

Ed Lockbaum

DFO - Library / MPO - Bibliothèque  
01025034

# FISHERIES MANAGEMENT PLAN

## SKEENA / NASS



## SALMON

1995

SH  
224  
B8  
P11  
95-14

LIBRARY  
PACIFIC BIOLOGICAL STATION  
FISHERIES & OCEANS CANADA  
NANAIMO, BRITISH COLUMBIA  
CANADA V0T 6N7

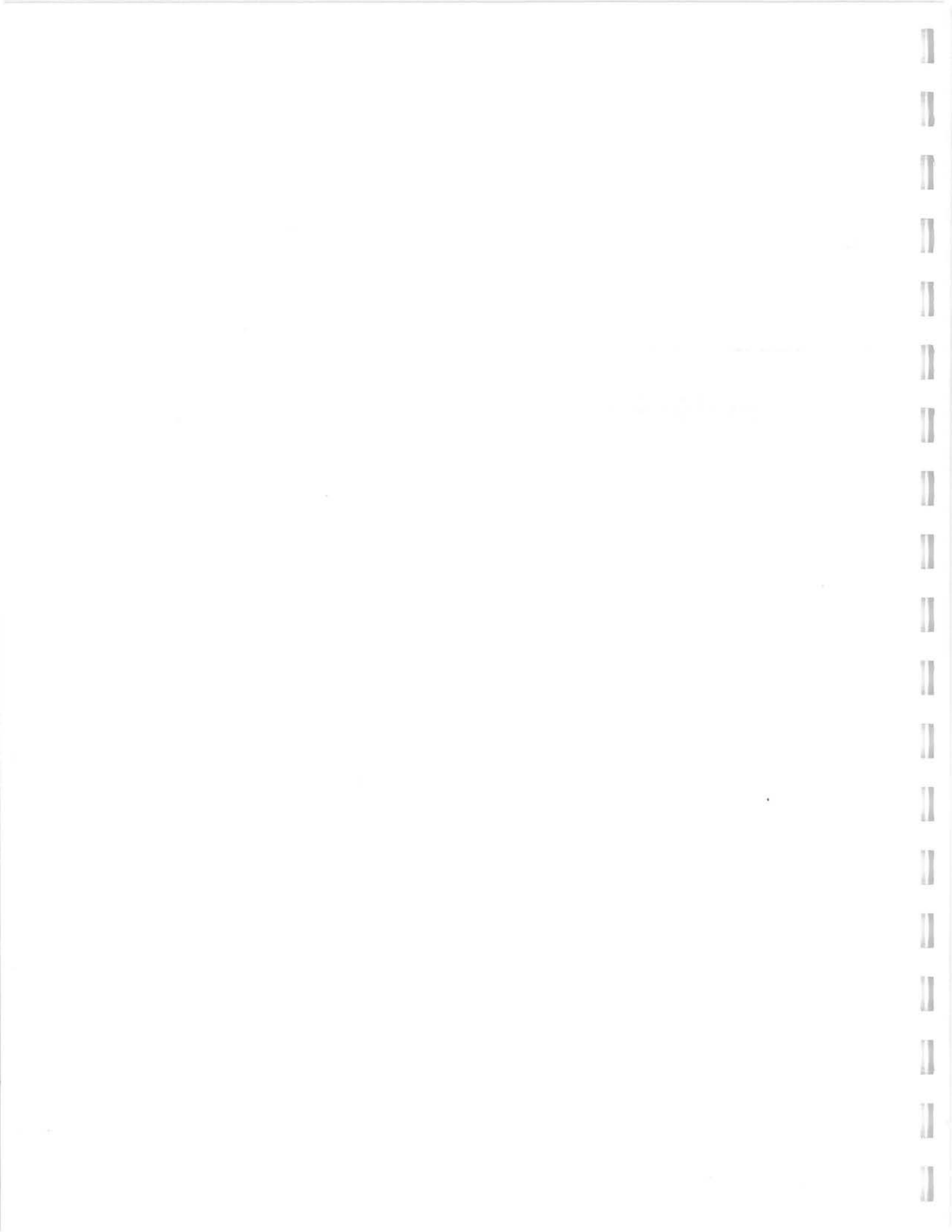
# FISHERIES MANAGEMENT PLAN

## NORTH COAST

Encompassing Management Areas 3, 4,  
5, 103, 104, 105, and the complete  
drainages of the Skeena & Nass rivers

## SALMON

1995



## FISHING PLAN: TABLE OF CONTENTS

<b>1</b>	<b>OVERVIEW OF THE NORTH COAST SALMON FISHERY</b>	<b>6</b>
1.1	Participants	6
1.1.1	DFO	6
1.1.2	Commercial	6
1.1.2.1	Net	6
1.1.2.2	Troll	6
1.1.3	Recreational	7
1.1.3.1	Tidal	7
1.1.3.2	Non-Tidal	7
1.1.4	Aboriginal	8
1.2	Location of Fishery	8
1.3	Timeframe of fishery	8
1.3.1	Commercial	8
1.3.2	Recreational	8
1.3.2.1	Tidal	8
1.3.2.2	Non-Tidal	9
1.3.3	Aboriginal	9
1.4	Landings	10
1.4.1	Commercial	10
1.4.1.1	Net	10
1.4.1.2	Troll	10
1.4.2	Recreational	11
1.4.2.1	Tidal	11
1.4.2.2	Non-Tidal	11
1.4.3	Aboriginal	12
1.5	Consultative Processes	13
1.5.1	Skeena Watershed Committee	13
1.5.2	Commercial	14
1.5.3	Recreational	14
1.5.4	Aboriginal	15
1.6	Management Styles	16
1.6.1	Commercial	16
1.6.2	Recreational	17
1.6.3	Aboriginal	18



<b>2</b>	<b>RETROSPECTIVE ANALYSIS</b>	<b>18</b>
2.1	Aboriginal	19
2.2	Commercial	19
2.3	Recreational	21
2.4	ESSR	22
<b>3</b>	<b>STOCK STATUS</b>	<b>23</b>
3.1	Prospects for 1995	23
3.1.1	Sockeye Salmon	23
3.1.2	Coho Salmon	24
3.1.3	Pink Salmon	24
3.1.4	Chum Salmon	25
3.1.5	Chinook Salmon	25
3.1.6	Steelhead	25
3.2	Post-Season and In-Season Assessment Information	25
3.3	Environment and Habitat	27
3.4	Species Interaction	27
3.5	Research	27
<b>4</b>	<b>BIOLOGICAL AND MANAGEMENT OBJECTIVES</b>	<b>28</b>
4.1	Conservation and Sustainability	28
4.2	International Considerations	29
4.3	Domestic Considerations	29
4.3.1	Aboriginal	29
4.3.2	Recreational	30
4.3.3	Commercial	30
<b>5</b>	<b>MANAGEMENT ISSUES</b>	<b>30</b>
5.1	By-Catch	30
5.2	Aboriginal Fisheries	31
5.3	Opening Dates	31
5.4	Allocation	31
5.5	Treaties	32
<b>6</b>	<b>MANAGEMENT MEASURES</b>	<b>32</b>
6.1	Allocations	32
6.2	Changes from last plan	32
6.3	Control and Monitoring of Fishing Activities	33

6.4	Harvesting Plan .....	33
6.5	Licensing .....	33
6.6	Key Regulations .....	33
6.7	Contingencies .....	34
<b>7</b>	<b>ENFORCEMENT ISSUES AND MEASURES .....</b>	<b>35</b>
7.1	Strategic Enforcement Plan .....	35
7.2	Commercial Net .....	37
	7.2.1 Overview .....	37
	7.2.2 Main Program Activities .....	38
	7.2.3 Enforcement Resources .....	39
	7.2.4 Enforcement Plan Evaluation Criteria .....	39
7.3	Commercial Troll .....	40
	7.3.1 Overview .....	40
	7.3.2 Main Program Activities .....	40
	7.3.3 Enforcement Resources .....	40
	7.3.4 Enforcement Plan Evaluation Criteria .....	41
7.4	Recreational Fishery - Tidal .....	42
	7.4.1 Overview .....	42
	7.4.2 Main Program Activities .....	42
	7.4.3 Enforcement Resources .....	43
	7.4.4 Enforcement Plan Evaluation Criteria .....	43
7.5	Recreational Fishery - Non-tidal .....	44
	7.5.1 Overview .....	44
	7.5.2 Main Program Activities .....	44
	7.5.3 Enforcement Resources .....	45
	7.5.4 Enforcement Plan Evaluation Criteria .....	45
7.6	ESSR and Food, Social, and Ceremonial Fishery .....	46
	7.6.1 Overview .....	46
	7.6.2 Main Program Activities .....	48
	7.6.3 Enforcement Resource Requirements .....	50
	7.6.4 Enforcement Plan Evaluation Criteria .....	50
<b>8</b>	<b>IN-SEASON ADJUSTMENT MECHANISMS .....</b>	<b>56</b>
8.1	In-season communications .....	56
	8.1.2 Contact List .....	57
8.2	Decision-making process .....	58

**9 EVALUATION AND PUBLIC CONSULTATION . . . . . 61**  
9.1 Escapement Monitoring . . . . . 61  
9.2 Public Consultation . . . . . 62

# 1 OVERVIEW OF THE NORTH COAST SALMON FISHERY

## 1.1 Participants

### 1.1.1 DFO

Conservation and Protection (C&P) staff are located in New Aiyansh, Smithers, Hazelton, Terrace, and Prince Rupert. A habitat technician is stationed in Terrace, and a habitat biologist in Smithers. Community Advisors are positioned in Terrace and Smithers. Sector staff comprising Aboriginal Fisheries Sector, Fisheries Management, Stock Assessment, and Habitat Management are centred in Prince Rupert.

### 1.1.2 Commercial

#### 1.1.2.1 Net

The net fishery occurs generally with gillnets in Area 4 and seine and gillnets in Areas 3 and 5. It is the second largest commercial salmon fishery on the West Coast, surpassed only by the Fraser River. It is also the first large net fishery to take place on the coast in any given year. As a result, during the first 3-4 weeks of the fishery, when the catch is primarily sockeye, the majority of the West Coast gillnet and seine fleet participates. July can see as many as 900 GN and 350 SN operating in a fishery. After the Fraser River opens, this fleet usually drops to primarily local fishers with about 250 GN and 30 - 40 SN operating.

