaining 312 were assigned to various special services such as crewing on ships and operating enhancement facilities and small-craft harbours.

The allocation of the Department's national budget and manpower among regions in the fiscal year 1981-82 is summarized in Table 19-2. The total budget is approximately \$450 million or 0.62 percent of total federal expenditures for departments and agencies. Fisheries, as distinct from ocean science and surveys, accounted for

Table 19-1 Geographical distribution of personnel in the Pacific Region of the Department of Fisheries and Oceans, 1981-1982

branch	headquarters units total: 689							field units total: 542							Total
	Vancouver	Technology Services Laboratory	Pacific Biological Station Nanaimo	West Vancouver Laboratory	Kamloops	New Westminster	Nanaimo	Port Alberni	Campbell River	Victoria	Kitimat	Prince Rupert	Queen Charlotte City	Whitehorse	
director general	8														8
information	4														4
economic and statistics	18														18
personnel	24														24
technology		21													21
special services:															
ships	7		27			19	4	8	11	81	13	24	11		205
other	62		41												103
field services	145				15	59	45	14	15	7	17	45	9	6	377
research	2	1	127	26											156
small craft harbours	7					14	5	2		1	1	5	1		36
salmonid enhancement program	151		13	5	4	24	21	10	19	2	7	18	5		279
total	428	22	208	31	19	116	75	34	45	91	38	92	26	6	1231

Source: Department of Fisheries and Oceans.

and to the Assistant Deputy Minister, who oversees the program's operations.

The structure of the other organizational line, Fisheries Management and Research, is much more elaborate. It is headed by a Director General, and has its headquarters in Vancouver. Its responsibilities are divided among three

about 84 percent of the Department's total budget, and approximately 78 percent of its manpower requirements. The fisheries budget for the Pacific region, at \$84 million in 1981-82, accounts for roughly one-third of all regional fisheries expenditures and almost a quarter of total fisheries' spending.

Table 19-2 Department of Fisheries and Oceans national allocation of budget and manpower, 1981-82

	manpower		budget	
	person-years	percent	millions of dollars	percent
Fisheries				
Headquarters	565	10	98.5	22
Regions				
Newfoundland	860	15	60.8	14
Gulf	200	4	29.7	7
Scotia-Fundy	1247	21	77.4	17
Ontario	123	2	9.0	2
Western	306	5	15.0	3
Pacific	1231	21	84.1	19
Ocean Science and Surveys				
Pacific region	298	4	17.2	4
Other regions and headquarters	1036	18	54.4	12
Total Fisheries and Oceans	5866	100	446.1	100

Source: Department of Fisheries and Oceans.

The pattern of budget and manpower allocations in the Pacific region is depicted in Figure 19-1. Of the region's \$84 million budget for the 1981-82 fiscal year, wages and salaries account for \$34 million, goods and services \$30 million, and capital expenditures \$20 million. About \$50 million, or 60 percent of the region's budget, was allocated to Fisheries Management and Research. The remaining 40 percent of the budget (\$34 million) was allocated to the Salmonid Enhancement Program. The Government of British Columbia contributed an additional \$1.5 million to this program in that year.

Recent Turmoil

A striking feature of the Department has been its repeated attempts to reorganize, particularly during the past decade. In conjunction with frequent changes in senior personnel, this has produced an unstable administrative environment in the Pacific region.

Responsibilities for the fisheries of Canada rest primarily with the federal government. Traditionally, this national responsibility has been supported by a full-fledged Minister and Department. But in 1971 fisheries was brought under the awkward umbrella of a newly created Department of Environment, along with forestry, meteorology, wildlife, water and environmental protection.

Within the Department of the Environment, the Fisheries Service was headed by one of seven Assistant Deputy Ministers, but because of the wide variety of disparate agencies in this conglomerate department, fisheries suffered from a lack of focus and attention at senior levels. This shortcoming was recognized, and in 1975 a Minister of State for Fisheries was appointed to share responsibilities for the Department of the Environ-

ment. In addition, the position of Senior Assistant Deputy Minister was created to head the Fisheries and Marine Service.

Three years later, in 1978, a separate Department of Fisheries and Oceans was created, in effect reversing the decision made seven years earlier to consolidate fisheries with other areas of federal responsibility in the Department of the Environment. With this structure came the appointment of a Minister, a Deputy Minister and four Assistant Deputies, which we have today.

While these developments were taking place, the Ottawa headquarters of the Department was expanding and becoming more heavily involved in Pacific region decisions, with a corresponding dilution of influence by regional officials. Successive waves of structural change have led to an apparent preoccupation with internal administrative matters both in Ottawa and in the region. During this period three different individuals held the position of Director General (formerly called Director) for the Pacific region, each of whom made significant organizational changes during his tenure.

These changes did little to improve the effectiveness of the Department. As one participant noted —

Re-organizations of management agencies have occurred with some regularity in response to changing circumstances. However, the organizational changes have done little to improve stock management and habitat protection. Furthermore, the institutional instability has resulted in the departure of significant numbers of Fisheries and Oceans staff including several well qualified fisheries biologists.⁶

The 1970s also saw the retirement of many fishery officers and professional staff who had been recruited from the armed forces after World War II. The influx of less-experienced replacement personnel added to administrative stress in the region.

These administrative disruptions came at a time when the Department's ability to manage the fisheries resources of the Pacific coast was being challenged by a number of important events. These included the extension of fisheries' jurisdiction from 12 to 200 miles, the development of the Salmonid Enhancement Program, the explosive emergence of the roe-herring fishery, a sharp increase in the catching power of fishing fleets, accelerating participation in sportfishing, new difficulties relating to the Indian fishery, and increasing public concern about environmental quality and protection of fish habitat. The resources of the region were tested as never before during a period of almost continual administrative upheaval and retrenchment. These events took their toll

in loss of morale, staff turnover and strains within the Department, which inhibited the policy development needed to cope with the rapidly changing circumstances.

Present Deficiencies

Effective and efficient administration can be expected only when the administrators have clear policy objectives and an orderly framework of legislation and procedures for carrying out their responsibilities. At the outset of this report I noted that coherent objectives and policies for the Department are conspicuously lacking. This void is manifested in archaic legislation, ineffective licensing arrangements, conflicting programs and other deficiencies I have examined in other chapters.

Aggravating the general vagueness of policy is the widespread perception that administration itself lacks consistency and vigour, and that policy decisions are pliable in the face of lobbying and other pressures. Recurring examples of important decisions that are subsequently reversed or modified undermines confidence in the government's competence, invites partisan pressure from affected groups and demoralizes the public service. Weaknesses in enforcement, in statistical information, in the consultation process and simply in policy documentation, among other weaknesses identified in this report, all contribute to the impression of loose administration.

I must also call attention to an apparent unresponsiveness to urgent needs. Sometimes this is associated with administrative processes in the Pacific region, such as the failure to issue fishing licences by the time the fishing season opens. More serious is the inability of Ottawa headquarters and other government agencies to cope with the demands put on them. I have been informed that, because of delays in governmental procedures in Ottawa, local officials had to try to enforce regulations while lacking the legal basis for doing so. For instance, the freshwater sportfishing regulations for this year, prepared and administered by the Province of British Columbia but requiring federal formal approval, were submitted to Ottawa last year; but they were not approved, so had no legal force, until mid-July, halfway through the fishing season. Under these circumstances, the province's conservation officers must rely on bluffing or intimidating sportsmen into complying with them.⁷

Furthermore, while I acknowledge the need for controls and sometimes burdensome procedures in a large government, I must still conclude that in some cases the procedures prevent the government from attending to the tasks it has set for itself. For instance, simple changes in fishing regulations involve cumbersome and time consuming procedures. And designing and implementing amendments to section 33 of the Fisheries Act took more than four years. The result of such cumbersome processes is a slow, unresponsive and unbusinesslike administra-

tion, though this may not be the fault of those in the front line of responsibility.

These are difficult issues for an external Commission to deal with because they call for an appreciation of functional relationships within the broad framework of the public service. This can only be obtained by means of a thorough review of administrative processes, lines of responsibility and financial resources. The remainder of this chapter examines some broad concerns that have been brought to my attention and suggests some steps toward improving the administrative system. Some important related matters are dealt with elsewhere in this report, such as recommended changes in legislation and licensing, measures to reconcile provincial and federal responsibilities, provisions for enforcement, and changes in management, research and consultative arrangements.

TOWARD MORE EFFECTIVE ADMINISTRATION

Strengthening Representation in Ottawa

Some participants in the Commission's hearings suggested that a special Minister of Fisheries for the Pacific be appointed on grounds that, although Fisheries and Oceans is a relatively small department, it has more direct contractual links with individuals and firms through licensing than almost any other federal department, and so calls for continual attention from the Minister. Moreover, the circumstances of the Pacific coast are so different from those of the Atlantic and other regions that it is unreasonable to expect one person to attend adequately to all.

While these arguments have some force, I cannot recommend two (or more) Ministers of Fisheries and Oceans within the federal government. With the whole Department accounting for less than one percent of the federal spending by all departments, and only 1.6 percent of the public service, it does not, realistically, justify more than one Minister. Such a situation would also give rise to questions about responsibility to Parliament for general fisheries policy, legislation, budgets and administrative arrangements in Ottawa. Nor do I recommend more than one Deputy Minister for Fisheries and Oceans, since that would almost inevitably generate conflict, competition and biases. I have concluded that the present structure, with one Minister responsible for Fisheries and Oceans for Canada, one Deputy Minister, and geographical responsibilities divided at the Assistant Deputy Minister level, is appropriate.

But certain improvements can be made. One is in the geographical location of the Assistant Deputy Minister responsible for the Pacific region. This senior official was recently moved to Vancouver on an experimental basis, though the Minister, Deputy Minister and the three other Assistant Deputy Ministers are all stationed in Ottawa.

This arrangement has apparently left a void in the representation of the Pacific region in Ottawa, thereby aggravating the problem it was intended to alleviate⁸ and confusing lines of responsibility in Vancouver. I therefore recommend that —

1. The office of the Assistant Deputy Minister for the Pacific region should be located in Ottawa.

Elsewhere, I recommend other measures to focus Ottawa's attention on, and facilitate its management of, Pacific fisheries. I suggest legislative changes in Chapter 21 that would give the Pacific region's Director General greater responsibilities and flexibility in managing the fisheries. I suggest in Chapter 20 that the Yukon fisheries might be better served if responsibility for that territory were shifted from the Pacific to the Western region. This would leave the Pacific region's attention focused on British Columbia. And in Chapter 18 I propose a framework for cooperation between the provincial and federal governments.

Regional Priorities

Some of the concern about the Pacific region's representation in Ottawa is rooted in the view that this region receives lower priority than the Atlantic at the political

servants.^{9, 10} Statistical indicators also tend to support it. Table 19-3 shows that during the last fiscal year the Pacific region received less than one-third of the regional manpower and fund allocations including those for the Salmonid Enhancement Program. Excluding the latter, the Pacific received only about 15 percent of the regional budget allocations, and other regions and headquarters have received much larger increases during the last twelve years. In at least one Atlantic province the expenditures on fisheries have been estimated to be more than the total value of landings.¹¹

These figures do not in themselves prove a misallocation of resources among regions; resources should be distributed according to needs and potential benefits. Nonetheless, other facts support that conclusion: the region accounts for more than a quarter of the total value of Canada's commercial fish production and most of the sportfishing administered by the Department; its geographical area of land and water is larger than those of the four Atlantic provinces combined, and much of it is remote and inaccessible; its resources are, for the most part, much more demanding in terms of day-to-day management and habitat protection requirements; and in contrast to marine stocks elsewhere that are managed for their natural yields, Pacific salmon and some other species afford much greater opportunities for increased pro-

Table 19-3 The Pacific Region's share of the Department's manpower and budget^a

	including Salmonid Enhancement Program ^b		excluding Salmonid Enhancement Program ^b			
	percent of manpower ^c	percent of budget	percent of manpower ^c	percent of budget	percent increase since 1969/70	
					manpower	budget
Headquarters (Ottawa)	13	26	14	29	40	980
Pacific Region	27	23	22	15	11	250
Other Regions	60	51	64	56	35	600

^a Excluding Ocean Science and Surveys.

^b Budgeted allocations for the fiscal year 1981/82.

^c In person-years.

Source: Department of Fisheries and Oceans.

and senior bureaucratic levels. Several factors could contribute to such a situation: fishing is a much more important component of the regional economy of the Atlantic than of the Pacific, fishermen earn lower incomes and have fewer occupational alternatives; the Atlantic regions have five provinces with keen interests in fishing, each with its own Minister of Fisheries, while the Pacific region consists of one province with no such specialized minister; and many more Members of Parliament come from Atlantic constituencies. In addition, subtle historical factors and political traditions keep Atlantic fishermen in closer communication with politicians and fisheries administrators in Ottawa.

This view about priorities was confirmed at my public hearings by Members of Parliament and public

duction through improved management, research and production.

For these reasons, I am concerned about the provisions for the Pacific region. I hasten to add that I have not been instructed to review Canada's nation-wide provisions for fisheries administration, which is the context within which such judgements must be made. I therefore recommend that —

2. The manpower and financial resources provided to the Pacific region relative to other regions, and to the Ottawa headquarters of the Department, should be thoroughly assessed in the context of a financial and administrative review of the Department (described below).

Organization Within the Region

The Pacific region, has experienced a long history of oscillation between centralization and decentralization.

Until the 1950s, most administration was in the hands of three district offices with a small coordinating group in the Vancouver headquarters. Then a process of centralization began in Vancouver as professional biologists, engineers and economists were recruited to deal with proliferating technical problems. In 1970 this trend was reversed by formal decentralization of fisheries management responsibilities into two offices, one for the north and another for the south. A renewed drift toward centralization followed, but today the trend is again in the direction of decentralization, especially with respect to fisheries management and habitat protection. In addition to the north area office based in Prince Rupert and the south area office in Nanaimo, a third area office in New Westminster is responsible for the Fraser River and northern rivers flowing through the Alaskan panhandle and the Yukon Territory. The headquarters office in Vancouver is responsible for offshore fisheries.

The three area managers are not responsible for all activities in their geographic areas. They manage salmon, herring and shellfish, but groundfish and offshore fisheries are managed from Vancouver. Habitat management is being decentralized apart from a small group of specialists to be retained in Vancouver. The Salmonid Enhancement Program (apart from the geographic working groups) is managed mainly from Vancouver headquarters, as are research, support services, information services, small craft harbours and international matters.

In retrospect, the frequent organizational changes of recent years appear to have been *ad hoc*, with insufficient attention to their impacts on the Department as a whole. Examples in addition to those noted above are the separate structure for the Salmonid Enhancement Program, moving the Assistant Deputy Minister from Ottawa to Vancouver, and the shifting of research responsibilities back and forth between the Fisheries Research Branch and other branches.

I am loath to recommend any major reorganization of responsibilities within the region at this time for three reasons. One is that the Department's personnel are weary of continuous reorganization, and have spent so much energy in the process that I consider it important to minimize dislocative changes, especially in view of all the other policy changes I have proposed. The second is that a gradual decentralization of responsibilities to area offices is now taking place, and this trend appears to be in the right direction. The third is that changes in Departmental organization should be considered in the context of a complete budget and efficiency review, which I recommend below.

Rather than major organizational changes, the emphasis, for the time being, should be on strengthening the Department's capabilities, re-aligning priorities, streamlining procedures, improving the qualifications of personnel, building up weak services, and improving information and planning.

Notwithstanding my reluctance to recommend reorganization, I believe a few changes are urgent and can be made without causing disruption. One is the appointment of a senior officer to assist the Director General. Clearly, the Director General now carries too many responsibilities single-handedly. This is partly illustrated in Figure 19-1, which shows the wide range of functions he must attend to. In addition, he must cope with the heavy external demands of representations from fishermen, processors, the provincial government and his superiors in Ottawa. Even with extraordinary energy, these pressures leave little time to attend to internal operations, budgeting, staffing and administration. I therefore recommend that —

3. An Associate Director General should be appointed to assist the Director General of the region, especially in respect of internal operations and administration.

This proposal is consistent with the findings of a recent review of the Support Services Branch, which noted the exceedingly heavy and diverse demands on the Director General.¹²

Some recommendations in other chapters have significant implications for administrative organization. They include those relating to the further strengthening and decentralizing of habitat management personnel (Chapter 3); transferring responsibility for the pollution control provisions of the Fisheries Act from the Department of Environment to the Department of Fisheries and Oceans (Chapters 3 and 18); improving licensing administration (Chapter 8); strengthening enforcement capabilities (Chapter 16); and improving consultative arrangements (Chapter 17).

Financial and Administrative Review

The administrative organization and support for the Department needs to be critically reviewed on a national basis and with attention to organizational detail. Such a review calls for a different kind of investigation from that undertaken by this Commission, one like the Zero A-Base Budget Review of all programs in Environment Canada initiated in 1977, when fisheries was the responsibility of that department. That review set out to assess priorities, to identify inefficiencies and duplication of functions, and to evaluate expenditures in terms of their benefits. It was deferred for the Pacific region because of a reorganization taking place there at the time; and when the Department of Fisheries and Oceans was created, the

review was put in abeyance for the rest of the Department as well. Except for an internal review of the Support Services Branch last year, no thorough review of the Department has ever been undertaken. This is now overdue, and I recommend that-

4. The government should initiate a thorough zero-base review of the administration, staffing and financial support for each program of the Department.

Properly conducted, such a review would throw light on my concerns and those raised by others about the Department's organization and internal management, and would meet the needs expressed by the recent Royal Commission on Financial Management and Accountability.

The defects in financial administration and control among federal departments, which have been so starkly portrayed by the Auditor General, can be seen as a direct consequence of the absence of any requirement to provide a proper accounting of the carrying out of the management role. . . .

Over the course of the past few years, several new financial measures for improving management efficiency have been developed and applied to a limited extent within government, including cost-benefit analysis, program planning and budgeting, operational performance measurement, and management by objectives. The contribution of each of these has been limited because, in the absence of any requirement for departments or agencies either to manage their affairs effectively or to demonstrate to the Government and Parliament that they were doing so, there has been little pressure to apply such techniques rigorously.¹³

The proposed review shall therefore follow the zero-base approach to ensure that each program is evaluated in its entirety with reference to predetermined objectives and priorities. This provides an opportunity to assess and reorient the established uses of administrative resources, which otherwise tend to be perpetuated by the traditional governmental budgeting procedure of making annual incremental adjustments to existing expenditure patterns. The review should include the whole Department, not just the Pacific region. It should identify, among other things, the requirements for new priorities and programs arising from this Commission. It should be conducted by a group that includes one or more senior officers of the Department, but the majority should be non-Departmental, such as specialists from Treasury Board, the Office of the Comptroller-General and perhaps a private consult-

ant. This kind of review has been carried out in other departments, apparently with considerable benefits.

Specific issues that have been brought to my attention and warrant investigation in the context of this review are the following:

- i) The balance of manpower and financial support devoted to the Pacific region in relation to other regions and headquarters, as discussed earlier in this chapter.
- ii) Whether Yukon fisheries administration would be better served if that territory were included in the Western region or the proposed Arctic region and, if it is to remain in the Pacific region, whether it should be part of the north coast or Fraser River area administration.
- iii) The separate reporting line for the Salmonid Enhancement Program, the administrative structure of that organization, and its working relationship with the Department's habitat management group.
- iv) The unique reporting line for the manager of the north coast area (i.e. directly to the Director General rather than through the Field Services Branch like the other area managers).
- v) The geographical division of research activities among the Environmental Institute at West Vancouver, the Fisheries Technology Laboratory in Point Grey, and the Pacific Biological Research Station in Nanaimo. These facilities have not been integrated as once planned, and there may well be opportunities for significant savings through merging libraries, facilities and administration.
- vi) The adequacy of fishery officer, enforcement officer and community advisor personnel and the appropriateness of their reporting lines.
- vii) The special deficiencies and problems of the Support Services Branch identified by a review team last year, including deficiencies of direction, communication and management of supplies.¹⁴
- viii) The policy favouring external consultants and contractors rather than in-house resources for management, enforcement and other functions.

My investigations have left me with the impression that the economy and efficiency of the Department's activities could be improved significantly. However, only a specialized internal review of the kind proposed could substantiate that impression and identify opportunities for improvements. Properly conducted, with the participation of Departmental personnel, such a review can be completed without impairing the Department's ability to cope with the heavy demands of policy changes in the meantime.

Personnel Training and Development

To properly carry out its diverse responsibilities, the Department needs a variety of specialized staff. Many of these specialists are employed widely in the public and private sectors — engineers, accountants, computer technicians and administrative support staff — and can be recruited from a large pool of qualified people. Others, especially in the fields of fisheries research, management and enforcement, require expertise not widely employed elsewhere. The Department must therefore make a special effort to ensure that adequately trained personnel are available.

The most lengthy and advanced training is required by fisheries research scientists. Many universities in Canada and elsewhere offer the post-graduate degree programs needed for these positions. And even more universities, including three in British Columbia, offer bachelor degree programs of the kinds needed by the fisheries biologists, biochemists and other specialists required by the Department. Most universities offer post-graduate programs in natural resource studies that can accommodate requirements for advanced training in fisheries.

However, deficiencies exist at two other levels. One is in training programs for technical support staff such as fishery officers, enforcement officers and technicians; the other is in professional training for fisheries managers.

As I explain in Chapter 16, the fishery officers are the Department's front line presence in the field, and their responsibilities in resource management call increasingly for specialized training. Yet in a review earlier this year, the Director of National Enforcement in Ottawa reported as follows:

Generally speaking, there is very little consistency in the type of training afforded the fishery officer recruits across the country. By and large there is very little formal training, the exception being the extensive recruit training program provided by Scotia-Fundy and Gulf Regions and the Law Enforcement Training, adopted by some regions and provided by RCMP, Regina. Most regions, following a short orientation program (2 to 3 weeks) provide the recruit with "on-the-job" training only, generally conducted by local supervisory personnel, who in many cases are not qualified trainers. In more recent years, some regions have provided workshops and some training in specialized areas, but by and large the programs now in effect are either unsatisfactory or do not go far enough.¹⁵

I find it alarming that none of the colleges and institutions in British Columbia provide adequate educational

programs for fishery officers (though Malaspina College is developing a program in fish culture, and the British Columbia Institute of Technology is developing a general resource management option). This contrasts sharply with the number of technical training programs available in forestry, wildlife and other natural resource fields. As a result, most of the Department's recent recruits have been trained in institutions in the prairie provinces or Ontario, with obvious implications for their familiarity with Pacific fisheries and the relevance of their specialized knowledge. I therefore recommend that —

- 5. The Department should cooperate with one of the colleges or technical training institutes in British Columbia to design and establish a training program suitable for preparing fishery officers and technicians.**

Cooperating with the British Columbia Fish and Wildlife Branch and other potential employers of fisheries technicians might also be fruitful. The program could be adapted to upgrade the training of experienced staff as well as new recruits.

Eventually, a well-rounded technical training program could provide the basic training for fishery officers, and for enforcement officers who would then undertake the additional special training in enforcement.

A recent study sponsored by the Department pointed to the dearth of training programs of this kind in the Pacific region and suggested a two-year program with options for technical training in fish management, habitat management, fish culture and related fields.¹⁶ This study and its detailed proposals offer a foundation for designing and implementing one or more programs that would close a significant gap in training facilities for fisheries personnel.