#### 1.1.2.2 Troll

Little effort is expected in the areas 3, 4, or 5, with moderate effort in the offshore areas of 103, 104, and 105. In most years, sub-area 3-1 has a troll fleet working, but due to the poor return of summer coho



expected to the Skeena River, this area may be closed in 1995. Similarly, northern Hecate Strait (103 and 104) will see an extended closure for the same conservation reasons.

### 1.1.3 Recreational

#### 1.1.3.1 Tidal

The tidal fishery is becoming world renowned with anglers primarily targeting on chinook and coho salmon, and halibut. Lesser effort is directed on species such as lingcod and rockfish. Fishing activity occurs throughout the year but degree of effort is highly variable and dependent on weather conditions. Effort during the winter months (November to March) is generally light with peak effort occurring during the summer and fall period (April to November). Anglers fish either independently on a self contained basis or arrange for a 'package trip' with a charterboat or lodge facility. This fishery contributes significant economic benefit to the provincial economy.

#### 1.1.3.2 Non-Tidal

This fishery is very popular and draws participants from all over the world. Several river systems are world famous, for example the Kispiox and Babine, and many anglers travel to northern British Columbia to specifically fish these systems. Anglers are comprised of local area residents, B.C. residents, and out of province and non Canadian residents. Guiding operations are found in most areas ranging from small operations to luxury facilities. This fishery also contributes significant economic benefit to the provincial economy.

#### 1.1.4 Aboriginal

Participants include the tribal groupings of the Nat'oot'en, Gitksan, Wet'suwet'en, and Tsimshian, on the Skeena Watershed and the Nisga'a and Gitanyow on the Nass Watershed. Most bands and/or tribal authorities have established exclusive fishing areas and limit participation to band members and other persons they authorize.

#### 1.2 Location of Fishery

The North Coast Salmon Management Plan encompasses Management Areas 3, 4, 5, 103, 104, and 105 as well as the complete watersheds of the Skeena and Nass Rivers.

#### 1.3 Timeframe of fishery

##### 1.3.1 Commercial

Area 4 gillnet openings this year will commence with a Skeena river chinook directed fishery on June 6. Area 3 will open a week later, targeting on Nass sockeye. The Area 4 sockeye directed fishery will likely begin June 26. Seine openings are scheduled in areas 3 and 5 on July 16. The net fisheries will continue until mid to late August, and in Area 4 into September with a late coho fishery. Troll fishing occurs from early July to mid September.

##### 1.3.2 Recreational

###### 1.3.2.1 Tidal

January 1 to December 31

Tidal sportfish effort occurs throughout the year with intensity of effort highly dependent on weather conditions. Effort during the winter months is low and peaks during the month of June through September.

Anglers primarily target on chinook and coho salmon, and halibut. Some effort is directed specifically on lingcod and rockfish. The majority of chinook salmon are harvested from May to late August with the majority of coho harvested from August to mid October.

Recreational diving and harvesting of finfish and shellfish takes place on a small scale 12 months per year. This activity peaks during the summer months. A recreational fishery for crab and prawn (by trap) occurs throughout the year, particularly in Prince Rupert Harbour.

#### 1.3.2.2 Non-Tidal

The salmon fishery begins in earnest with the chinook fishery in early May and culminates with the coho fishery ending as late as mid-November on some coastal systems. Steelhead are targeted from July through October on summer runs and November through May for winter run stocks.

#### 1.3.3 Aboriginal

In tidal waters, light effort by troll gear occurs all year long. The Skeena and Nass estuary fisheries occurs with commercial gillnet gear and begins in early May. This fishery continues during non-commercial times until mid-August, at which time the non-desirable pink salmon predominate in the catch. Near the villages of Port Simpson, Kitkatla, and Metlakatla, in Management Areas 3, 4, and 5 respectively, commercial gillnet fishing occurs when the salmon are present, generally mid-May to October. Some slight effort occurs by commercial seine vessels. In non-tidal waters harvest begins by gillnet approximately early May and continues through August. An increasing amount of food fish

is taken by the fish wheels located on the Skeena near Terrace and on the Nass near New Aiyansh.

## 1.4 Landings

The Skeena and Nass Rivers are respectively the second and third largest producers of salmon in British Columbia. Both rivers support numerous races of all of the Pacific salmon species. Canadian commercial fisheries targeting on Skeena and Nass bound sockeye and pink salmon occur from the B.C. - Alaska border to the approach waters of Ogden Channel and northern Banks Island. Aboriginal fisheries harvest all species from the approach waters to upper reaches of both systems. Recreational fisheries occur in tidal waters and in non-tidal portions, mainly for chinook, coho, and steelhead.

### 1.4.1 Commercial

#### 1.4.1.1 Net

Total hailed catch for 1994:

	Area	sk	co	pk	cm	ck	st
gn:	3	144690	23759	50157	153673	1959	663
	4/5	576246	62752	169301	135792	10424	2557
sn:	3	181435	30226	304832	101921	1611	118
	4/5	9711	1879	15967	2847	55	0

Landings vary from year to year, depending on run sizes.

#### 1.4.1.2 Troll

Landings in Prince Rupert will be substantial, as most of the north coast fleet will deliver there. However, these landings do not indicate the amount of fish harvested in the Skeena/Nass area.



## 1.4.2 Recreational

### 1.4.2.1 Tidal

Accurate information on catch is not available but varies widely from year to year depending on strength of returning fish stocks. It is estimated that 3000 - 5000 chinook are harvested each year. Coho salmon catches are also highly variable with catches ranging from 5000 to 20,000 fish in any year. In 1994, a creel census was conducted for a portion of area 3 and all of area 4. This census was conducted from June 18 to September 17. Additional information was compiled from hails taken by patrolmen, DFO shiops crews and Fishery Officers. The total known tidal sport catch was: sockeye - 4; coho - 23494; pink - 1516; chum - 446; chinook - 3253.

### 1.4.2.2 Non-Tidal

The timing, length, and large area of this fishery makes dedicated monitoring difficult as this fishery occurs during both aboriginal and commercial harvest times. Operations cover large geographic areas with very few Officers as compared to Lower Mainland and WCVI.

Catch figures cannot be used to estimate angler effort as there is a large catch and release fishery on most systems.

While enforcement of the steelhead fishery has historically been shared between DFO and Provincial officials, steelhead harvest monitoring in non-tidal waters is a Provincial responsibility.

### 1.4.3 Aboriginal

#### 1994 Allocations And Catch

<b>Tribal Council</b>	<b>Sk</b>	<b>Co</b>	<b>Pk</b>	<b>Cm</b>	<b>Ck</b>
-----------------------	-----------	-----------	-----------	-----------	-----------

#### **Nass River**

Nisga'a - Canyon City, Greenville, and Kincolith

1994 Allocation	50000	3500	5000	500	7000
1994 Catch	28935	2355	1165	587	5970

#### **Gitanyow**

1994 Allocation	5200	250	185	25	620
1994 Catch	1198	0	0	0	120

#### **Total Nass**

1994 Allocation	55200	3750	5185	525	7620
1994 Catch	30133	2355	1165	587	6090

#### **Skeena River**

Tsimshian - Lax Kwalaams, Metlakatla, Kitkatla, Hartley Bay, Kitsumkalum, Kitselas, Prince Rupert

1994 Allocation	80000	2500	5000	500	5000
1994 Catch	57729	980	4372	1334	2575

Gitksan Wet'suwet'en - Lower Skeena, Moricetown

1994 Allocation	100000	2500	25000	500	10000
1994 Catch	49794	3653	7655	257	7011

## Nat'oot'en

1994 Allocation	35000
1994 Catch	32300

## Takla Lake

1994 Allocation	1037	550
1994 Catch	1050	228

## Tlazden

1994 Allocation	500
1994 Catch	265

## Total Skeena

1994 Allocation	216550	5000	30000	1000	15000
1994 Catch	141125	4633	12027	1591	9814

## 1.5 Consultative Processes

### 1.5.1 Skeena Watershed Committee

Early in 1992, the Skeena Watershed Committee (SWC) was formed. This is a group that includes representation from the three sectors: aboriginal, recreational, and commercial; plus DFO and the provincial government. The objective of this committee is to create a forum where discussion of conservation issues can occur with all parties present, and to build on common interests in the fishery resource. Recent years have seen the SWC take on a higher profile in the context of sector fishing plan integration.

In 1994, and again in 1995, there has been a fixed Area 4 fishing plan in place, as a direct result of the SWC process, which has met approval of all sectors.

### 1.5.2 Commercial

**Net** - Traditionally, the commercial fishing industry has been consulted through the North Coast Advisory Board (NCAB), consisting of members from all major fishing groups, as well as fish processors and native groups, about local issues and management plans; and through the Commercial Fishing Industry Council (CFIC) regarding commercial fishing allocation issues.

The net plans are developed in close consultation with industry (including both gear types and processors) and other affected users (Aboriginal and recreational) prior to the season with both local and regional representatives. Every effort is made to consult with the advisory boards should substantive in-season changes be required.

**Troll** - There are regularly scheduled meetings, pre- and post-season, with the Northcoast Advisory Boards and OTAC. There are also in-season weekly radio conferences with the fleet and the Troll Advisors. Fishing plans are developed pre-season based on stock forecasts, allocation, and conservation concerns, in consultation between DFO, OTAC and CFIC.

### 1.5.3 Recreational

The DFO sportfish advisory process is a three tiered process with foundations at the local community level. This process deals primarily with anadromous fisheries but is slowly evolving to include fisheries directed on indigenous species. Local sportfish advisory committees have been established in the communities of Prince Rupert, Kitimat, Terrace, Smithers, and Stewart. These local committees meet and pass recommendations (resolutions) to the North Coast Co-management Committee of the Sport Fish Advisory Board (SFAB). The North Coast Co-management Committee in turn reports to the regional SFAB body in Vancouver which is the final approval authority for all recreational fishery



recommendations presented to DFO.

The Province of British Columbia considers all recommendations brought forward from the SFAB related to non tidal, indigenous stock fisheries including steelhead.

Meetings occur at all levels of the process in the spring and fall of each year. The scope of the meetings includes discussion and review of existing sportfishing regulations and management regimes used to manage the various fisheries in the Skeena/Nass area. Recommendations from the committees related to tidal and non tidal fisheries are reviewed by DFO and the Province and implemented in the management of sportfisheries in the Skeena/Nass (Areas 3,4,5) wherever appropriate. DFO recreational fisheries coordinators liaise with these boards throughout the process.

#### 1.5.4 Aboriginal

Consultation takes place with the Skeena aboriginal groups under the auspices of the Skeena Fisheries Commission, an umbrella group consisting of the Nat'oot'en, Gitksan, Wet'suwet'en, and Tsimshian tribal groupings, as well as individual bands and tribal groups . On the Nass system, consultations take place with the Nisga'a and the Gitanyow.

The Department's policy, and legal obligation resulting from the Supreme Court's decision in *Regina v. Sparrow*, has resulted in the issuance of Communal Licences for the various groups on the Skeena and Nass rivers. Prior to the issuance of these licences, consultation must take place. This consultation is generally carried out between the Aboriginal groups and staff in the AFS and Fisheries Management sector in the North Coast.

The development process for aboriginal fisheries begins with the development of stock abundance forecasts. This is done by the Stock Assessment sector of Science Branch and

increasingly by the bands and tribal authorities affected. Using this data and complying to policy set by senior managers in DFO, recommendations for management approaches are developed jointly by the AFS Coordinator and the Skeena/Nass Management Coordinator. These recommendations are taken to the respective bands and/or tribal authorities by the AFS Coordinator. The AFS Coordinator and Skeena/Nass Management Coordinator negotiate with the bands to gain input and approval of the plan. On final approval of the plan by the band or tribal authority, the Chief of Fisheries Management and the Chief of Conservation and Protection, a communal license is issued.

## 1.6 Management Styles

There are a number of salmon fisheries within the scope of the Management Plan which are actively managed. These include the large commercial fishery at the mouths of the Skeena & Nass systems, a growing recreational fishery both in tidal and non-tidal waters, an aboriginal fishery for food, social, and ceremonial purposes, and an Excess Salmon to Spawning Requirements (ESSR) fishery conducted on surplus stocks by all four tribal groups.

### 1.6.1 Commercial

Net - Pre-season expectations are developed from brood year escapement figures, anticipated survival rates, and sibling age-class relationships. The in-season fisheries are managed according to abundance, catch rate in the commercial fishery, and escapement as monitored by test fisheries in the Nass and Skeena Rivers above the commercial fishery area. The fishery is also managed to protect non-target species such as coho and steelhead in the main systems, and coastal pink and chum. The fishery is controlled by varying closed times and areas and varying mesh sizes of gillnets. A steelhead conservation program is in place which requires that a fish revival tank be maintained on the fishing vessel as a condition of licence.

There is a fixed management plan set for the Area 4 fishery, based on targeted harvest rates for steelhead, early steelhead, early coho, and sockeye. This plan is agreed to by all sectors in the SWC process.

Troll - Troll fishing plans are subject to the Canada/US Pacific Salmon Treaty, a gear allocation, and to local stock conservation requirements. It is a highly controlled "common property" fishery that targets on passing stocks, with a north coast allocation for chinook, a coastal allocation for Fraser River-bound sockeye, time and number limits on pinks in the A-B line strip, and specific conservation closures in designated areas. Gear and minimum size limits apply for the purposes of conservation, limiting the catch efficiency, and optimizing the value of the catch. In-season actions include a weekly teleconference with the troll fleet, with the intention of extending the fishing season as much as possible without risking over-harvest of any species, such as by minimizing catch of Quota species (ie chinook red-line closure).

#### 1.6.2 Recreational

Tidal: The recreational (sport) fishery on a whole is managed on the principle that fish stocks are a common property resource. The fishery is regulated by use of a licensing regime, daily/annual/possession and size limits and open/closed areas. There is a catch ceiling of 42,000 chinook salmon in tidal waters (not including terminal exclusion areas) of the North Coast. This catch ceiling has not been reached in any year since its inception based on catch information received.

Non tidal: This fishery is managed on a similar concept to the tidal fishery (common property resource) with access to all people. Management regimes implemented in this fishery centre around the use of licensing mechanisms, daily and annual catch limits, possession limits, size limits, and closed times and areas to protect spawning or weak stocks. Gear

and bait restrictions and boating restrictions are also enacted on river systems where such measures are deemed necessary. The Province of B.C. limits angling effort on some freshwater river systems using special classified waters and angling guide regulations. Regulations enacted to manage non tidal sport fisheries are made under the Federal Fisheries Act and the Provincial Wildlife Act.

### 1.6.3 Aboriginal

The management style for these fisheries is in constant evolution and is specific to location, fishery and band. Generally, aboriginals are being encouraged to take an active role in the management of their fisheries, from determining stock status and setting allocations through to the actual monitoring and control of the aboriginal fishery. This is done in conjunction and consultation with DFO personnel, particularly the Skeena/Nass Management Coordinator. The legislative control of the fishery rests with the Aboriginal Communal Fishing Licences Regulations, and the issuance of communal licences for each band or tribal authority. These licences stipulate the requirements for all aspects of the fishery.

## 2 RETROSPECTIVE ANALYSIS

There are a number of salmon fisheries within the scope of the North Coast Salmon Management Plan. These fisheries can be summarized and categorized into the following broad groups:

- i) Aboriginal
  - Food, social, and ceremonial; tidal and non-tidal.
- ii) Commercial
  - Gillnet and seine net; tidal
  - Troll; tidal.
- iii) Recreational
  - Tidal and non-tidal.

iv) ESSR                      o                      Non-tidal

2.1 Aboriginal

Aboriginal fisheries for food, social, and ceremonial purposes are conducted in tidal waters of Areas 3, 4, and 5, coastal systems, and the lower portion of the Skeena system by the Tsimshian group of bands. In the middle portions of the Skeena, the Gitksan and Wet'suwet'en groups conduct their fisheries. On the upper reaches of the Skeena watershed, the Nat'oot'en people, as well as Takla Lake and others, fish. On the Nass, the Nisga'a conduct their fisheries. The Gitanyow fish in both the Skeena and Nass systems (particularly at the Meziadin fishway), claiming territory that overlaps both watersheds.

All these fisheries are conducted through the communal licensing system.

2.2 Commercial

The Skeena fishery involves multiple stocks of all salmon species. Since 1994 the management regime has been designed to reduce the harvest rates on summer run steelhead and early coho stocks from the upper Skeena drainage, while attempting to maintain the sockeye harvest rate. This has been implemented through the fixed management plan introduced with the SWC.

The Nass gillnet and seine fisheries harvest multiple stocks of all salmon species. The current management regime in the outer portion of Area 3 is driven by abundance of Skeena and Nass sockeye and pink, while the inside fisheries are based on Nass sockeye and pink.

The Grenville Principe (Management Area 5) fishery is driven by Skeena sockeye and pink stocks during the June to early August and by local pink and chum stocks from early August through September.

The conduct of the commercial fishery for the Skeena River is governed by summer coho and steelhead harvest rates and weekly sockeye and pink escapement targets, implemented through the fixed management plan. The weekly targets are used to provide appropriate escapement to the various stocks that move into the Skeena River during the period of June through August.

The commercial fishery for the Nass area is governed by annual and weekly sockeye and pink escapement targets for the Nass and Skeena stocks respectively. The weekly targets for Skeena stocks are used to provide appropriate escapement to the various stocks that move through the outer Nass area during the period of June through August.

In-season forecast modifications occur on a continual basis. The in-season Area 3, 4 & 5 catches and escapements are compared to the historic catches and escapements as outlined in the section below. Based on this comparison, the run size is modified where necessary and fisheries may be adjusted with consideration given to the estimated harvest rates of coho and steelhead.

In addition to weekly management decisions there is a need to decide on extensions for the commercial fishery on a daily basis during each fishing week. Decisions are based on information used to make weekly decisions. This information is obtained from the following sources.

- escapement
  - Skeena River test fisheries (historical data);
  - Nass fishwheels, used in 1994 to replace the test fishery data;
  - Area 3, 4 & 5 coastal pink escapements (historical data).
  
- catch CPUE
  - Alaska Commercial
    - District 104 seine
    - District 101 gillnet



- Canadian Commercial
  - Area 1 seine
  - Area 3 gillnet and seine
  - Area 4 gillnet and seine
  - Area 5 gillnet and seine
- Native Food Fishery
  - Port Simpson gillnet
  - Skeena Tidal gillnet
  - River gillnet
  - Kincolith gillnet

The decision making process for weekly and daily management is typically a field driven process. Field data in the form of catch and escapement information is forwarded from the field directly to management coordinators. The timely transfer of this information is crucial to fisheries management decisions.

Management decisions virtually always change the pre-season expectations on both stock sizes and fishing patterns, with the exception of the fixed Area 4 fishing plan established through the SWC process. Enforcement plans are based on pre-season expectations. Accordingly, when management decisions vary the pre-season plans, there is a corresponding change to the enforcement requirements for each fishery. The in-season linkage between management actions and enforcement actions rests with the Chiefs of Fisheries Management and Conservation and Protection.

### 2.3 Recreational

Opportunities for recreational fishing for a variety of species are available all year. Sportfish closures are implemented in tidal and non tidal waters during specific periods each year to protect certain fish stocks during sensitive periods in their life cycles. Management is centred around the use of daily, annual, and possession catch limits, and limits on size of fish where appropriate. Management measures also include the use of regulations governing the type and

kind of sportfishing gear that may be used to harvest fish for recreational purposes. Specifics with respect to catch limits, fishing times, and fishing gear are outlined in the tidal and non tidal recreational fishing synopsis.

Proposed changes to existing management regimes are reviewed in consultation with local advisory committees in the Skeena/Nass River watersheds and the North Coast Co-management committees prior to implementation.

Catches of chinook salmon in tidal waters (not including terminal exclusion areas) are applied to the North Coast chinook allocation for the sportfishery of 42,000 fish. This domestic allocation is a portion of the 263,000 chinook limit that Canada implemented to fulfil obligations with respect to the chinook salmon rebuilding program under the Pacific Salmon Treaty. Management of the recreational fishery is designed to minimize impact on aboriginal food fisheries.

Sportfish catch and effort information is required to develop balanced and effective management regimes. Information is obtained through the use of catch logbook programs, 'on grounds' hauls, and creel census surveys wherever possible. A tidal water creel survey program will be carried out in Area 4 waters in 1995. A freshwater (non tidal) creel survey will also be carried out in the lower reaches of the Skeena River in 1995. Close liaison with local area DFO staff from the Conservation and Protection and Fish Management Sector is required.