To train the specialized enforcement officers described in Chapter 16, I recommend that —

- 6. The Department, in cooperation with the R.C.M.P. training school in Regina, the Justice Institute of British Columbia or other appropriate institutions, should support the development of a strengthened enforcement training program for fishery enforcement officers.**

The study of fishery officer staffing referred to above identifies a number of related problems in recruitment and career development. These should be considered in the context of the budget and efficiency review of the Department proposed earlier.

The second deficiency — the lack of supplementary training for professional fishery managers — is equally urgent. With time, fisheries management will increasingly demand professional training. University degree programs offer the requisite scientific preparation, but they

do not prepare people for the operational management of fisheries: I refer to the techniques of assembling data, analyzing stocks and catch statistics, and interpreting the results in order to make proper management decisions. To meet this need, I recommend that —

7. **The Department should cooperate with one or more of the universities in British Columbia in designing and offering a non-degree program in fisheries management for training the Department's personnel.**

An embryonic program of this kind has been tested at the University of British Columbia's Institute of Animal Resource Ecology, where advanced data processing and computer technology are available. Although the experiment has been highly successful a stronger commitment would be needed from the Department to enable this or a similar program to be successful on a continuing basis.

The resource management program would provide professional training for biologists and perhaps also fishery officers who had sufficient preparation.

Planning

Throughout this report I have emphasized problems that flow from unclear policy objectives, vague priorities, a lack of evaluation and accountability and the absence of forward planning. The results are uncertainty and frustration within the fishing community, confusion and demoralization within the public service and inefficiencies within fisheries administration. This must be rectified. I concur completely with the Royal Commission on Financial Management and Accountability that —

The institution of sound management must begin with the establishment of goals and the assignment of relative priorities to them through the allocation of resources.¹⁷

Policy development and coordination in the Pacific region is ostensibly in the hands of the executive committee, and I understand that a senior official has recently been designated as a planning director. But any deliberate forward planning process now appears to be overwhelmed by more immediate pressures; so it does not steer the allocation of manpower and budgets, nor does it permeate the administration in any significant way. In order to correct this situation, the Department needs, in the Pacific region, an on-going planning process to develop policies, set objectives, make forecasts, design programs and budgets and evaluate the results. I therefore propose that —

8. **The Department should designate a policy and planning group, consisting of senior officers, with specific responsibility for strategic long-range planning for fisheries management and administration in the region.**

The purpose of this recommendation is to replace the present reactive stance of the Department with a forward-looking one that deliberately pursues explicit objectives. If this planning body is given the status it warrants, and if it consults and communicates adequately through mechanisms I discuss in Chapter 17, it could do much to overcome the uncertainty and drift that seems to have characterized administration in the past, and to give direction to the allocation of public resources.

FOOTNOTES

1. The Fisheries Association of British Columbia, Exhibit #63, p. 34.
2. Pacific Coast Fishing Vessel Owner's Guild, Exhibit #194, p. 1.
3. The Pacific Gillnetters Association, Exhibit #70, p. 5.
4. T. Northcott, Exhibit #86, p. 2.
5. Revised Statutes of Canada, 1979, C 42.
6. Association of Professional Biologists of British Columbia, Exhibit #96, p. 3.
7. The Province, Vancouver, July 6, 1982, p. 1.
8. D.D. Tansley, Deputy Minister, Department of Fisheries and Oceans, transcript of the public hearings, Volume 67, pp. 13899-13902.
9. J. Fulton, MP, transcript of the public hearings, Volume 48, p. 9825.
10. D.D. Tansley, Deputy Minister, Department of Fisheries and Oceans, transcript of the public hearings, volume 67, p. 13869.
11. R.D.S. Macdonald, Fishermen's Income, and inputs and outputs in the fisheries sector: the P.E.I. case, Canadian Issues, Volume 3 No. 1, Spring 1980. pp. 25-35.
12. Department of Fisheries and Oceans, Support Services Review, September 15, 1981.
13. Royal Commission on Financial Management and Accountability, Final Report. Ottawa, March 1977. p. 27.
14. Department of Fisheries and Oceans, Support Services Review, September 15, 1981.
15. Preliminary Report on a Fishery Officer Career Plan in the Department of Fisheries and Oceans. Ottawa, May 21, 1982. p. 7.
16. C.W. Chestnut, "Study of Opportunities for Cooperation to Meet Pacific Fisheries - B.C.I.T. Mutual Interest in Training and Placing Graduates." Prepared for the Department of Fisheries and Oceans, 1981.
17. Royal Commission on Financial Management and Accountability. Final Report. Ottawa, March 1979. p. 31.

Part VI

Yukon

CHAPTER 20

YUKON FISHERIES

...the fishery is one of the best on the continent, with a variety of species, numerous accessible fishing sites, good return for effort and minimum regulation. Uncontrolled resource use will change this situation.

YUKON CONSERVATION SOCIETY¹

In the preceding chapter I explained that Yukon fisheries are administered as part of the Department of Fisheries and Oceans' Pacific region. The problems the Department faces in this territory, and the framework within which it operates, are quite different from those in British Columbia, however. And the political and jurisdictional arrangements differ substantially from the rest of the Pacific region. These unique circumstances have required me to undertake a special investigation of fisheries policy as it applies in Yukon. Some of my recommendations in other chapters apply to the whole Pacific region; in this Chapter I summarize my particular conclusions about Yukon arrangements.

THE FISH RESOURCES

The fish resources of the Yukon Territory have not been systematically surveyed, and hence our knowledge about them rests on various investigations into particular problems. Many of these studies were carried out by agencies other than the Department of Fisheries and Oceans, and they comprise a patchwork of field inventories, compilations of catch statistics, surveys of fishermen, and monitoring studies associated with development projects.

Generally, the freshwater fish stocks in Yukon lakes are not highly productive. Low concentrations of nutrients, low temperatures and short ice-free seasons result in slower growth rates, longer periods of maturation, and less frequent spawning than at lower latitudes. In Yukon rivers the productivity of fish stocks is believed to vary considerably, but information is scanty.

Both freshwater and sea-run (anadromous) species are important in Yukon, and they are utilized in commercial, sport, and subsistence fisheries. All five species of Pacific salmon use the Yukon River system, which is one of the

most productive on the coast. This great river connects extensive inland spawning and rearing streams with the ocean, where salmon spend most of their lives. So, unlike freshwater stocks, their productivity is not retarded by the harsh Yukon climate. Chinook and chum are fished along the main stem (and tributaries) of the Yukon River, which flows through Alaska and empties into U.S. territorial waters in the Bering Sea. Sockeye, chinook and coho are fished in the Alsek-Tatshenshini system but pink salmon are rare. Runs of salmon are found in the Liard and Mackenzie rivers also.

Other anadromous species, such as steelhead trout, are found in small numbers in the Tatshenshini River. Arctic char and dolly varden are anadromous in some locations and landlocked in others.

Much more important are the freshwater species. Grayling are widely distributed in lakes and streams and highly sought by fishermen. Lake trout and three species of whitefish dominate catches in the lakes. Other significant species are northern pike, turbot, and rainbow trout which have been introduced to a few areas.

The fragmentary evidence available on the condition of Yukon fish resources suggests that stocks of the principal species are declining. Lake trout and grayling appear to be the most seriously depleted. The main cause of depletion is believed to be overfishing, with habitat damage being a contributing factor in some areas. Little is known about the condition of the salmon stocks using Yukon rivers, because their distribution and abundance in Yukon is poorly documented and data on their contribution to ocean commercial fisheries is weak. The dearth of resource information makes it hazardous to draw any broad conclusions about stock sizes or trends.

THE FISHERIES

Until 1954 the regulation of fishing in the territory was rudimentary, and no licences were required for sportfishing. In that year, regulations provided for sport, commercial and domestic licences. Subsequently, provision was made for Indian food-fishing certificates as well. These four licensing systems continue to accommodate distinct fisheries.

The Sport Fishery

In 1980 just under 17 thousand sportfishing licences were sold by the Yukon Territorial Government, as shown in Table 20-1. Allowing for unlicensed anglers under 16 years of age, nearly 20 thousand sport fishermen fished in Yukon waters in 1980.² This year licence fees were raised and new categories were introduced for resident fishermen over 65 years of age and for one-day non-resident fishermen.

Table 20-1 Sportfishing licences in Yukon

	fee in 1982	number of licences sold in 1980
resident of Canada	\$ 5.00	10,987
resident over 65 years	0	n.a. ^a
nonresident: season	20.00	2,343
5 day	10.00	3,503
1 day	5.00	n.a. ^a
total sales		16,833

^a New licence category introduced in 1982.

Source: Yukon Territorial Government.

The sport fishery is dominated by residents of Canada, well over half of them being residents of Yukon. They buy almost two-thirds of the licences and account for three-quarters of the estimated 170 thousand angler days of fishing in 1980.³ Probably 80 percent of their total catch is taken by 20 percent of the fishermen.⁴

Many sport fishermen from other countries are attracted to the territory by the excellent trophy fishing opportunities and remote fishing lodges. But the majority of nonresident fishermen fish casually while visiting Yukon for other reasons.

Spending of about \$4.2 million was attributed directly to sportfishing in the territory in 1980; of this, \$1.4 million was spent by nonresidents.⁵ As Table 20-2 shows, the sport catch is estimated to have been 170 thousand fish in 1980,⁶ and this probably accounts for more than 95 percent of all fish caught (though data on all fisheries is very weak). Grayling accounted for nearly half the total sport catch, and lake trout and northern pike for another third. Salmon and other trout accounted for 12 percent, and the remainder consisted of whitefish, char and other species.

Table 20-2 Estimated catches in Yukon^a

	sport (thousands of fish) ^b	commercial (thousands of pounds) ^c
grayling	83	0
lake trout	38	10
northern pike	21	0
whitefish	4	17
salmon	14	204 ^d
other	10	1
	170	232

^a Excluding catches in the Indian and domestic fisheries. These 2 fisheries accounted for annual catches of salmon of about 187 thousand pounds and 46 thousand pounds, respectively, in recent years. Catches of other species are believed to be small.

^b Estimates for 1980.

^c Rough estimates of average annual catches during the 5-year period 1977 to 1981.

^d Dressed weight.

Sources: "1980 Survey of Sportfishing in Canada, Preliminary Results." Prepared for the Department of Fisheries and Oceans, 1981; Annual Narrative Reports, Department of Fisheries and Oceans, Whitehorse.

Sportfishing activity shows certain conspicuous patterns that have important implications for policy. First, it has been growing rapidly. During the 1970s licence sales almost doubled. Second, sportfishing is heavily concentrated on the few lakes and streams accessible by road. Third, it is highly seasonal; nearly 80 percent of the fishing takes place during summer months, and winter fishing is limited mainly to ice fishing on lakes by local residents. Fourth, while sportfishing activity has been increasing rapidly, average catches have been declining sharply. A recent study suggests that the rate of harvesting has already exceeded sustainable yields in many of the more accessible lakes where fishing is concentrated, and stocks have been declining.⁷

Another concern is the increasing pressure on certain remote lakes from fly-in sportfishing operations, which are an important adjunct to the tourist industry promoted by the Yukon government. These operators concentrate pressure on particular stocks in lakes of low productivity, and when catch rates decline they move on to other lakes, leaving depleted fish stocks. So far, this problem has not been well documented, however.

Responsibility for managing sportfishing is divided. The Yukon government, through its Department of Renewable Resources, administers sportfishing licences. The federal Department of Fisheries and Oceans is responsible for designing and enforcing fishing regulations, although the enforcement authority is shared with conservation officers of the Territorial Wildlife Branch. The main management tools are gear restrictions and daily and seasonal bag limits, which apply uniformly throughout the territory. Certain limits and closures have been applied to particular areas of special interest or sensitivity, though these measures are not authorized by the present regulations.