## 2.4 ESSR

In 1995, as in the past three years, an ESSR fishery is anticipated on the Skeena system, and possibly on the Nass, if a surplus develops. The numbers of harvestable surplus on the Skeena could be 150,000 sockeye and 150,000 pink salmon. The agreement to harvest surplus fish for sale is made with the Skeena Fisheries Commission (SFC). This ceiling is sub-allocated by the SFC to the three tribal groupings of Tsimshian, Gitksan - Wet'suwet'en, and Nat'oot'en. These fisheries are designed to harvest only surplus fish;

therefore, harvest methods are by selective gear only. This selective gear takes the form of beach seines, fish wheels, fish traps, and the Babine fence. Monitoring for catch taken to date is conducted by aboriginal guardians and Fishery Officers.

### 3 STOCK STATUS

#### 3.1 Prospects for 1995

Pre-season expectations for the Skeena, Nass, and related coastal systems are developed for sockeye and pink salmon stocks using brood year escapements and the historical average return for each spawner, modified to reflect recent year production trends. The expected abundances are used as input into management models, and as a basis for the negotiation and consultation process with the various user groups.

##### 3.1.1 Sockeye Salmon

Sockeye stocks in the area are among the largest in British Columbia producing, in recent years, an estimated average harvest of 1,600,000 sockeye. Seven sockeye stock groupings, each with discrete run timing, have been identified on the Skeena system. The Nass has one stock grouping. Nass sockeye escapements and production have been highly variable, but the overall trend is stable or increasing in recent years. Production and escapements in recent years have been exceptionally high. In addition, there are a few small coastal systems, primarily in Area 5, that produce sockeye. Spawning escapement goals for the area are 1,270,000 sockeye.

In 1995 more than 4.0 million sockeye are expected to return, resulting in a commercial net catch of 2.0 million sockeye.

### 3.1.2 Coho Salmon

Summer run Skeena coho are currently in a depressed state, and have been the subject of conservation measures for the past four years. Reasons for low levels of Skeena coho are uncertain, but are thought to include poor survival and over harvesting. The status of Nass River coho stocks is uncertain.

Coastal coho run timing is later, and the net fisheries have not impacted them to a great degree. Due to the later timing, with runs coinciding with swollen, muddy streams, stock status is unknown, but thought to be better than early timing stocks.

Forecasts of return are not done for coho.

### 3.1.3 Pink Salmon

Areas 3, 4, and 5 pink stocks are among the largest in British Columbia producing, in recent years, an estimated average harvest of 4,300,000 pink salmon. The spawning escapement goals are 1,625,000 pink salmon.

Nass, Skeena and coastal pink stocks increased during the early 80s to 90s time period but pink abundances have recently declined significantly due to poor survivals. The 1995 pink return is forecast to be 2.4 million. It should be noted that although some of the major stocks continue to produce large returns, there can be conservation concerns for some stocks, for example coastal pinks when overwintering conditions have been poor. Ten separate stocks produce the bulk of the pink production. Our current level of knowledge only allows for management of broad stock aggregations. There is, however, an increased awareness of the necessity to maintain diversity within species and a clear direction to move towards more stock specific management.

In 1995 a commercial net catch of 1.0 million pink is forecasted.

### 3.1.4 Chum Salmon

The Skeena & Nass area is not a large chum salmon producer, with only occasional fisheries targeting on these species - most catches are incidental to fisheries targeting on other species. Conservation concerns exist for most stocks and production is well below historical levels. The catch is frequently composed of stocks which spawn outside the area.

### 3.1.5 Chinook Salmon

Skeena chinook are the second largest wild stock grouping in British Columbia. Many of the earlier timing stocks, for example in the Kitsumkalum River, have responded positively to conservation commitments made under the Pacific Salmon Treaty. Other stocks, such as the Bear River, appear to have not recovered as well and remain at lower levels.

### 3.1.6 Steelhead

There are many stocks of steelhead that spawn throughout the area. There is very little hard data available to substantiate steelhead stock status; however, the data that does exist, coupled with anecdotal information, suggests that Skeena and Nass steelhead numbers have been highly variable over the past ten years, ranging from the highest years on record in 1985 and 1986 to some of the lowest years on record in the early 1990's. The reasons for low steelhead abundance are not well understood, but are thought to include poor survivals related to flooding and freezing, poor ocean survivals and over harvesting. In general, steelhead stocks throughout the coast are at low production levels.

## 3.2 Post-Season and In-Season Assessment Information

In-season estimates of run strength are derived from commercial and native catch and escapement monitoring programs in both the Nass and Skeena areas.

In both the Nass and Skeena, in-season catch information is collected by a combination of DFO and charter patrol vessels on a daily basis throughout the season.

In-season sockeye escapement information for Nass sockeye is provided from fish-wheel mark recovery programs conducted in a cooperative program with the Nisga'a. The Skeena daily sockeye and pink escapement estimates are provided through the Skeena gillnet test fishery program which has been operating since 1955.

Pink salmon escapement information for the Nass and coastal Skeena stocks is collected on a weekly basis, beginning in mid-July, by DFO fishery managers and charter and DFO patrol vessel crews. Escapement of chum, chinook and coho for coastal Nass and Skeena stocks are collected throughout the season by DFO and charter patrolmen.

Assessments of in-season stock size are made from three sources of information:

- 1) The gillnet CPUE for sockeye are compared against the historical CPUE-stock size relationship to provide weekly sockeye run size estimates,
- 2) The Skeena model is used to estimate sockeye run size using known catch and the model harvest rates to calculate escapement and sockeye run size estimates,
- 3) The Skeena test fishery escapement information provides an additional estimate of escapement that is combined with catch information to provide a run size upgrade.

Additional research is underway to incorporate (as a pilot in 1995) a Bayesian approach to combine all sources of information and provide a best estimate from all data sources.



Post-season assessment consists of aerial, boat and foot surveys of as many of the major salmon producing systems as budgets permit throughout the Nass and Skeena watersheds and coastal areas. These assessments have been conducted by DFO fishery managers, C&P, SEP, STAD, charter patrolmen and AFS peoples.

### 3.3 Environment and Habitat

Habitat in these systems are relatively pristine. There has been some logging, mining and other industrial activity, as well as some urban development.

### 3.4 Species Interaction

Incidental harvests of non-target salmon species and other species of fish, mammals and birds occurs during net fisheries targeting on sockeye, pink and occasionally chum salmon. In the Skeena/Nass region the most controversial has been the bycatch of coho salmon and steelhead trout.

Recently, significant changes have occurred in the conduct of the Area 4 net fisheries to reduce the incidental harvest of the above mentioned species primarily by reducing fishing time and increasing area closures. Gear modifications have also been considered but require additional assessment before being implemented.

### 3.5 Research

Research in the Skeena area has increased significantly in recent years funded mainly through the Skeena Green Plan. Efforts are concentrated on coho, steelhead and chinook conservation and management issues related to productive potential and stock status.

Sockeye research is concentrated in the areas of:

Stock ID programs including DNA and electrophoretic baseline and test fishery sampling programs to improve our capacity for assessment and stock specific management.

Run reconstructions and test fishery evaluation programs to improve assessments of inseason run size and stock productive capacity.

Sockeye Lake rearing capacity evaluations to reveal the productive capacity and stock status of the Babine and a sampling of the other Skeena sockeye producers.

Coho Research is concentrated in the areas of:

Stock ID programs including DNA and electrophoretic baseline and test fishery sampling programs to improve our capacity for assessment and stock specific management.

Coho juvenile surveys, habitat evaluations, escapement and tagging programs to evaluate productive capacity and stock status.

Coho exploitation rate indicators to clarify the harvest patterns and impacts on upper Skeena coho.

Chinook research is currently concentrated on chinook stock ID baseline collection.

DFO also is cooperating in a series of steelhead research programs in concert with the Province including observer and radio-tagging programs.

#### **4 BIOLOGICAL AND MANAGEMENT OBJECTIVES**

##### **4.1 Conservation and Sustainability**

Specific biological objectives have not been formally set for Skeena stocks. Fisheries directed on Nass and Skeena salmon stocks are conducted to harvest surplus target species/stocks while at the same time minimizing the impacts on the non-target species/stocks. Time and area closures and gear modifications are the actions most often utilized to address the incidental harvest of non-target species/stocks.

## 4.2 International Considerations

The signing of the Pacific Salmon Treaty in 1985 between Canada and the United States resulted in the initiation of management restrictions for several Pacific coast fisheries to control interceptions of the other countries salmon stocks.

With respect to Nass and Skeena salmon stocks the Canadian Area 1 pink troll and outside Area 3 pink net fisheries are restricted to limit interceptions of Alaskan pink salmon. These fisheries are major harvesters of Nass and Skeena pink stocks and under certain run sizes the desired harvest of these stocks could be adversely affected.

The SE Alaskan net and troll fisheries in Districts 101 through 106 are major harvesters of Nass and Skeena salmon stocks of all species. Specific treaty restrictions apply only to the District 101 gillnet and District 104 seine fisheries for sockeye alone - District 104 provisions have expired, and are currently being renegotiated. Interceptions of Nass-Skeena sockeye continue to increase, however they are significantly less than if there were no treaty.

## 4.3 Domestic Considerations

### 4.3.1 Aboriginal

The aboriginal fisheries directed on Nass and Skeena salmon stocks are presently co-managed by DFO and the various bands in a manner such that the negotiated harvest allocations of "section 35" fish by species are achieved unless conservation concerns are present for a particular species or stock. In some instances more selective harvest techniques are being developed in attempts to address incidental harvest concerns.

#### 4.3.2 Recreational

The primary objective of management of the recreational fishery directed on Nass and Skeena salmon stocks is to provide maximum angling opportunity for anglers with a reasonable expectation of catch. Retention of catch within a daily/possession limit regime will be provided in sportfisheries directed on stocks with surpluses available. Catch and release management regimes are provided in sportfisheries directed on salmon stocks with very small or no surpluses available. Management of tidal and non tidal sportfisheries is undertaken between DFO and the recreational fishing sector in a 'co-management' atmosphere with important management decisions reviewed in consultation with sportfishing representatives.

#### 4.3.3 Commercial

The primary objective of the commercial fisheries directed on Nass and Skeena sockeye and pink salmon is to annually attain the maximum allowable harvest of these stocks while reducing the harvest rate on non-target species to levels they can withstand. Steelhead and coho stocks have been the main stocks of concern and have resulted in significant actions being implemented in both the net and troll fisheries.