With only a small staff in the huge territory, enforcement is a difficult task; consequently, the Department relies heavily on indiscriminating regulations for the whole territory. Inevitably, in the divergent circumstances of Yukon fisheries, these regulations are inadequate to protect heavily fished stocks in certain areas, and are unnecessarily stringent in other areas, causing irritation among sport fishermen and consequent problems of compliance and enforcement.

The Commercial Fishery

Both anadromous and freshwater species are commercially fished in the territory. Chinook and chum salmon are taken in the Yukon River, mainly near Dawson and further downstream. During the 1970s an average of 3,800 chinook and 4,000 chum salmon were taken annually. The salmon are marketed locally, fresh or frozen.

Even if the stocks allowed larger catches, expansion of this industry is constrained by the small size of the local market and the incapability of processing plants to produce products of sufficiently high value to justify transport to external markets.

A new commercial venture has recently been established by native groups, with support from the federal Departments of Regional and Economic Expansion and Indian and Northern Affairs, for processing fresh and frozen salmon and marketing it in Yukon and British Columbia. Some anxiety has been expressed about additional pressure on stocks that could result from this operation.

Commercial fishing for freshwater species, primarily lake trout and whitefish, is authorized on 20 Yukon lakes. As in the salmon fishery, markets for the products have been unstable and uncertain. Table 20-2 shows the size and composition of commercial catches in recent years.

Commercial fishing licences are issued annually at a fee of \$25, and specify the location of fishing, the species to be taken, and the time and method of fishing authorized. The number of licences issued for salmon fishing in the Yukon River has been limited since 1980 in the interests of conservation. In that year nontransferable licences were issued only to those who fished in any of the preceding three seasons. In the 1981-82 licence year, only 39 were issued.

Within the Yukon River, management of the salmon fishery has been orderly. The commercial fishery generally operates six days a week when the salmon are running in the rivers, but the number of days may be curtailed if the runs appear low, as was the case for chinook salmon this year.

The number of commercial fishing licences for freshwater species is not limited. Fifty licences were issued in 1981 and I understand the number increased sharply this year. For each lake in which commercial fishing is authorized, an annual quota is fixed according to a somewhat arbitrary productivity estimate of approximately one-half pound per acre of lake per year. When the quota has been reached, the lake is closed to both commercial and domestic fishing (discussed below). The total quota for all commercial fishing lakes is 145 thousand pounds of whitefish and 73 thousand pounds of lake trout. Current landings are only a fraction of the quota, but production is spread very unevenly over the various lakes. Some are fished to their quotas regularly, while others are untouched or only lightly exploited.

Domestic Fishing

Domestic fishing licences are issued annually to people other than Indians at a fee of \$10 to authorize them to

take fish for their own food requirements. These licences, like commercial licences, specify the location of fishing, the species to be taken, and the time and method of fishing authorized. In 1981, 47 domestic licences were issued for salmon fishing, and 76 for freshwater species. This fishery is believed to account for only about one percent of the total catch in the territory.

The domestic fishery is managed flexibly to accommodate varying needs and circumstances. In southern Yukon, where concerns about declining stocks and competition with the sport fishery are most acute, domestic fishing has been confined in recent years to lakes with commercial quotas, and the domestic catch is subject to these quotas. Elsewhere domestic fishing is permitted at the discretion of fishery officers.

Indian Food Fishing

Fishing has always been and remains today an integral component of Yukon Indian culture.⁸

In recognition of their traditional dependence on fish, certificates are issued without charge to Indians to authorize them to take fish for food. In 1981-82, some 204 certificates were issued, but this undoubtedly represents only a fraction of the number of Indians who engage in this fishery, because most are unaware of, or do not comply with, the requirement. Certificates authorize fishing for both salmon and freshwater species, but no reliable information is available on the catch taken. Only recently has an attempt been made to estimate catches.

Management of Indian fishing relies mainly on suggestions of fishery officers to constrain harvests where this is felt to be necessary. While the total catch is believed to be modest, some controversy has developed over competition between Indian and sport fishermen for salmon in the Klukshu-Tatshenshini river system.

Last year, the Council of Yukon Indians and the federal government negotiated an agreement-in-principle for Indian fishing. This provides a framework for a final agreement to be reached within two years. According to testimony presented at this Commission's hearings, the agreement will call for substantial changes in the management of the Indian fishery, requiring that certain rights to fish be defined quantitatively, that priorities be assigned among fisheries and that Indians have the opportunity to participate in commercial fisheries.⁹

Once in effect, this agreement will provide for consultation with Indians in the development of Yukon fisheries policy. This will require improved information about the stocks and their yield capabilities, consistent monitoring and catch information, and closer consultation with other fishing interests.

Needed Improvements in Fisheries Management

In many respects the regulatory framework for managing Yukon fisheries is well developed, and is considerably more advanced than the arrangements for ocean fisheries in the rest of the Pacific region. Licensing systems are well established for all of the fisheries, and the variety of these appears to be sufficient to accommodate the special needs of the territory.

In the commercial salmon fishery, entry is controlled, as are the commercial catches. The main challenges facing salmon management lie at sea, outside the territory, where U.S., Canadian and Japanese commercial fleets catch salmon destined for Yukon. To a large extent escapements are beyond the control of fisheries managers in the territory. As a result of preponderant American involvement, solutions to many management problems hinge on Canada's international agreements with the U.S., which are beyond this Commission's terms of reference.

In the other commercial fisheries, as in the domestic fishery, licences provide for close control. And the imminent agreement with Yukon Indians will allow them to take better advantage of economic opportunities in the fisheries. In view of the advanced stage of these negotiations, I make no recommendations on this matter.

But there are nevertheless significant deficiencies that must be corrected in order to properly conserve and manage the valuable fish resources of the territory. The most conspicuous of these is the paucity of information about the resources themselves — their size, distribution and yield capabilities — which is a serious obstacle to managing fisheries.

So little is known about basic biological values of the lakes and rivers and the fish species they produce that knowledgeable management decisions cannot be made.¹⁰

This deficiency of information must be alleviated to enable the Department to meet its basic responsibilities for conserving and managing the stocks. Later, I point to a need for this information in connection with habitat protection as well. And under the expected agreement with Yukon Indians, this need will be even more urgent.

I therefore recommend —

1. **The Department should immediately initiate a systematic inventory of the fish resources in Yukon, giving priority to the lakes and streams subject to heaviest fishing pressure.**

This program should aim at identifying the size and condition of the stocks and their yield capacities. The survey should be carefully planned over a period of years and coordinated with the compilation of catch statistics

and other information using modern data processing techniques. This information will enable, among other things, more reliable determinations of commercial quotas.

The second conspicuous shortcoming of Yukon fisheries management is the imbalance between the distribution of fishing pressure and the resources available. Many lakes and streams are very lightly fished, while those in the more accessible areas appear to be overexploited. Because the stocks in the territory are so sensitive to fishing, it is particularly important to ensure that the pressure of harvesting is not permitted to exceed the sustainable yield of the stocks in each lake or river system. If the Department fails in this, the resources will be depleted and the unique fishing opportunities of the territory will be eroded.

The direction of needed reform is clear. The Department must rely less on across-the-board regulations and more on discriminating management controls to meet the needs in varying circumstances. Accordingly, I recommend —

2. **The Department should progressively adopt more discriminating fishing regulations and management techniques to take account of the particular conservation requirements of individual lakes and river systems and to maintain a diversity of fishing opportunities.**

These measures could include specific provisions for particular lakes, relating to access, size and bag limits, and permitted gear. In pursuing this more flexible approach, the Department should take account not only of varying resource capabilities but also of the desirability of providing a diversity of fishing opportunities. Maintaining a rich variety of sportfishing opportunities in the territory is particularly important, and the Department should explore, in consultation with sportfishing interests, alternative arrangements for regulating access and controlling fishing effort in order to meet this need. Clearly, the Department's ability to adapt management arrangements to particular circumstances depends heavily on resource information of the kind to be compiled under my first recommendation.

The fees for sportfishing licences were raised significantly this year and so I do not propose a further change now. Clearly though, the fee schedule should be reviewed periodically. For commercial fishing, quota licensing of the kind I have proposed for the smaller ocean fisheries would almost certainly provide a more effective management regime than the present arrangements, though such a change does not appear to be urgent.

HABITAT MANAGEMENT

Protecting the habitat of fish in Yukon is an even greater challenge for the Department than managing the fisheries. With substantial and growing pressures of industrial development in the territory, and with many governmental agencies as well as private interests involved, habitat management has become a major preoccupation.

Pressures on the Habitat

The fish habitat within the territory is threatened by a wide range of activities, but the most conspicuous are mining, hydroelectric projects and access development. A variety of other threats, including domestic sewage, are significant in some places.

Placer gold mining has grown rapidly in recent years and has expanded well beyond the traditional gold-producing areas. This industry often causes major disturbances to streambeds and, by increasing sedimentation, destroys the streams' capacity to support fish.

Hardrock mining in Yukon is presently limited to a few operating mines, but several major new projects are being considered. This industry's main threat to fish habitat is water pollution from mine effluents.

New hydroelectric projects are being planned or investigated in several areas of Yukon. Their expected impacts on fish vary considerably, and it is generally agreed that mitigation efforts can be only partially successful. Thus hydroelectric power development inevitably implies some sacrifice in potential fish production.

Almost all industrial developments in the territory involve building new year-round access roads into areas that could previously be reached overland only in winter. Quite apart from physical damage to fish habitat that may be caused by road construction, improved summer roads invite increased fishing pressure, which can result in newly accessible stocks being overexploited and depleted.

All these activities have an adverse impact on fish in certain areas, and altogether they comprise an assault on fish habitat that puts heavy demands on the agencies charged with protecting it.

The Regulatory Framework

The federal agencies that are formally involved in Yukon fish habitat management are the Department of Fisheries and Oceans, the Department of Indian and Northern Affairs, the Department of the Environment and the Yukon Territory Water Board. Their division of responsibilities and the regulatory framework within which they operate and interact is complicated, so I

sketch these briefly below. The Yukon Territorial Government has no formal responsibility for habitat, but it exercises some influence in policy development by the federal agencies.

Department of Indian and Northern Affairs Most natural resources in Yukon are owned by the federal Crown. The Department of Indian and Northern Affairs allocates access to land, timber and minerals through a variety of federal statutes.¹¹ Water rights and pollution control are administered by the Yukon Territory Water Board (described below). The policies of the Department of Indian and Northern Affairs in allocating and managing the Yukon resources and approving road access on public land can have important implications for fish habitat in the territory in the same way that British Columbia's resource policies affect habitat to the south (described in Chapter 3).

Yukon Territory Water Board Under the Northern Inland Water Act,¹² the Yukon Territory Water Board issues licences and permits to use water in Yukon for a variety of purposes and to discharge waste into water. Of these, hydroelectric power generation, placer mining and mine milling are the most serious threats to fish habitat.

The board has nine members, three from federal government agencies (including the Environmental Protection Service of the Department of the Environment), three appointed by the Yukon Territorial Government and three appointed by the Minister of Indian and Northern Affairs. Significantly, the Department of Fisheries and Oceans is not represented on the board, so it must rely on referral arrangements as its avenue to protect fish habitat from licensed activities. Through these referrals, the Department assesses proposed developments and suggests measures to mitigate habitat damage but does not participate directly in decisions regarding water use.

Department of Fisheries and Oceans The Department of Fisheries and Oceans administers the Fisheries Act in Yukon, and therefore has authority for protecting fish habitat. In Chapter 3 I described the habitat protection features of the Act and general problems relating to its application; these apply to Yukon as well as British Columbia. In Yukon, additional complications arise from the relations between the Fisheries Act and the Northern Inland Waters Act.