### 5 MANAGEMENT ISSUES

#### 5.1 By-Catch

The significant by-catch issues in the commercial fisheries are early run steelhead and coho. Due to the very poor recent returns of these species, the Skeena Watershed Committee (SWC) was formed to address management measures for the various fisheries occurring on these stocks. The SWC is a consensus based committee comprised of representatives from the three user groups - commercial, recreational, and aboriginal - as well as DFO and the Province. In 1994 an agreement was reached on the commercial

fishing plan for Area 4, which was designed to address reductions in harvest rates for these two species.

## 5.2 Aboriginal Fisheries

These fisheries are controlled by communal licenses drafted by Aboriginal Fisheries Sector and issued by the Conservation and Protection sector. The main issue that will arise in the Skeena and Nass area is the very controversial fishery at Moricetown. At the time of this writing, an attempt was being made through negotiation to establish some restrictions on the gaffing that occurs here.

## 5.3 Opening Dates

The communal and recreational fisheries proceed all year long. The ESSR fishery openings will depend upon surplus stocks being identified in-season, which will be determined by the Fish Management and Stock Assessment biologists. The first commercial gillnet fishery in Area 4 is scheduled for June 6.

## 5.4 Allocation

Specific catch allocations presently exist for the different gear types within the commercial sector for Areas 1 to 5 and between the three aboriginal groups (Nat'oot'en, Gitksan-Wet'suwet'en and Tsimpsean) in the Skeena and is presently being negotiated between the two aboriginal groups (Nisga'a and Gitanyow) in the Nass for ESSR fisheries. There is no official allocation between the different user groups.

With respect to Nass and Skeena sockeye and pink stocks there is an allocation arrangement between seines, gillnets and trollers determined pre-season by CFIC. A percent of the harvest of these two species is assigned to each gear type which is then managed to in-season by DFO managers.

The aboriginal allocations on the Skeena are based on an equal sharing relationship between the three groups and may vary

depending upon how large the identified surplus of sockeye is. For pink salmon in the Skeena there is usually a sharing arrangement established pre-season between the Tsimpsean and Gitksan-Wet'suwet'en.

## 5.5 Treaties

There are no treaties between aboriginal groups on the Skeena or Nass systems and the Government of Canada.

The Pacific Salmon Treaty impacts the commercial pink fishery in Areas 3 and 5. However, there is not expected to be any agreement between Canada and the United States on management regimes for 1995.

## 6 MANAGEMENT MEASURES

### 6.1 Allocations

In order to achieve the allocations as determined pre-season, fisheries for each gear type may be adjusted in time or areas to speed up or slow down their catch rate of a particular species. In the case of pink salmon the allocation between seines and gillnets is rarely achieved due to low numbers of vessels of a particular gear type or due to an inability of the gillnet sector to catch pinks as fishing time is very limited in August.

At this point in time there is no official policy as to the catch sharing arrangement between the different user groups.

### 6.2 Changes from last plan

The 1995 commercial and recreational fisheries remain virtually unchanged from 1994, due to an agreement reached at the SWC to establish a three year fishing plan for Area 4, in order to lend stability to the commercial sector. Some dates have changed, but the time allowed for fishing remains similar.



Consultation for the Aboriginal fisheries is on-going.

### 6.3 Control and Monitoring of Fishing Activities

Control of all fisheries will be by variation order and accompanying Public Notice. Conservation and Protection will be tasked with completing these documents. Monitoring of fishing activities will be a joint effort. In general, in the commercial net fisheries, charter patrol vessels, directed by the management coordinator, will take the lead role, with Fishery Patrol Vessels obtaining hailed catch figures occasionally. Enforcement monitoring will be directed by Conservation and Protection, with participation of the Fishery Patrol Vessels and Charter Vessels. In inland fisheries, catch monitoring on the communal and ESSR fisheries will be conducted by the native bands involved, and enforcement monitoring will be done jointly by Conservation and Protection and the AFOs that are being trained in 1995.

### 6.4 Harvesting Plan

The harvesting plan for Area 4 will be developed in the SWC process, to be finalized near the end of May. Harvesting plans for the other fisheries are developed as outlined in sections 1.5 and 1.6.

### 6.5 Licensing

Commercial and communal fisheries are licensed according to regulation, and is not expected to be an issue in 1995. The ESSR fishery may be licensed through a communal licence this year.

### 6.6 Key Regulations

The key regulations used to manage and control the fisheries are outlined in section 7, Enforcement Issues and Measures, and specifically in the tables attached to that section.

## 6.7 Contingencies

Contingency plans have been developed to respond to: run sizes other than predicted, poaching and illegal sales, conservation concerns, and protest fisheries.

### 1. Status quo

Management decisions will be made as outlined in this plan. Decisions about native fisheries will be made based on recommendations from the Skeena Technical Committee, unless the committee is unable to reach consensus in which case the matter will be decided by DFO.

### 2. Sockeye run less than predicted

The sockeye runs have been maintained at relatively stable, high levels over the last decade, and a shortage of surplus sockeye (at the level of the current aboriginal surplus fishery) is expected to occur less frequently than 1 in 10 years.

The run size information provided will be reviewed weekly by the Skeena/Nass Management Coordinator liaising with the appropriate representatives of the Skeena Technical Committee. The in-season management model will be used to evaluate the magnitude of any surplus of enhanced stocks. If no surplus is identified, then there will be no ESSR fishery on the Skeena River in 1995.

A sockeye abundance so low that the traditional aboriginal fisheries would be affected is very unlikely. Since all conceivable scenarios would result in a commercial harvest prior to the fishery being closed, the traditional aboriginal fisheries would not be curtailed except for the extreme circumstance of a clear conservation emergency.

### 3. Run more than predicted, additional surplus

An algorithm will be developed to predict additional surplus which could be available for harvest at the Babine Fence if this is part of the Allocation Agreement(s). If, in-season, predicted enhanced surplus is between 200 and 500,000, management uncertainty could be mitigated against by limiting harvest to 50% of surplus. If surplus is predicted to be over 500,000, all additional surplus could be available for harvest. This will be reviewed and developed in the Skeena Technical Committee and will include some sharing arrangement between the groups.

### 4. Sale outside of agreements

Sale outside of agreements has taken place on the Moricetown reserve at roadside stands and at the Gitsegukla reserve for processing plants, as well as other operations. Conservation and Protection staff are planning to conduct a number of operations on these on-going problems.

### 5. Coho conservation problem

The Area 4 management plan is designed to curtail the harvest rate on coho and steelhead. If a further problem is identified through monitoring catch data and the test fishery, a request may be made to curtail the food, social and ceremonial fishery upriver. This has happened in the past and has generally been accepted by the affected communities.

## 7 ENFORCEMENT ISSUES AND MEASURES

### 7.1 Strategic Enforcement Plan

A proper resource mix will be integrated into the management plans in 1995 to enhance DFO's ability to maintain control of all fisheries. This will include Fisheries Patrol Vessels, Charter Vessels, air surveillance, vehicles and Fishery Officer operated boats.

- Fishery Patrol Vessels will be deployed by C&P sector to maintain orderly control of fisheries. They will be chiefly responsible for enforcement activities, openings and closures, boundary patrols, close time patrols and licensing compliance. There will also be a requirement for collection of in-season catch data and stream enumeration work.
- Charter Patrol Vessels will be deployed by Fisheries Management sector. They are used to augment the FPV fleet and are chiefly employed for stock assessment [in-fishery hauls], stream enumerations and for Observe, Record and Report [ORR] enforcement.
- Air surveillance will conduct opening and closure patrols, closed time and area patrols, fleet enumeration, stream enumerations and deployment of human resources. Both Fisheries Management and Conservation and Protection will have a flying budget, and both will liaise closely with each other when a flight is planned, in order to maximize our effectiveness.
- Fishery Officer operated vessels, consisting of rigid hull inflatables, jet boats and skiffs, will be deployed from FPV's or from land based facilities, in several geographic areas. The small boat fleet is used mainly for short periods for conveyance of Fishery Officers to allow for faster and greater coverage of an area while performing monitoring and enforcement activities.
- Vehicles will be used for conveyance of Fishery Officers for monitoring ports, designated landing sites and fishing sites in communal, sport and commercial fisheries. Vehicles which are outfitted with emergency equipment will conduct vehicle checks and may be called upon to assist in road blocks.
- Special Operations will be organized as required to maintain control of illegal activities. This may result in redeployment of key staff and some equipment.

## 7.2 Commercial Net

### 7.2.1 Overview

The Area 3, 4, and 5 fishery occurs in a very large area, stretching from the Alaskan boundary down to the top end of Banks Island. Usually, throughout the season, all three areas open and close concurrently. At times throughout the season, some Areas or Sub-Areas may open or close at a different time than Area 4, making boundary patrols important.

Enforcement flights are conducted at the start of every opening. These flights also count the boats in the area. The timing of these flights should be coordinated to put the plane over the Skeena River right at the opening, with Officers in skiffs on the water ready to respond to any sightings of early sets. Another very high use area, where infractions can occur frequently, is off Smith Island in 4-12.

The steelhead conservation program is very controversial and is seen by the commercial fleet as an allocation conflict (conserving steelhead for up-river recreational fishers) as opposed to a conservation concern. A shutdown of the Area 4 River/Gap/Slough for steelhead conservation in 1993 provoked a protest in Prince Rupert that had wide-spread support from the local community. Protests culminated in the blocking of DFO facilities in Prince Rupert and a protest fishery held under the guise of an Aboriginal food fishery. Fish were distributed free of charge to Prince Rupert locals. This is an ongoing controversy and has the potential to flare again in 1995.

Other issues that are addressed on an on-going basis are:

- a) monitoring closed times/ closed areas.
- b) checking gillnet mesh, depth, and length.
- c) checking seine net mesh, length and depth.
- d) checking number of gillnets per vessel.

- e) checking marking of vessel and gear.
- f) checking of "steelhead boxes".
- g) checking personal and vessel licences.
- h) monitoring A-B line (Area 3)
- i) monitoring tidal/non-tidal boundaries (Nass, Skeena)
- j) introduction of Sec. 35 (Aboriginal) fish into commercial fishery (caught by aboriginal owned commercial vessels prior to fishery or trucked down from inland areas).
- k) fishers/packers/processors failing to record steelhead landings.
- l) packers/processors dumping unwanted fish (ie pinks, steelhead).
- m) illegal export of Canadian caught salmon to U.S.
- n) compliance levels

Aboriginal Section 35 fisheries: Intention will be to ensure harvest does not conflict with commercial fisheries resulting in opportunity for sale of fish caught for food, social, or ceremonial purposes. To this end, section 35 tidal water fisheries will close 24 hours prior to a commercial fishery and re-open 12 hours after the conclusion of that fishery. Control will be maintained through both the timing of the aboriginal fishery and checks of fish holds prior to openings.

## 7.2.2 Main Program Activities

Pre- and post-opening patrols of fishing area by rigid-hulled inflatable boats (RIB), Fishery Patrol Vessels (FPV), and airplane will be conducted to monitor closed times. Pre-opening boardings are to be made to inspect for Aboriginal fish. Boardings will occur during fishery to check licence documents, "steelhead boxes", gear and vessel marking, and net measurements. Patrols by boat and plane during the fishery will monitor closed areas. Offloading at plants will be monitored to determine accuracy of sales slips re: steelhead. Surveillance and roadblocks will be used to intercept Aboriginal fish. A-B line will be patrolled by plane and vessel during fisheries.



### 7.2.3 Enforcement Resources

Person Years:	1.13
Salary Dollars:	\$45,200
Overtime Dollars:	\$10000
O & M Support Dollars:	\$8000.

Sea Days: Four patrol vessels will be required in Area 1 from June 15 to Oct. 1, 1995. The vessels must be tasked to enforcement and accommodation for F/O's will be required. These vessels will be working the closed areas or possibly other fisheries in the area when there are no salmon net openings.

Charter Vessels: Up to 11 charter patrol vessels have been employed in covering this very large area. Number of charter vessels in 1995 depends on budgets. Charters are important to enforcement programs because they conduct hails, taking the pressure off of FPV's to do this management oriented task, and they lend a DFO presence on the grounds, resulting in preventative enforcement. They participate actively in ORR.

Air Hours: Three hours of air surveillance are required each week for this fishery. Total cost of these flights will be \$10,000.00.

### 7.2.4 Enforcement Plan Evaluation Criteria

- a. Number of incident reports
- b. Number of vessels checked
- c. Number of boardings (at sea / dockside)
- d. Number of dockside checks
- e. Number of persons checked
- f. Number of plant inspections
- g. Number of closed area vessel sightings
- h. Number of sightings of illegal gear
- i. Number of seizures of illegal gear
- j. Number of violations (by type)
- k. Number of written warnings given (by type)

- l. Number of charges laid (by type)
- m. Number of prosecutions and penalties
- n. Number of patrols by type
- o. Number of sanctions and penalties
- p. Number of violations detected as a result of vessel patrols
- q. Number of violations detected as a result of air patrols
- r. Feedback from Fishery Officers
- s. Feedback from advisory groups
- t. Media coverage

### 7.3 Commercial Troll

#### 7.3.1 Overview

Enforcement of this fishery will concentrate on patrols of closed areas. It appears that all of Areas 3 and 4, as well as 103 and 104 for a large part of the year, will be closed except in areas and times that commercial net openings are occurring.

#### 7.3.2 Main Program Activities

Enforcement flights, in conjunction with patrols of closed areas, will be conducted during the troll season. One flight per week of all the areas, using a flight plan that will cover most of the common fishing areas, will be conducted.

#### 7.3.3 Enforcement Resources

Person Years:	0.08
Salary Dollars:	\$3200
Overtime Dollars:	\$2,000
O&M Support Dollars:	\$2,000

Sea Days: Four FPV's will be patrolling areas 3, 4, and 5 throughout the summer months. A large HQ vessel (Tanu or

James Sinclair) will be tasked to this fishery, to be shared by other northcoast areas for the duration of the salmon season.

Charter Vessels: Up to 11 charter patrol vessels have been employed in covering this very large area. Number of charter vessels in 1995 depend on budgets. Charters are important to enforcement programs because they lend a DFO presence on the grounds, resulting in preventative enforcement. They participate actively in ORR.

Air hours: Requirements for flight monitoring of closed areas will be met by combining flights used for other fisheries. One flight on a call-out is expected. Total flight costs will be \$1000.

#### 7.3.4 Enforcement Plan Evaluation Criteria

- a. Number of incident reports
- b. Number of vessels checked
- c. Number of boardings (at sea / dockside)
- d. Number of dockside checks
- e. Number of persons checked
- f. Number of plant inspections
- g. Number of closed area vessel sightings
- h. Number of sightings of illegal gear
- i. Number of seizures of illegal gear
- j. Number of violations (by type)
- k. Number of written warnings given (by type)
- l. Number of charges laid (by type)
- m. Number of prosecutions and penalties
- n. Number of patrols by type
- o. Number of sanctions and penalties
- p. Number of violations detected as a result of vessel patrols
- q. Number of violations detected as a result of air patrols
- r. Feedback from Fishery Officers
- s. Feedback from advisory groups
- t. Media coverage

## 7.4 Recreational Fishery - Tidal

### 7.4.1 Overview

The main enforcement concerns are:

1. Conservation and allocation of chinook salmon.
2. Conservation of coho.
3. Conservation of halibut and groundfish
4. Conservation of shellfish, including crabs and abalone.
5. Licensing.

### 7.4.2 Main Program Activities

Patrols by boat will be started in February when the winter chinooks are present, the frequency depending on effort and weather. The frequency of these patrols will increase during April and May, when the effort increases dramatically and the lodges/charters start operating. Patrols will be conducted during evenings and weekends at docks and ramps throughout the area, particularly at Rushbrooke floats and the boat ramp at Port Edward, as a large portion of the local fishermen return at this time. Also, time will be spent checking sport fishermen during the commercial net season (July/Aug.). In the past F/O's have been busy running net fisheries and have had little time to monitor the sport fishery. Enforcement checks at the sea-plane base in Prince Rupert are worthwhile to ensure catch limit compliance of clients coming from the different lodges in the area. Checks of local campgrounds during the tourist season will be conducted to check for processing. Patrols of local beaches during low tides will enforce PSP Closures. Also some joint patrols with the local RCMP are useful when dealing with people who are operating vessels under the influence of alcohol. Joint patrols and information sharing may be conducted with Customs and Immigration re: U.S. charter operators.

### 7.4.3 Enforcement Resources

Person Years:	0.5
Salary Dollars:	\$20,000
Overtime Dollars:	\$4,000
O&M Support Dollars:	\$2,000

Sea Days: Fishery Patrol vessels may be utilized in February and March to conduct a few sport fish patrols. These patrols could be combined when doing other patrols on shellfish, herring and the trawl fishery (10 Days). RIB's may be used once a week for local patrols (60 days).

Later in the season when this fishery expands, dedicated patrols will occur more frequently. FPV's will conduct patrols of more remote locations when not engaged in commercial net fisheries (30 Days). F/O's may conduct RIB patrols twice a week (150 days).

Charter Ships: In the past no dedicated charter patrol vessels have been utilized in this fishery. Charter Patrolmen monitor recreational fishery on an intermittent basis between monitoring commercial net fisheries and stream assessment. Increased monitoring by charter vessels will assist Fisheries Management in obtaining catch data.

Air hours: Requirements will be minimal. Total dedicated resources are \$1,600.

### 7.4.4 Enforcement Plan Evaluation Criteria

- a. Number of incident reports
- b. Number of vessels checked
- c. Number of boardings (at sea / dockside)
- d. Number of dockside checks
- e. Number of persons checked
- f. Number of seizures of illegal gear
- g. Number of violations (by type)
- h. Number of written warnings given (by type)

- i. Number of charges laid (by type)
- j. Number of prosecutions and penalties
- k. Number of patrols by type
- l. Number of sanctions and penalties
- m. Number of violations detected as a result of vehicle patrols
- n. Number of violations detected as a result of vessel patrols
- o. Number of violations detected as a result of air patrols
- p. Feedback from Fishery Officers
- q. Feedback from advisory groups
- r. Media coverage

## 7.5 Recreational Fishery - Non-tidal

### 7.5.1 Overview

Patrols of rivers and streams throughout the area will be conducted to ensure public awareness, conservation of protected species, and compliance of all applicable sportfish restrictions.

### 7.5.2 Main Program Activities

High profile, uniformed patrol of streams and lakes by boat, vehicle and foot will be conducted randomly throughout the week, including evening and early morning patrols. Checks of campgrounds to check possession and processing, and of airports for possession and documentation, will occur. Joint patrols with RCMP and especially B.C. Conservation Officers, to address non-Fisheries concerns and to increase manpower, will be conducted. Plainclothes patrols and long distance surveillance to curtail offenses easily hidden when a uniformed officer is on scene, multi-agency roadblocks during peak seasons to check possession and documentation, and public education programs and promotion of ORR programs are all activities that will be conducted throughout the year.



### 7.5.3 Enforcement Resources

Person Years:	1.3
Salary Dollars:	\$52,000
Overtime Dollars:	\$10000
O & M Support Dollars:	\$6000

Sea Days: Not applicable.

Charter Ships: A charter patrolman has assisted in the monitoring and assessment of sportfish efforts in some of the key producing streams within the area (particularly the Kwinimass, Kutzemateen, and Ecstall Rivers). These individuals assist in monitoring fishing activities through an observe/record/report program.

Air Hours: Total cost of flights will be \$1,600.

Requirements vary dependant on size and time of fishery and what other fisheries are occurring in the area at the same time. Generally, minimum coverage will be two officers spending two days a week on the fishery in each Field Supervisors area (Terrace and Smithers). One vehicle per fulltime officer and one for every two seasonal officers in heavily fished areas will be used. One jetboat and one or two smaller runabouts for each area with large systems. To obtain acceptable compliance levels, patrol coverage requires significant overtime, as most activity occurs outside regular working hours. Air support requirements will be minimal, but may be used for transport of enforcement personnel to remote locations.