The holder of a water licence issued by the Yukon Territorial Water Board under the Northern Inland Waters Act may be liable for prosecution under the Fisheries Act for harming fish habitat even though he complies with the licence. This is parallel to problems in British Columbia associated with provincial resource rights, described in Chapter 3, but here the potential conflict is not between conflicting resource use authorizations

issued by separate governments, but between two federal statutes administered by separate agencies of the same government. So far, impasses have been avoided and the Department of Fisheries and Oceans has concentrated, with mixed success, on having conditions attached to water licences to mitigate damage to fish habitat. But the potential for conflict remains, and is heightened by the prospect of hydroelectric developments and other major projects such as the proposed Alaska Highway natural gas pipeline.

Department of the Environment The Environmental Protection Service of the Department of the Environment conducts water quality studies and participates in designing guidelines for water use by placer mining operations and municipalities. It also has responsibility, jointly with the Department of Fisheries and Oceans, for administering the deleterious substance section (section 33) of the Fisheries Act. The service is represented on the Yukon Territory Water Board, but it has been criticized for failing to aggressively advance fisheries values in the board's deliberations.

Project Approval Arrangements

To coordinate their separate interests in new industrial developments and other projects in the territory, the federal agencies have established an initial environmental evaluation procedure to provide interagency review of a wide range of projects. This is an entirely administrative process without statutory authority, but it provides an avenue for the Department to bring considerations of fish habitat to bear on development plans.

This process is initiated by the other resource agencies, described above, when they receive a development proposal. It tends to be dominated by the large staff and resources of the Department of Indian and Northern Affairs. The Department of Fisheries and Oceans, with its meagre resources, is typically in a position of reacting defensively rather than participating fully in project planning. In addition, the Department has been reluctant to acknowledge the legitimacy of the kind of trade-offs implied by integrated resource management and planning (described in Chapter 3). This is due in part to the uncompromising wording of the Fisheries Act, which the Department is required to administer (see Chapter 3). In addition, it has not had the information about fish resources, their habitats and capabilities required to engage in effective planning, or the manpower and facilities needed to monitor and enforce habitat protection measures.

Toward Improved Habitat Management

The present provisions for protecting and managing fish habitat in Yukon are inadequate for the task. The

division of responsibilities among governmental agencies needs to be rationalized, their respective authorities must be clarified and arrangements for planning and project approvals need to be more systematic and effective.

A basic requirement is to clarify the authority of federal agencies involved in habitat protection. In Chapter 3 I proposed that the overlapping responsibilities of the Departments of the Environment and Fisheries and Oceans be resolved by assigning to the latter full responsibility for administering the habitat protection provisions of the Fisheries Act in the Pacific region, including Yukon. This will alleviate one source of uncertainty and duplication.

In Chapter 3 I made specific recommendations concerning the Department's commitment to integrated resource use planning and management, and techniques for its more effective involvement in this program. My proposals there for the Department's participation in referral arrangements and its authority to approve developments apply equally to Yukon. If Departmental approvals of hydroelectric power facilities, placer mining operations and similar activities were incorporated into water licences, the potential conflict between the Fisheries Act and the Northern Inland Waters Act would be resolved.

Compensation arrangements for damaged habitat were also recommended in Chapter 3, but the need for these in Yukon is far less acute because the federal government alone owns the natural resources there and administers fisheries. With only one government directly involved, the line of political accountability is much clearer than for British Columbia and resource use conflicts can be reconciled among federal agencies. Habitat protection in Yukon should focus on mitigating damage; any arrangements for compensation can be settled individually for each project where the federal government considers them warranted. Thus, in Yukon emphasis should be placed on the administrative procedures adopted by federal agencies in assessing proposed developments.

Second, the Department of Fisheries and Oceans' lack of representation on the Yukon Territory Water Board is anomalous in view of the importance for fisheries management of the board's decisions. This is apparently a legacy of the time when fisheries administration was part of the federal Department of the Environment and hence was represented by the member appointed from that agency. In view of the legislative requirement that membership of the board must include representatives of federal departments that are most directly concerned with managing water resources in the territory, and my proposals that the Department of Fisheries and Oceans assume more responsibility for water quality, I recommend —

3. A representative of the Department of Fisheries and Oceans should be appointed to the Yukon Territory Water Board.

Through direct participation in the board's deliberations, the Department of Fisheries and Oceans should be able to more effectively influence habitat mitigation requirements in water licences.

To engage effectively in these processes, the Department must cope with the urgent need for information about fish resources and the impact of disturbances to their habitats. I have already recommended a survey of fish resources, which will throw light on the productivity of lakes and streams. In Chapter 3 I proposed that the Department carry out a comprehensive inventory of aquatic habitats in cooperation with British Columbia. In Yukon, where salmon are less prevalent and the pressures more isolated, the effort should be more selective. I therefore recommend —

4. The Department should initiate a systematic program of data collection on fish habitat in Yukon, giving priority to salmon streams and areas subject to existing and expected pressures on habitats.

Some biophysical work of this kind has been undertaken, but it has been very limited. Regardless of the scale of this program, it is important to establish an orderly system of compiling, processing and storing data to enable progressive accumulation of information available for resource planning purposes.

ADMINISTRATION

Yukon fisheries are administered as part of the Department of Fisheries and Oceans' Fraser River, Northern British Columbia and Yukon Division of the Pacific region. The Whitehorse office thus reports through the division office in New Westminster, though the biological staff report directly to the regional headquarters in Vancouver. No professional habitat management or engineering staff are currently based in Yukon.

The Yukon district's allotted staff consists of six full-time and six seasonal employees. They are expected to administer the Department's programs, including enforcement, from the Stikine River to the Arctic coast. The district's budget has been constrained during the last two years and recently the office has been instructed to terminate three of its seasonal employees. Coupled with staff turnover, which has resulted in lost experience in dealing with Yukon problems, the district has been unable to keep pace with its responsibilities. Meanwhile, the pressures on fish stocks and fish habitats, and the demands for fisheries information and enforcement, are increasing rapidly.

The Department's provisions for administering its responsibilities in Yukon are seriously inadequate. To properly manage the sensitive resources of the territory, the available manpower and support must be increased. I therefore recommend —

5. The Department should substantially increase the staff and related budgetary support for managing Yukon fisheries.

In addition to its strained resources, the Yukon district is burdened by its responsibilities to both the regional headquarters in Vancouver and the divisional headquarters in New Westminster. Most of the other agencies with which the Department must deal have more senior officials in Whitehorse and so they have more local authority. This asymmetry impedes cooperative management arrangements.

Moreover, Yukon is a minor appendage of the division responsible for the crucial Fraser River system. Yet its problems are quite different from those in the rest of the region, and so it warrants a more distinct position in the organizational framework. In view of these considerations I propose —

6. The Yukon District of the Department should be elevated to the status of a Division.

The effect of this change will be to eliminate the divided line of reporting to division and regional headquarters, to increase the authority of the Department's officials in the territory and to give a higher profile to Yukon fisheries in the Department's administrative structure.

I am concerned also about the larger organizational question of the appropriate administrative region for the Yukon territory. The Pacific region's concerns are dominated by marine resources, ocean fisheries, the complicated problems of regulating commercial fleets and other matters described in this report that have limited relevance to Yukon. The substantive common interest is in the management of salmon that migrate to some Yukon rivers, but even in this respect Yukon concerns differ insofar as they centre on international questions and are quite separate from the fisheries involved in the rest of the region.

It strikes me that the major Yukon concerns are more similar to those of the Department's Western region, which includes the prairie provinces and Northwest Territories and is concerned mainly with freshwater fish and fisheries. Yukon fisheries might better be served as part of that regional organization. I offer no specific recommendation on this matter, but in the preceding chapter I proposed a general budget and administrative review of the Department and in that context the Yukon's position

within the Department's regional organization should be reviewed. Thus —

7. **In the context of the budget and administrative review of the Department (proposed in Chapter 19), the position of the Yukon territory in the Department's regional organization should be assessed.**

CONSULTATION

All communications between the Department and other governmental agencies, private fishing and environmental interest groups, and the public are informal. The most developed is the interagency referral process for proposed projects, but this is only between governmental agencies. The Yukon River Advisory Committee represents the commercial salmon fishermen and processors on the Yukon River and provides a forum for advising the Department on development of the fishery and management of the runs, particularly in the Dawson area. Apart from these, and occasional workshops or meetings on particular subjects or problems, consultation depends on direct contacts between fisheries officials and the public.

Consultation thus has two dimensions: among governmental agencies with common interests; and between the government and private interests. I have already described the relationships among government departments and the scope for conflict among them. Clearly, close liaison is needed between the Department and other federal and territorial agencies concerned with fisheries management. To meet this need, I propose —

8. **A Yukon Fisheries Committee, chaired by a representative of the Department of Fisheries and Oceans, should be established with representatives of the federal Departments of the Environment and Indian and Northern Affairs, the Yukon Department of Renewable Resources and other concerned governmental agencies to provide a regular forum for sharing information and resolving mutual problems relating to fisheries and habitat management.**

The arrangements for this consultative body should be similar to those I propose in Chapter 18 for the Canada-British Columbia Fisheries Committee.

To provide for consultation between the Department and private groups with fisheries interests, the arrange-

ments must be more flexible. In the special circumstances of Yukon, the most pressing need is for organized consultations with recreational and commercial sportfishing interests to communicate and examine problems of fisheries management, to seek their advice and to promote their cooperation in regulating fishing activity. Therefore —

9. **The Department should strike a Yukon sportfishing advisory committee to serve as a forum for discussing problems relating to management of the sport fishery.**

I have described the appropriate structure and procedures for such advisory committees in Chapter 17.

Consultation with representatives of the smaller commercial, native and subsistence fisheries is more difficult because of the barriers to communication and travel. The Department's present, more modest arrangements, involving occasional meetings and the Yukon River Advisory Committee should be continued and expanded as circumstances require.

CONCLUSION

The fish resources of Yukon have not hitherto received the attention required to assure their proper conservation and management. Present knowledge about them is meagre, but there is evidence of excessive exploitation in some water systems. This must be reversed if the territory's rich recreational opportunities are to be preserved. And the growing number and size of assaults on fish habitat call for a much more aggressive approach to environmental management. Many of the present deficiencies are the result of an awkward administrative organization and insufficient support, which are therefore subjects of many of my recommendations.

Yukon fisheries are overshadowed by the ocean fisheries administered by the Department's Pacific regional organization. But they are nevertheless very valuable resources; they enrich lifestyles, the economy and the social fabric of the territory substantially. Certainly they deserve to be properly conserved, managed and reconciled with the pressures of industrial development. My proposals are intended to begin closing the gap between the present provisions for Yukon fisheries and the needs of the last decades of the 20th century.

FOOTNOTES

1. Yukon Conservation Society, Exhibit #155, p. 1.
2. Howard Paish and Associates Ltd., "The Yukon Sport Fishery: A Policy Oriented Assessment of Sport Fishing in Yukon." Prepared for the Department of Fisheries and Oceans, Government of Yukon, Department of Indian and Northern Affairs, February, 1981.
3. Howard Paish and Associates Ltd., "The Yukon Sport Fishery." p. 58.
4. Thomas L. Burton, Outdoor Recreation in the Yukon. Department of Recreational Administration and Population Research Laboratory, University of Alberta, 1977.
5. "1980 Survey of Sportfishing in Canada, Preliminary Results." Prepared for the Department of Fisheries and Oceans, 1981.
6. Howard Paish and Associates Ltd., "The Yukon Sport Fishery"; and "1980 Survey of Sportfishing in Canada, Preliminary Results."
7. Howard Paish and Associates Ltd., "The Yukon Sport Fishery."
8. Council of Yukon Indians, Exhibit #153, p. 1.
9. Mr. J. Jack, Council of Yukon Indians, transcripts of the public hearings, Volume 49, p. 10,019.
10. Exhibit #155, p. 8.
11. Territorial Land Act, Revised Statutes of Canada 1970, Chapter T-6; Yukon Placer Mining Act, Revised Statutes of Canada 1970, Chapter Y-3; Yukon Quartz Mining Act, Revised Statutes of Canada 1970, Chapter Y-4.
12. Revised Statutes of Canada 1970, First Supplement, Chapter 28.