### 7.5.4 Enforcement Plan Evaluation Criteria

- a. Number of incident reports
- b. Number of vessels checked
- c. Number of boardings (at sea / dockside)
- d. Number of dockside checks

- e. Number of persons checked
- f. Number of seizures of illegal gear
- g. Number of violations (by type)
- h. Number of written warnings given (by type)
- i. Number of charges laid (by type)
- j. Number of prosecutions and penalties
- k. Number of patrols by type
- l. Number of sanctions and penalties
- m. Number of violations detected as a result of vehicle patrols
- n. Number of violations detected as a result of vessel patrols
- o. Number of violations detected as a result of air patrols
- p. Feedback from Fishery Officers
- q. Feedback from advisory groups
- r. Media coverage

## 7.6 ESSR and Food, Social, and Ceremonial Fishery

### 7.6.1 Overview

Most issues revolve around an individual's or band's failure to comply with the terms and conditions of the communal licence. Some of the problems are:

- a) Fish w/o being designated as fisher under licence.
- b) Fail to produce or carry designation documents.
- c) Exceed personal allocation.
- d) Fish during closed time or in closed area.
- e) Use of non-authorized gear or methods.
- f) Fail to check gear on a regular basis.
- g) Fail to mark gear.
- h) Fail to submit catch data by fisher to authority.
- i) Sale of food, social, and ceremonial fish by;
  - 1) Introducing into commercial catch
  - 2) Introducing into ESSR or authorized fish for sale
  - 3) Door to door, roadside, or cash buyers.
  - 4) Organized, large scale sales (protest).

- j) Participation of non-native fishers.
- k) Claiming aboriginal privileges for prohibited commercially caught fish if checked.
- l) Fishing for unauthorized species (ie Abalone)
- m) Harvesting bivalves in contaminated area (whole North Coast is closed to harvest, except for razor clams in Area 1 and Geoduck clams where they are being monitored for PSP.
- n) Non-fisheries offenses encountered on patrol (drugs, firearms, wildlife, waste management).

In addition to above violations committed by individuals, the potential exists for enforcement against bands and tribal authorities (although this has been avoided in the past):

- a) Exceed allocation set for band.
- b) Band authorized/encouraged contravention of terms of communal licence.
- c) Failure to submit catch data or fail to provide accurate catch data.
- d) Fail to comply with side agreements of licence; ie guardian agreements.

To ensure compliance levels are maintained at an acceptable level in this fishery, the following activities will be performed:

- Consultation with the bands, tribal councils, and the Skeena Technical Committee for devising communication links and working arrangements to attain results associated with illegal activity and catch monitoring in both the Communal food, social and ceremonial, and ESSR commercial fisheries.
- Integrated patrols by various methods by DFO staff, Aboriginal Fishery officers, and Native Guardians.
- The use of Designated Landing Sites in various areas for the monitoring of catch levels in the ESSR Fishery by DFO staff and Native Monitors as agreed by joint committees.

- The use of Designation Cards to identify legal participants in all communal fisheries.
- Integration of Fisheries Patrol Vessels, charter vessels, Fishery Officer operated vessels and air surveillance to maximize monitoring and control of all commercial, sport and communal fisheries.
- Implementation of enforcement plans with joint committees that will focus on controlling buyers and arranging for prompt delivery of sales slips.
- Enforcement of the provisions of any agreements will also address unauthorized sales for the 1995 season.
- When the in-season management decisions have been approved, Conservation and Protection Sector will be responsible for ensuring Variation Orders and Public Notices are developed and posted in the affected area. Variation Orders will be used to open and close areas as required. Copies of all Variation Orders will be kept on file at the Prince Rupert office.

#### 7.6.2 Main Program Activities

These fisheries are unique in that the participants, in some of the areas, are also involved in the enforcement and control of the fisheries. On the Skeena system, there is an Aboriginal Fishery Officer pilot program being conducted in 1995. Aboriginal Fishery Officers have all the powers of a Fishery Officer when in the accompaniment of a DFO Fishery Officer.

The enforcement strategies vary widely throughout the division depending on fishery, geographic area and guardian agreement with band. Most coastal aboriginal people have access to commercial fishing equipment and fish year-round for species other than salmon. In the past, a low priority put on this fishery outside of salmon season has seriously

curtailed enforcement activities. This has led to poor or non-existent catch data. The potential for violations is high.

Some general enforcement strategies will be as follows:

- high profile patrols by boat, foot, vehicle and air of fishing grounds and landing sights.
- public information meetings with aboriginal fishers prior to and during the season by AFOs and/or DFO officers to ensure knowledge of the licence requirements.
- Public education regarding sale (and purchase) of non-authorized fish. This will be accomplished by establishing a toll free number located in Prince Rupert, relaying all the latest information about legal fish sales. The number to call is 1-800-FISH.
- Inspections of commercial vessels prior to commercial openings to deter introduction of food fish.
- Inspections of processing plants, restaurants, and stores to ensure no possession for sale of unauthorized fish.
- Roadblocks on both highways and on backroads to intercept illegal transport for commercial purposes. Conducted as a joint agency operation (RCMP, CO Service, MOT).
- Detailed investigations to ensure accurate catch data and no unauthorized sale.
- Special Operations to ensure compliance with all parts of communal licence.
- Surveillance (possibly long term or over long distance) to ensure authorized use of catch.
- Development and sharing of intelligence data by DFO and aboriginal authorities to target possible offenders.
- Development of contingency plans to deal with large scale protests and/or non cooperation by aboriginal fishing authorities.
- Development of enforceable communal licences, especially landing and transport requirements.

### 7.6.3 Enforcement Resource Requirements

Person Years:	1.0
Salary Dollars:	\$40,000
Overtime Dollars:	\$9,000
O&M Support Dollars:	\$7,000

Sea Days: Five patrol vessels will be in Areas 3, 4, and 5 from June 15 to October 1. The vessels must be tasked to enforcement and accommodation for F/O's will be required. These vessels will be working other fisheries when the aboriginal fishery is closed.

Charter Vessels: Up to 11 charter patrol vessels have been employed in covering this very large area. Number of charter vessels in 1995 depends on budgets. Charters are important to enforcement programs because they conduct hails, taking the pressure off of FPV's to do this management oriented task, and they lend a DFO presence on the grounds, resulting in preventative enforcement. They participate actively in ORR. Air Hours: Total cost of flights will be \$3,000.00.

### 7.6.4 Enforcement Plan Evaluation Criteria

- a. Number of incident reports
- b. Number of vessels checked
- c. Number of boardings (at sea / dockside)
- d. Number of dockside checks
- e. Number of persons checked
- f. Number of vehicles checked
- g. Number of Mandatory Landing Program sites checked
- h. Number of plant inspections
- i. Number of closed area vessel sightings
- j. Number of sightings of illegal gear
- k. Number of seizures of illegal gear
- l. Number of violations (by type)
- m. Number of written warnings given (by type)
- n. Number of charges laid (by type)



- o. Number of prosecutions and penalties
- p. Number of patrols by type
- q. Number of sanctions and penalties
- r. Number of violations detected as a result of vehicle patrols
- s. Number of violations detected as a result of vessel patrols
- t. Number of violations detected as a result of air patrols
- u. Feedback from Fishery Officers
- v. Feedback from advisory groups
- w. Media coverage

**CONSERVATION & PROTECTION  
ISSUES AND STRATEGIES  
COMMERCIAL NET**

PRIORITIZED ENFORCEMENT ISSUES	ENFORCEMENT TASKS	ENFORCEMENT STRATEGIES	APPLICABLE LEGISLATION	CHARGES & LICENCE SANCTIONS	PLANNED COVERAGE	ANTICIPATED RESULTS	OBSERVED RESULTS
Fish during close time	Monitor closed areas Openings & Closures	Patrol during openings closings & close time	PFR (1993) 53	Appearance Notice	Throughout season. Gn. openings June - August	100%	
Fish with gillnet longer than 375 m	Measure length	Blitz patrols Areas 3 & 4	PFR (1993) 57(1)	Appearance Notice		100%	
Fish with wrong mesh size	Measure mesh	Blitz patrols Area 4 ck. fishery	PFR (1993) 57	Appearance Notice	Gn. openings June - August	100%	
Fish with deep gillnet	Count meshes	Blitz patrols in outside areas 3 & 4	PFR (1993) 54(2)(c)	Appearance Notice	Gn. openings July - August	100%	
Fish with deep seine net	Measure depth	Seine measuring course - Prince Rupert	PFR (1993) 60(3)(b)	Appearance Notice	Sn. openings July - August	100%	
Fail to affix validation tabs	Visually observe Licence	Check during routine patrols	PFR (1993) 16(2)	Appearance Notice	June - August	95%	
Fish without licence	Boardings/Licence checks	Routine patrols	PFR (1993) 26(1)	Appearance Notice	June - August	100%	
Fail to produce licence or registration card	Boardings/Licence checks	Routine patrols	FGR 11	\$35.00	June - August	90%	

**COMMERCIAL TROLL**

PRIORITIZED ENFORCEMENT ISSUES	ENFORCEMENT TASKS	ENFORCEMENT STRATEGIES	APPLICABLE LEGISLATION	CHARGES & LICENCE SANCTIONS	PLANNED COVERAGE	ANTICIPATED RESULTS	OBSERVED RESULTS
Fish during close time	Monitor closed area	Patrol especially during June - Sept.	PFR (1993) 53(2)	Appearance Notice	June - Sept.	100%	

## RECREATIONAL FISHERY - Tidal

PRIORITIZED ENFORCEMENT ISSUES	ENFORCEMENT TASKS	ENFORCEMENT STRATEGIES	APPLICABLE LEGISLATION	CHARGES & LICENCE SANCTIONS	PLANNED COVERAGE	ANTICIPATED RESULTS	OBSERVED RESULTS
Fail to record chinook salmon catch on licence	Enforcement check	Routine Patrols with some blitzes	BCSFR 36	\$50.00	Throughout year	90%	
Fish without tidal water sport fish licence	Enforcement check	Routine Patrols with some blitzes	BCSFR 18(a)	\$50.00	Throughout year	100%	
Fail to affix salmon conservation stamp	Enforcement check	Routine Patrols with some blitzes	BCSFR 18(b)	\$50.00	Throughout year	90%	
Catch and retain more than 2 chinook salmon	Enforcement check	Routine Patrols with some blitzes	BCSFR 34(d)	\$50 + \$25 to \$100.00	Throughout year	100%	
Catch and retain more than 4 salmon in the aggregate	Enforcement check	Routine Patrols with some blitzes	BCSFR 34(d)	\$50 + \$25 to \$100.00	Throughout year	100%	
Use gear designed to catch more than one fish at a time	Enforcement check	Routine Patrols with some blitzes	BCSFR 29(1)	\$50.00	Throughout year	90%	
Angle with weight on line greater than 1 kg.	Enforcement check	Routine Patrols with some blitzes	BCSFR 28	\$75.00	Throughout year	90%	
Possess fish the species of which cannot be readily identified	Enforcement check	Routine Patrols with some blitzes	FGR 36(1)(a)	\$50.00	Throughout year	90%	
Possess fish the number of which cannot be readily determined	Enforcement check	Routine Patrols with some blitzes	FGR 36(1)(b)	\$50.00	Throughout year	90%	