Part VII

Toward Policy Reform

CHAPTER 21

POLICY IMPLEMENTATION AND REVIEW

...the present situation cannot be quickly resolved by one or two system changes. Instead, it will require hard work and responsible decisions by high quality managers for a period of years We would hope that this Commission will start this process happening, as the potential of the B.C. fishing industry is too great to be lost, both to our economy and to Canada as a nation.

THE PACIFIC COAST FISHING
VESSEL OWNERS GUILD¹

The recommendations in this report call for a host of changes to federal fisheries policy as it applies to the Pacific region. Some of these imply minor changes; others call for fundamental reforms. In this chapter I suggest steps for implementing these changes and keeping pace with new challenges in the future.

POLICY IMPLEMENTATION

Fisheries policy is embodied in federal legislation, ancillary regulations, fishing licences, and administrative policies and procedures. Implementation of my proposals will require changes to all of these policy instruments in varying degrees, and special administrative arrangements will be needed to mould them into a modern and cohesive system.

Developing the Policy Instruments

To begin with, all of the policy instruments require thorough review and overhaul both to rectify present deficiencies and to implement needed reform.

Legislation Although the Department is directly involved in the administration of nine federal statutes in the Pacific region, the core of fisheries legislation is the Fisheries Act. The legislative changes required to implement my proposals centre on this statute.

Originally passed in 1867, and riddled with amendments over the decades, the Act is as old as Canada and its age shows.

Many provisions of the archaic Act are anachronistic and ambiguous. For example, it requires that a dory be equipped with a compass, two quarts of drinking water and two pounds of food for each crew-member, and a fog-horn or trumpet. And as I pointed out in Chapter 16 it contains the out-dated sentence of hard labour, a serious ambiguity resulting from what appears to be a drafting error, and inconsistencies among levels of penalties.

Furthermore, matters are divided between the Act and its supplementing regulations unsatisfactorily. Crucially important features of policy, such as commercial licensing and fleet development arrangements, receive scant attention in the Act; these and other areas of important and sensitive policy are found in the regulations, passed without formal debate in Parliament. In contrast, details that should be in regulations, such as the minimum distance between stationary salmon nets, are set out in the Act in painstaking detail.

Third, the scope of the Fisheries Act is too narrow and its tone is entirely punitive. It is silent about the management and planning responsibilities of the Department and the social and economic objectives it is to meet. In addition, it leaves the Department open to legal challenge in carrying out some of its most important programs, such as allocating catches among sectors of fishing fleets. Almost all of the Act is devoted to creating offences and prescribing penalties.

Finally, the Act fails to reflect the differences in character between the fisheries on the Pacific coast and those on the Atlantic, with their different resources, fishing methods, licensing systems, traditions and problems. Many provisions that are intended to apply nationwide are extremely general in scope. This leaves important features of policy to regulations, leading to the imbalance between the Act and regulations described above. As well, it places too much decision-making power on the Minister, and delegates no authority to the regional officials, who must actually make most management decisions.

Thus, a major overhaul of the Fisheries Act is long overdue; new policies should not be implemented through yet another patchwork of amendments. Accordingly, I recommend that—

1. **The Fisheries Act should be repealed and replaced by a modern, lucid statute containing the main principles of fisheries policy for Canada. The new Act should—**
 - i) **Include a clear statement of national fisheries policy objectives.**

- ii) Set out the Department's management responsibilities and planning procedures. The scope of these should be broad, leaving no doubt about the Department's mandate to effectively manage fisheries and fleet development.
- iii) Commit the Department to integrated resource management and planning, and set out arrangements for dealing with projects and developments that affect fish habitat.
- iv) Devote a separate part to Pacific fisheries, consistent with the national policy framework.
- v) Set out the legal authority and procedures to be followed in allocating the sport, commercial and Indian fishing rights recommended in Parts III and IV of this report.
- vi) Provide for the appointment of the Pacific Fisheries Council recommended in Chapter 17, and create the Pacific Fisheries Licensing Board proposed in Chapter 8.
- vii) Formally delegate decision-making authority to the licensing board and, where appropriate, to regional officials of the Department.
- viii) Include a clear and consistent structure of penalties, recommended in Chapter 16.

The anachronisms in the current Act should be eliminated; some provisions now in regulations should be elevated to the new statute, and vice versa. With a separate part devoted to Pacific fisheries policy, it should be much easier to strike an appropriate balance between the need for a national policy and the need to recognize regional diversity, and between the amount of policy detail to be incorporated into the new Act and the amount to go into regulations. Many other considerations will go into drafting the new legislation concerning its structure, organization, and detailed provisions, which cannot be dealt with in this report.

Although I recommend that the Fisheries Act be replaced, this process undoubtedly will be time consuming. Some recommendations in this report (particularly those concerning licensing in Part III) should be implemented before the end of this year and thus should not wait for a new Fisheries Act. Accordingly, I recommend that—

2. **Pending passage of a new Fisheries Act, new commercial fisheries licensing regulations should be passed immediately to implement the proposals in Part III of this report.**

Regulations Regulations are passed by the federal Governor General in Council (effectively, the cabinet) and have the force of law. In all, the Department admin-

isters 21 sets of regulations in the Pacific region, passed under several statutes and covering a diverse range of subjects including fisheries management for the various species, commercial and sportfishing licensing, fish inspection and Yukon fisheries. Most deal with detailed aspects of policy, such as specifying mesh sizes for nets and other gear restrictions, and describing management areas. But they now also include laws that have major implications for fisheries management and private interests, such as the Department's licensing program.

Inconsistencies and duplication among some of the regulations have arisen as a result of their having been enacted and amended piecemeal over the years. In conjunction with preparing the new Act, the government should streamline and consolidate the Pacific fisheries regulations. Therefore, I recommend that—

3. **New Pacific fisheries regulations should be passed under the new Fisheries Act. They should contain administrative detail ancillary to the Act and policies that must be adjusted quickly in response to changing conservation and management needs.**

I will not comment on the many detailed aspects of the current regulations, but two disturbing problems deserve mention.

One concerns the time it takes for regulations to be passed. At the Commission's hearings, the Department described the tortuous and complicated government procedures that are followed in obtaining needed amendments to fisheries regulations. Before becoming law, they pass through 17 hands within the Department and the Privy Council organization and this can take up to 6 months. Delays of this nature are understandable for amendments to statutes that must be passed by Parliament, but they are inexcusable for changes to regulations that should be far more expeditious. They have created serious management and enforcement difficulties and have been an acute embarrassment for the Department in dealing with the public and provincial government. For example, this year's freshwater sportfishing regulations were not passed until the fishing season was half over. While they are in limbo, their enforcement must depend on voluntary public compliance or, in some cases, bluff.

By their nature, most Pacific fisheries must be conserved and managed seasonally, and the Department must be able to adjust its policies quickly in response to changing needs. Current procedures are a serious hindrance to the Department in effectively discharging its responsibilities. So I recommend that—

4. **The federal government's procedures for passing fishing regulations should be streamlined so that they can be changed quickly in response to changing needs.**

The second problem concerns regulations relating to commercial fisheries management. Under their current structure, the regulations define a number of fisheries management areas on the Pacific coast and stipulate the closed fishing times for them. The Director General has the authority to vary closed times for any area; this is how, for example, salmon fisheries are opened and closed during the season.

However, this technique is cumbersome for effective management, which often requires regulating fishing in small areas to protect specific stocks. An infinite number of areas on the coast could be selected for openings and closures, and the requirement that areas be formally described in regulations is too rigid. This is, incidentally, an especially urgent matter in the fisheries of the Pacific: in the intensive roe-herring fishery, for example, adjusting the boundary of an opening by a short distance can have crucial management implications. So the areas should not be defined in the regulations; regional officials need the authority to adjust them flexibly.

This problem was identified in a 1980 report of a standing joint committee of the Senate and House of Commons,² which recommended amendments to federal legislation that would allow for more flexibility. This deficiency should be rectified without further delay. So I recommend that—

5. **Department officials in the Pacific region should be authorized to designate areas to be subject to fisheries openings and closures.**

Licences In this report I have recommended that current commercial licences be replaced by limited-entry and quota licences and mariculture leases. And in Chapter 14, I recommended a new system of permits and agreements for Indian fisheries. These will be the point of contact between the government, that must authorize access to the resources, and the fishermen who utilize them.

I recommended in Part III that the new licensing arrangements be in place for the 1983 fishing season. Therefore—

6. **The Department should immediately prepare Indian fishery agreements and permits (recommended in Chapter 14) and new commercial fishing licence documents, and establish administrative arrangements for issuing new long-term limited-entry and quota licences and mariculture leases (proposed in Part III).**

The commercial licences should be relatively simple and short documents, identifying licensees and species to be fished and, where appropriate, designating vessels and fishing zones. Mariculture leases will be more involved, requiring detailed fisheries management planning. Indian fishery agreements will be complicated also, and should

be prepared in close consultation with the bands and the Indian fishery advisory committee, recommended in Chapter 17. The Indian permits should be simple to prepare.

Expediting Reform

Implementing the wide-ranging recommendations in this report will be a major undertaking for the government, affecting virtually all of the Department's administrative units in the Pacific region and Ottawa, and other government agencies. This task must begin at once and proceed systematically. Delay will be costly in terms of the substantial economic and social benefits that will flow from modern and reformed Pacific fisheries policies.

Responsibility for these initiatives, therefore, should be assigned to a team that has the stature, time and resources to see them through, and is free from the distractions of day-to-day fisheries administration. A special unit should therefore be created for this purpose. Accordingly, I recommend—

7. **A temporary Minister of State for Pacific fisheries, junior to the Minister of Fisheries, should be appointed and given responsibility for implementing reforms in Pacific fisheries policy.**

A minister with cabinet stature will be in the required position to shepherd new legislation through Parliament in conjunction with the senior minister; to oversee passage of new regulations; and to liaise effectively with other ministers such as those responsible for Indians, the environment, finance and industrial development. As well, he could speak with authority on behalf of the government in explaining progress to the public.

The special minister will require full-time assistance from the Department. Thus:

8. **A full-time policy and planning group within the Department's Pacific region should assist the temporary Minister of State in implementing policy reforms.**

In Chapter 19 I recommended that the Department establish a permanent policy and planning committee. For the temporary purpose of making these reforms, this group should function fulltime. Under the direction of the Minister, it should immediately begin to make the necessary arrangements for appointing the Pacific Fisheries Council (recommended in Chapter 17); to organize the Pacific Fisheries Licensing Board (proposed in Chapter 8); to initiate discussions with the province toward reaching a federal-provincial agreement (recommended in Chapter 18); and to assist in launching the budget and organizational review of the Department (recommended in Chapter 19). It should determine priorities for the other reforms and set a timetable for dealing with them in consultation with the Pacific Fisheries Council.

POLICY REVIEW

The most striking feature of Pacific fisheries policy is its complexity. The task of isolating and analyzing the host of interrelated issues has been a major challenge for me and this Commission's staff. While I outline new policy directions in this report, it must be recognized that no policy framework will be suitable forever, and the government must face the need to adapt its policies as circumstances change. The recommendations in this report are designed to provide the government with flexibility to do this.

Most policy is developed within the Department itself, and my proposal for a planning committee will focus this process and make it more systematic. The new consultative structure I proposed in Chapter 17 will provide valuable help in exploring the implications of proposed changes in policy and in alerting the Department to difficulties with policy and needed changes.

However, sometimes neither the Department's internal capabilities nor consultative arrangements will be adequate. Consultants, task forces and formal commissions of inquiry can often be helpful in advancing fisheries policy.

In British Columbia the consulting industry is not nearly as fully developed for fisheries as it is for other resource industries, such as forestry and mining. Those in the field provide mainly biological services and their involvement in policy formulation and review has been limited. In general, consultants are best equipped to provide advice about technical questions and problems that are relatively narrowly specified.

A task force typically includes a small number of experts in a field who are appointed to advise the government on specific features of public policy. Sometimes they include government officials. By pooling the experience and perspectives of experts on a subject, such groups can tackle more complicated and esoteric problems that do not involve widely divergent interests and do not call for an extensive public inquiry process.

Where reforms will affect diverse groups of people or involve fundamental questions of public policy, the government should seek the advice of formal commissions of inquiry. With high public visibility and public proceedings, they are able to gather facts and canvass advice from a wide spectrum of the public. Public hearings help various interests to understand the problems and positions of others and improve communications between groups and individuals with competing interests. They should be used more frequently than they have in the past. Had an inquiry of this nature been conducted earlier, much of the backlog of controversy and frustration over policy could have been avoided. And had an inquiry been struck in the late 1960s before the Davis Plan introduced limited entry to the salmon fishery, many of the difficulties experienced with this program might have been foreseen and forestalled. The same can be said about the almost continual controversy that has surrounded the Department's habitat protection initiatives over the last decade.

Furthermore, the terms of reference should be focused sharply on individual policy problems as they emerge. The scope of this Commission's inquiry was very broad, and some of the issues I have had to deal with (such as commercial fishing licensing, Indian fishing arrangements and Yukon fisheries policy) could have justified separate inquiries, especially in light of the need for reform in all of them to cope with modern pressures. More frequent commissions thus would serve two purposes: more attention would be paid to individual questions of policy; and solutions to problems would be more timely.

CONCLUSION

This Commission's work is now completed and reforms can begin. Whether or not the specific recommendations in this report are adopted, it is important for the government to proceed now to reform fisheries policy systematically. This will call for a concentrated effort from the Department and careful planning. The new formal policy framework and interim organizational arrangements proposed in this chapter should sustain the momentum towards improved Pacific fisheries policy.

FOOTNOTES

1. The Pacific Coast Fishing Vessel Owners Guild, Exhibit #120, p. 18.
2. Fourth Report for the First Session of the Thirty-second Parliament from the Standing Joint Committee of the Senate and the House of Commons on Regulations and Other Statutory Instruments, July 17, 1980.

CHAPTER 22

OVERVIEW

There is no quick and easy solution to Pacific Coast fisheries management problems which have been decades in the making Any long-term plan to address those challenges will be resisted by the inertia of tradition and by the combative attitudes forged in years of conflict among competing users of the fishery resource. But, there is enormous incentive for extraordinary effort to transcend the problems of the past.

ASSOCIATION OF PROFESSIONAL BIOLOGISTS
OF BRITISH COLUMBIA¹

In the first chapter of this report I emphasized the overriding need for a coherent policy for the Pacific fisheries, a framework based on clear objectives that would eliminate the ambiguities, contradictions and confusion of the past. I also outlined some general objectives for fisheries policy, consistent with this Commission's terms of reference, to provide a broad framework for designing policy reform. The subsequent chapters of this lengthy report have attempted to unravel the present management arrangements, analyze the problems that must be resolved and suggest improvements.

My recommendations are numerous, and they range from minor suggestions to proposals for fundamental changes in public policy. The complexity of the issues and the difficulty of dealing with them in an orderly sequence tend to cloud their relationship to an overall policy framework. So in this concluding chapter I refer back to the general policy objectives I articulated at the outset to put the major thrust of my recommendations into that perspective.

Resource Conservation

The constitutional responsibility of the federal government for fisheries is clear, and its first obligation is to ensure that the resources are properly conserved, managed and developed. These are the subjects dealt with in Part II. The first requirement for management is knowledge about the resources themselves; that is, the stocks of fish, the habitat on which they depend and the pressures they are subjected to. I have reviewed the condition of

the stocks in Chapter 2, and found that herring, halibut, most groundfish and minor species are either in good condition or are recovering from past overfishing. Salmon, by far the most valuable, are more problematic. Some stocks are healthy and others are recovering; but in the aggregate, our salmon remain well below their historical levels of abundance. The immediate constraint on rehabilitating most of the depressed stocks is inadequate spawning escapements, a consequence of excessive fishing. Ultimately, however, the capacity to produce salmon is governed by the quality of the habitat.

Protecting and managing fish habitat is an especially demanding responsibility on the Pacific coast because salmon depend on estuaries, rivers and streams that are subject to innumerable disturbances and pollution from industrial activities throughout the western watersheds. But our present knowledge about critical fish habitats, their potential productive capacities and the impact of other activities on them is seriously deficient. This impedes not only fisheries management but also effective planning of other resource development. Because of the interest of both governments in this information, I have recommended in Chapter 3 a major inventory of the freshwater and estuarial fish habitats in British Columbia, sponsored jointly by the federal and provincial governments. This will enable long-term objectives to be set for the fisheries; it will provide the essential information for integrated resource management planning; and it will help to identify opportunities for enhancement. I also propose more systematic procedures for approving development projects that affect fish habitat and means of ensuring that habitat losses will be mitigated or compensated.

Fisheries management, particularly in the dominant salmon and herring fisheries, leaves much scope for improvement. In Chapter 4 I have recommended new arrangements for collecting the needed information, formulating plans, managing fishing during the season, and regularly evaluating performance in consultation with the participants in the fisheries. Effective fisheries management depends on continuing scientific research, and specific needs are identified in Chapter 6.

With the approaching end of the first phase of the Salmonid Enhancement Program, plans must be made for the future. In Chapter 5 I reviewed the experience so far, noting, on the one hand, the high expectations for meeting fish production targets and, on the other hand, the uncertainties surrounding these predictions, the impact that enhanced stocks will have on wild stocks, the outcome of lake enrichment projects, and the control of commercial fishing fleets, all of which threaten the ultimate success of the program. I recommend that the program be continued on a more modest scale under a modified intergovernmental agreement, with less empha-

sis on large-scale artificial enhancement works until the success of those facilities already built can be assessed.

The management of habitat, fishing and enhancement are interdependent, and I propose measures to integrate them more closely. The success of these activities depends, in turn, on improvements in regulating access to the fisheries, the subject of Parts III and IV.

Maximizing the Benefits of Resource Use

The fish of the Pacific coast are exceptionally valuable, and competition for the available catches is intense. Salmon bring high prices in the commercial fishery, they generate excellent sportfishing opportunities, and for Indians they provide traditional food and cultural support. To ensure that the resources are used in the most beneficial way, account must be taken of these differing economic and social benefits.

By far the largest catch is taken in the commercial fisheries, but the industry has been allowed to develop in such a way that the potentially high returns are being dissipated in grossly overexpanded fleets and unnecessarily high costs of redundant fishing capacity. In all of the major commercial fisheries, and especially in the salmon, herring and halibut fisheries, the major challenge today is to rationalize the fleets to the available resources.

Far too many commercial fishing privileges have been issued and, through subsidies, the government has encouraged fleets to expand so that they are now a continuing threat to proper management and conservation and the major obstacle to improved economic performance of the industry. To rectify this most serious failure of past policies, I have proposed fundamental reforms in the present obsolete and incoherent licensing systems. In Chapters 7 and 8 I recommend a policy framework for modern commercial fisheries, aimed at keeping fishing capacity in balance with the resources available, encouraging the fleet's structure to develop efficiently, providing security to fishermen and vesselowners, enabling the government to adjust fishing privileges as conditions change, recovering for the public the returns from resources in excess of reasonable returns to fishermen and vesselowners, and simplifying administration.

For the commercial fisheries other than salmon and roe-herring, I propose in Chapter 10 that those fishermen who now operate vessels with limited-entry licences be given new licences that authorize them to harvest a specific quantity of fish, related to the total allowable catch for the fishery. These licences, and all new quota licences, should carry explicit 10-year terms. In addition to facilitating fisheries management, this will encourage fleet rationalization and permit relaxation or abolition of many of the intricate regulations now imposed on vessels, gear and fishing times.

For the much more complicated salmon and roe-herring fisheries, I propose, in Chapter 9, new limited-entry licences with 10-year terms, specifying the gear authorized. I also recommend policies for dealing with the contentious problem of allocating the catch among competing sectors of the fleets. I propose that the currently excessive licensed capacity in these fleets be reduced by one-half over a 10-year transitional period, and that this process be facilitated by a voluntary licence retirement program financed jointly by the industry and the government.

My recommendations include a variety of other improvements in the regulation of access to resources. I suggest that licences that provide access to groups of species or stocks that are fished and managed separately be abolished in favour of more specific privileges, and that licences should apply to defined fishing areas. I propose more consistent licence fees and royalties related to the value of the fish, and that new licences be issued by competitive bidding. I recommend that revenues from royalties and bonus bids for new fishing privileges in the salmon and roe-herring fisheries be directed to cover costs of retiring licensed fishing capacity and to finance new enhancement. And I suggest that the several forms of direct and indirect subsidies now provided for new vessel construction be abolished.

In addition, I advise that provisions be made for accommodating development of the fledgling mariculture industry and for cautious experiments in ocean ranching for salmon. And I recommend an entirely new administrative structure for issuing licences, processing appeals and retiring excess licences, thereby separating these important responsibilities from those relating to resource management.

My proposals for licensing commercial fishing and fleet rationalization are far-reaching, but the present arrangements are grossly inadequate, and their legacy of failure to promote orderly development of the primary fishing industry necessitates fundamental reforms.

Economic Development and Growth

The commercial fisheries of the Pacific coast have hitherto failed to achieve their economic potential mainly because of excessive fleet development. In Chapter 13 I have examined other aspects of the industry's organization, relating to its ownership, control and competitiveness. The historical pattern of control of fishing fleets by processing companies has been weakening and, from the viewpoint of the public interest in industrial organization and competitive markets for fish, this is desirable. To prevent any reversal of this trend, however, and to forestall any other excessive concentration of fishing privileges, I recommend strict limits on the permitted holdings of any

licensee. I propose that the Department's concern with the processing industry should focus more on regulating quality standards for products and less on regulating trade.

Although the fishing industry has been unable to use the existing natural resources efficiently, the opportunities for developing them are exceedingly bright. Salmon are highly responsive to enhancement, and coupled with improved management to rebuild wild stocks, total yields might be doubled. I explain in Chapter 11 that other fish and shellfish are amenable to mariculture, and the waters of the Pacific coast are well suited to this activity. Mariculture activities could also provide new economic opportunities for coastal communities. I have therefore recommended a system of mariculture leases to provide an orderly framework for developing opportunities in mariculture and ocean ranching.

Social and Cultural Development

In designing fisheries policy, the social and cultural consequences of any changes must be considered carefully because of the dependence of particular groups and communities on commercial, recreational and Indian fishing. This raises special problems in the face of the urgent need to reduce the size of fishing fleets. So my proposals for fleet rationalization in Part III incorporate provisions for securing the fishing privileges of those established in the fishery to a degree that they have hitherto not enjoyed, providing them with protected opportunities to continue participating in the industry and focusing fleet reduction on voluntary withdrawals for the next 10 years.

Indians occupy an important place in the commercial fisheries, and in view of their special problems of economic and social development their continued participation should be encouraged. In Chapter 12 I review these problems and recommend support for Indian fishing organizations. The successful adaptation of coastal Indians to commercial fishing suggests that this affords the most promising avenue for developing their economic and social self-reliance.

The traditional Indian food fishery, involving Indians throughout the coast and the interior, raises special problems, reflected in the prolonged abrasive relationship between some bands and the Department of Fisheries and Oceans. In Chapter 14 I propose new approaches to this question that will secure bands' rights to defined quantities of fish. Under proposed new arrangements, Indians would be able to use their fish to their best advantage through consumption or sale, and to engage constructively in fisheries management and enhancement.

Sportfishing has become an important element in the quality of life for hundreds of thousands of Canadians. Excessive pressure on the stocks on which most sportfishing depends, and progressive restrictions on fishing, are threatening to erode sportfishing values; the immediate challenge is to preserve the quality of sportfishing opportunities while constraining the rate of exploitation. The difficulty in meeting this challenge is aggravated by a dearth of reliable information about sportfishing activity, catches and stock conditions. I propose in Chapter 15 a 5-year program aimed at preserving sportfishing opportunities while holding sport catches to their present levels; improving the information base to allow for more appropriate sportfishing management planning; and, in consultation with the sportfishing community, designing sportfishing policy for the longer term. My sportfishing proposals also involve regulating access through higher licence fees and a system of punchcards and tags, and integrating the federal saltwater licence with British Columbia's freshwater sportfishing licence.

Returns to the Public

The returns to labour and capital employed in commercial fishing are now generally low, mainly because of overexpanded fleets. With the rationalization measures I propose in this report, however, the returns can be expected to improve substantially. Consistent with my terms of reference, I have proposed in Part III charges to capture for the public some of these returns from the resources used after "fair and reasonable returns to fishing enterprises."

The proposed schedule of royalties for all commercial fisheries, based on recent catches, would yield some \$15 million annually, and I propose that these rates be increased if the value of fish rises. These levies will capture only part of the gains from fleet rationalization, however; the rest will accrue to existing fishermen until the proposed new licensing is in full effect.

It is not unrealistic to suppose that current catches could be taken with half the size of the current fleets at half the present cost, implying a net economic gain in the order of \$100 million annually. But it may take up to a decade to achieve this degree of rationalization, and even longer before the gains are fully reflected in royalties and payments for new fishing licences. The immediate increase in sportfishing licence fees will yield about \$4 million annually.

I have also proposed elimination of subsidies for constructing and improving fishing vessels, indirect subsidies under income tax arrangements, and other aid to vessel construction through loan guarantees. The effect on the federal treasury of abolishing all these programs cannot be quantified, but it implies savings of several millions

annually. Less direct government expenditures can be expected to be reduced also; for example, fewer fishermen operating smaller more efficient fleets can work longer each year and thus depend less on public assistance.

Against these new revenues and savings, my proposals call for increased expenditures for certain purposes. I recommend a renewed enhancement program but on a somewhat smaller scale than the present one, and with part of the federal share to be collected from the commercial and sport fisheries. The cost of the proposed inventory of aquatic resources will be shared with the provincial government. The federal government's contributions to both of these programs should be less than its expenditures under the current enhancement program.

The fleet-reduction program calls for a federal contribution of some \$8 million annually for 10 years. I have also proposed strengthening some of the Department's management and administrative capabilities, especially the monitoring of stocks and catches, commercial licensing, habitat management and enforcement.

From the government's and taxpayers' financial point of view, the balance appears favourable. Within a few years, increased revenues will more than offset these additional costs, and in the long term can reasonably be expected to exceed, for the first time, the costs of managing the Pacific fisheries.

Flexibility

Fisheries policy must recognize the Pacific fisheries' susceptibility to profound and unpredictable changes in resource abundance, technology and markets. The failure of past arrangements to accommodate change in an orderly way has been exceedingly costly. Most conspicuously, controls on fleet development have been overwhelmed by sudden increases in the demand for most fish in recent years, leaving all the major commercial fleets grossly overexpanded. Moreover, the form of fishing licences and the way they have been administered leaves the government with little flexibility, so the problem is made more intractable. Throughout this report I have been concerned to recommend licensing and other arrangements that will be resilient to disturbances, provide the government with the flexibility needed to adjust to changing conditions without disrupting explicit or implied commitments, and ensure that it has the information needed to anticipate changes.

Administrative Simplicity

A policy, no matter how well conceived, will succeed in achieving its objectives only if it is effectively administered and enforced. I examine the question of enforcement in Chapter 16. This is a special problem for the

fisheries because opportunities to abuse fish and their habitats are so profuse that adherence to fishing laws and regulations depend heavily on voluntary compliance and cooperation. This essential support is undermined if violators are seen to be dealt with leniently. Although incentives to violate the fishing laws and regulations have been increasing, the enforcement effort has not kept pace and needs to be strengthened.

My proposals for strengthening the enforcement effort include recruiting a specialized staff of fisheries enforcement officers, who would be primarily responsible for laying charges, collecting evidence and pursuing cases through the courts. These responsibilities would be largely separate from those of fishery officers, who are concerned mainly with resource management. I also recommend strengthening prosecuting expertise, and a variety of other changes to modernize the legislation, to stiffen fines and to more frequently suspend the fishing privileges of offenders.

Fisheries administration is heavily criticized by commercial, sport and Indian fishermen and other groups who deal with the Department. My investigation of the Department's administrative system, summarized in Chapter 19, reveals serious weaknesses, but not all can be attributed to arrangements in the Pacific region. At the root of many problems is the absence of a clear policy framework and explicit objectives to guide administrators. This results from obsolete legislation, regulations that are more appropriate for other regions of Canada, vague guidelines for dealing with important problems such as the allocation of the catch among competing groups, and divided responsibilities among federal, provincial and territorial departments and ministries. Other difficulties arise from constraints on budgets and manpower and a turmoil of reorganization in recent years.

To rectify these deficiencies I propose separating from the Department's resource management structure, the important responsibilities for administering the commercial licensing system and appeals; consolidating responsibilities for habitat management and enforcement; coordinating research; and changing certain lines of reporting. My proposals include improved staff training and the formation of a much needed policy-development group within the Department. I also identify other problems of Departmental administration and financing, and recommend a thorough budget and administrative review. In general, the future policy for the Pacific fisheries needs to make a clearer distinction between day-to-day administration and high-level policy and planning.

Over the decades, fisheries policy has become heavily encrusted with restrictions and regulations governing fishing privileges and the details of fishing. I recommend that many of these be relaxed or abolished altogether.

Some have never served a legitimate purpose, and others will become unnecessary under the proposed fleet rationalization and licensing policies. I also propose elimination of personal licensing of fishermen, certain licences required for fishing vessels, and some of the Department's present activities in regulating exports of fish products.

This inquiry has left me concerned that the government's general approach to its responsibilities in the fisheries has hitherto been directed too much at details, at placating vociferous groups and at "attempts to do too many things for too many people at the cost of neglecting its most serious responsibilities."² In one area of administrative responsibility after another I have observed an absence of policy direction, priorities and planning and, with some exceptions, a diffuse distribution of responsibilities.

It is time to take a more scientific and businesslike approach to managing the Pacific fisheries. The fishing industry does not need or want paternalistic regulation; it is a technically sophisticated and potentially robust industry; and it needs only a clear policy framework to enable it to flourish. Sportfishing organizations also understand the need for scientific management and objective planning. And many Indians, who have struggled to defend their special position in the fisheries, are now prepared to use modern contractual and business arrangements to pursue their goals.

Many facets of federal fisheries management interface with administrative responsibilities of the Province of British Columbia, especially in the fields of habitat management, pollution control, sportfishing regulation, mariculture and enhancement. I explained in Chapter 18 that the present meagre arrangements for reconciling the two governments' interests and activities often result in duplication of effort, lost opportunities for constructive cooperation and sometimes friction. So I suggest that the two governments enter into an agreement on fisheries matters, incorporating some of the provisions contained in agreements between the federal government and other provinces, but also including new arrangements for reconciling their interests in habitat management, resource inventories, enhancement, freshwater fisheries, sportfishing licences and the administration of shellfish and mariculture. I recommend also a high-level inter-governmental consultative group to plan and supervise cooperative programs and to resolve mutual problems.

The problems of the Yukon Territory are quite different, being dominated by freshwater sportfishing and habitat damage associated with mining. In Chapter 20 I explain the pressing need to overcome the prevailing lack of knowledge about the territory's sensitive fish resources, to clarify the responsibilities of federal and Yukon regu-

latory agencies, and to strengthen provisions for fisheries and habitat management.

In order to cope with problems in the complicated Pacific fisheries, and especially to effect policy changes, the government needs systematic consultative arrangements to communicate problems and channel advice from those with interests in fisheries and fish habitat management. While the Department has created advisory groups in considerable number and variety, many do not enjoy the confidence of the participants that is essential for their success. The present arrangements have developed piecemeal; they lack coherence and take excessive amounts of time and effort on the part of administrators and private participants. I propose in Chapter 17 that they be replaced with a more systematic consultative structure that would have at its centre a Pacific Fisheries Council to provide general policy advice to the Minister and that would channel the advice of more specialized advisory committees. These consultative arrangements will be particularly important in implementing reforms in the wake of this inquiry.

Finally, I propose in Chapter 21 specific means for effecting the needed policy changes and for reviewing policy in the future. The current Fisheries Act is archaic and inadequate, and I recommend that it be replaced by a modern comprehensive statute structured to permit a sharper focus on Pacific fisheries within a national policy framework. I propose that regulations and ancillary licence documents be reviewed and redesigned as well.

To ensure that the new policy framework is implemented quickly and systematically, I suggest that a special temporary Minister of State for Pacific fisheries be appointed. As well, I recommend means of dealing with new policy questions, to help the Department meet new challenges as they arise.

Readiness for Change

At the outset of this report I noted a widespread perception of the need for fundamental changes in fisheries policy. This attitude goes well beyond the fishing community because fish, and the quality of the environment they depend upon, are part of the heritage of Canadians on the Pacific coast.

When we discuss and manage the fishery — particularly salmon — we are dealing with a certain mystique, an aura surrounding the salmon, that is based on a long and exciting history that all British Columbians and many Canadians feel they understand.

Fishing is a way of life for many British Columbians and has been part of the coastal community for centuries. It formed the back-

bone of the native Indian food supply and was an early and lasting mainstay of the colonial and provincial economy. Salmon was then and is now an important and fascinating marine resource.

Today many British Columbians continue to earn their living fishing or in fishing-related work. Others are joining a growing number of people who are dependent on the recreational fishery which attracts hundreds of thousands of resident fishermen and tourists seeking their sporting pleasure in the salmon sports fishery.

Yet today we are discussing the fishery as though this valuable and renewable resource, this part of our culture, could disappear. We regard it as being in serious peril and we routinely speak of the "crisis" of the fishing industry.³

My investigations suggest that this anxiety is justified and, as this report indicates, substantial policy changes are needed.

This inquiry has been held at a difficult time for the fisheries. The generally depressed economic conditions, high interest rates and rising costs, which have affected all industries, have aggravated the underlying structural problems of the fishing industry. Sport fishermen's and Indians' anxieties about their access to fish are unprece-

ented. These conditions not only exacerbate apprehensions about policy changes, but also force recognition of the need.

This inquiry is being held at an appropriate time. We now have a declining resource base, overcapitalization in the catching and processing segments of the industry, reduced world market prices for seafood products, and increasing pressure on the resource from the numerous user groups.⁴

This is, therefore, not a time for complacency; the fishing community is ready to consider new directions.

Above all else that comes out of this process, Mr. Commissioner, we hope that there at least comes an understanding by all participants that the resource is in trouble. We are all part of the problem and we must all be part of the solution.⁵

As the western Canadian poet Sarah Binks urged on "the sailor who puts to sea when the wind is right,"⁶ so the government should be encouraged to initiate fisheries reform.

If the government seizes the present opportunity to start the process of reform, building on the consultative process that this Commission has initiated, I believe it will be possible to reverse the current adverse trends and begin to realize the rich potential of our Pacific fisheries resources.

FOOTNOTES

1. Association of Professional Biologists of British Columbia, Exhibit #96, p. 5.
2. Fisheries Association of British Columbia, Exhibit #63, p. 34.
3. New Democratic Party Caucus, Exhibit #136, p. 1.
4. The Pacific Gillnetters Association, Exhibit #70, p. 3.
5. B.C. Wildlife Federation, Exhibit #144, p. 49.
6. Paul Hiebert, Sarah Binks, McClelland and Stewart Limited, Toronto, 1964, p. 137.