## ABORIGINAL FOOD, SOCIAL & CEREMONIAL FISHERY

PRIORITIZED ENFORCEMENT ISSUES	ENFORCEMENT TASKS	ENFORCEMENT STRATEGIES	APPLICABLE LEGISLATION	CHARGES & LICENCE SANCTIONS	PLANNED COVERAGE	ANTICIPATED RESULTS	OBSERVED RESULTS
Fish without being designated	check designations	Routine patrols	ACFLR 8	Appearance notice	May - Sept	80%	
Contravene or fail to comply with condition of licence	checks during fishing activity	Routine patrols	ACFLR 7	Appearance notice	May - Sept	90%	

## RECREATIONAL FISHERY - Non-tidal

PRIORITIZED ENFORCEMENT ISSUES	ENFORCEMENT TASKS	ENFORCEMENT STRATEGIES	APPLICABLE LEGISLATION	CHARGES & LICENCE SANCTIONS	PLANNED COVERAGE	ANTICIPATED RESULTS	OBSERVED RESULTS
Exceed daily quota of fish from prescribed waters	<u>Kokanee Limits:</u> 10 kokanee only from lakes; zero kokanee from streams	Routine patrol	BCSFR 55.1(c)	\$50 + \$25 to \$100	Throughout year	100%	
Exceed daily quota of fish from prescribed waters	<u>Salmon Limits:</u> Section 55: Chinook under 50 cm: max 4; over 50 cm: max 2; coho under 50 cm: max 4; over 50 cm: max 2; pink, chum or sockeye: zero. <u>Other sections</u> Max 4 salmon in one day; min size 30 cm; max possession limit two days catch.	Routine patrol	BCSFR 55.1(d)	\$50 + \$25 to \$100	Throughout year	100%	
Exceed daily quota of fish from prescribed waters		Routine patrol	BCSFR 55	\$50 + \$25 to \$100	Throughout year	100%	
Catch and retain more than four salmon in the aggregate in one day		Routine patrol	BCSFR 56(1)(d)	\$50 + \$25 to \$100	Throughout year	100%	
Catch and retain or possess undersized salmon		Routine patrol	BCSFR 61(c)	\$40 + \$10 to \$100	Throughout year	100%	
Exceed twice daily quota of fish	<u>Monthly/Annual quotas - Steelhead:</u> Skeena/Nass: 0. Chinook over 65 cm: 10/year	Routine patrol	BCSFR 14(a)	\$50 + \$25 to \$100	Throughout year	100%	
Catch and retain steelhead from prescribed waters		Routine patrol	BCSFR 56(2)(b)	\$50 + \$25 to \$100	Throughout year	95%	
Catch and retain more than 10 chinook over 50 cm from non-tidal waters		Routine patrol	BCSFR 56(1)(b)	\$50 + \$25 to \$100	Throughout year	100%	
Use hook with more than one single point		Routine patrol	BSCFR 64	\$50	Throughout year	90%	

Possess salmon or trout roe in excess of 1 kg		Routine patrol	BSCFR 7	\$50 + \$25/kg to \$100	Throughout year	100%	
Catch or attempt to catch fish by snagging or using snares		Routine patrol	BSCFR 10(f)	\$100	Throughout year	90%	
Illegal use of net or set line		Routine patrol	BSCFR 11(1)	\$100	Throughout year	100%	
Use more than one line		Routine patrol	BSCFR 66(a)	\$75	Throughout year	90%	
Use gear designed to catch more than one fish at a time		Routine patrol	BSCFR 66(b)	\$75	Throughout year	90%	
Use gaff or net		Routine patrol	BSCFR 66(c)	\$100	Throughout year	90%	
Fail to comply with a condition of angling licence		Routine patrol	WLA 16.01	\$100	Throughout year	90%	
Fail to comply with a condition of a Non-Tidal Classified Waters Licence		Routine patrol	WLA 16.01	\$100	Throughout year	90%	
Angle without licence		Routine patrol	WLA 13(a)(i)	\$100	Throughout year	90%	
Angle without class II licence		Routine patrol	WLA 13(a)(ii)	\$100	Throughout year	90%	
Fail to produce angling licence		Routine patrol	WLA 99(a)	\$100	Throughout year	90%	
Guide angler for fish when angler does not have licence		Routine patrol	WLA 56(2)	\$100	Throughout year	90%	
Fish for or possess fish during closed time from prescribed waters		Routine patrol	BCSFR 57(1)	\$100	Throughout year	90%	
Fail to forthwith return fish to water		Routine patrol	FGR 33	\$50	Throughout year	90%	
Fail to release fish in least harmful manner		Routine patrol	FGR 33	\$50	Throughout year	90%	
Possess fish the species of which cannot be readily determined		Routine patrol	FGR 36(1)(a)	\$50	Throughout year	90%	



Possess fish the number of which cannot be readily determined		Routine patrol	FGR 36(1)(b)	\$50	Throughout year	90%	
Possess fish the size of which cannot be readily determined		Routine patrol	FGR 36(1)(d)	\$50	Throughout year	90%	

## 8 IN-SEASON ADJUSTMENT MECHANISMS

### 8.1 In-season communications

The Chief of Fisheries Management will have overall responsibility to ensure that various user groups and agencies are kept well informed about the status of management as the season progresses.

In-season management changes to all fisheries will require effective communication between staff within the Fisheries Management and Conservation and Protection Sector. Collection of catch and effort information will be undertaken by a combination of Fishery Patrol Vessels and Charter Vessels.

In the commercial fishery, catch and effort data will be submitted to the appropriate Management Coordinator. This data will be compiled into a useable format and distributed to Divisional and Regional management staff, as well as the public, as required.

Recreational openings and closures required as a result of in-season decisions will be coordinated by Recreational Fisheries Coordinator in consultation with Management Coordinators and C & P staff. Variation Orders required will be initiated by the Recreational Fisheries Coordinator and associated Public Notices will be completed and posted by local C & P Field Supervisors, depending on the area affected. Communication releases will be coordinated and developed by the Recreational Fisheries Coordinator in concert with the Management Coordinator. Press releases will be developed by the Recreational Fisheries Coordinator in concert with the Communications Branch.

In the ESSR fishery, the Skeena/Nass Management Coordinator will communicate catch and effort data related to this fishery to Divisional and Regional staff, as well as the public, as required.

### 8.1.2 Contact List

The communication of the fishing and enforcement plans to the public is extremely important for the success of the plan's implementation.

In order to facilitate the flow of information, DFO has established a contact list. The following people have been assigned to this role based on their area of responsibility:

C. Dragseth	Area Manager	627-3416
S. Cameron	A/Director, Conservation and Protection	666-0589
D. Miller	A/Chief of Conservation and Protection	627-3402
Vacant	Field Supervisor, Prince Rupert	
D. Knapton	Field Supervisor, Prince Rupert	627-3429
D. Burnip	Field Supervisor, Terrace	635-2206
T. Turnbull	Field Supervisor, Smithers	847-2312
C.C.Graham	Director of Fisheries Management	666-6931
D. Einarson	Chief of Fisheries Management	627-3426
D. Wagner	Management Coordinator, Skeena/Nass	627-3425
J. Steward	Management Coordinator, ESSR & s.35	627-3421
E. Fast	Recreational Management Coordinator	627-3409
L. Jantz	Salmon Biologist, Skeena/Nass	627-3457
D. Radford	Manager of Aboriginal Fisheries Sector	627-3420
D. Heap	AFS Coordinator	627-3435
D. Peacock	Stock Assessment Senior Biologist	627-3467

## 8.2 Decision-making process

### Weekly Management Meetings Schedule

#### Monday

- Internal phone conference, 9 AM to discuss local management and enforcement events relating to Communal fisheries.

The participants are: Chief of Fisheries Management; Chief of C&P; Nass\Skeena Management Coordinator; Field Supervisor Prince Rupert; Field Supervisor Terrace; Field Supervisor Smithers; AFS coordinator.

#### Tuesday

- 1300h Divisional meeting to determine if there are any emerging problems with integration, and to resolve.

The participants are: Area Manager; Chief of Fisheries Management; Chief of C&P; Senior Biologist of North coast Stock Assessment; and when necessary North Coast Manager of Aboriginal fisheries Sector.

- 1330h Regional teleconference chaired by Director of Operations Branch.

The north coast participants are: Area Manager; Chief of Fisheries Management; Chief of C&P; Senior Biologist of North coast Stock Assessment; and when necessary North Coast Manager of Aboriginal fisheries Sector.

#### Wednesday

- Catch data collected from the Communal food, social and ceremonial fishery as well as the ESSR fishery, will be summarized by the Skeena/Nass Management Coordinator.

Catch and escapement data for the commercial fisheries will be compiled and summarized by the Area 3, 4, & 5 Management Coordinator. The data will be entered and forwarded to the Chief of Fisheries Management, who will distribute the data internally and externally as required.

#### Thursday

- Teleconference at 0830h, Chief Fisheries Management and Regional Salmon Coordinator, with other south coast participants as required.
- North Coast Commercial Salmon Management meeting, 10 AM, an internal management meeting to discuss stock data, catch and escapement data, and to discuss the future week's fishing opportunities. At certain times during the year Provincial participation will be included as set out in the MOU between DFO North Coast and the Ministry of the Environment. Decisions from this meeting that result in fishing plans for the up-coming week are then sent out via facsimile to B.C. Environment and as a notice to industry giving fishing times and areas. The Chief of Fisheries Management will contact the designated Ministry of the Environment biologist on a regular basis regarding fishing plans.

Stock data and test fishing results are compiled and presented by the Salmon Biologist for the Skeena. The catch to date for the various fisheries is presented by the Nass/Skeena Management Coordinator, and the Area 3, 4, and 5 Management Coordinator, who make recommendations to the Chief of Fisheries Management. The Chief of Fisheries Management then bases his decision on openings on this information and other recommendations from other areas. A Notice to Industry is then prepared by the Management Coordinator and distributed to clients via Fax at 2 PM from Regional Headquarters and locally. A 24 hour tape record-o-phone is also updated daily with the most recent fishing information and is done by a Management Coordinator in

Prince Rupert.

- 1530h Regional teleconference chaired by Director of Operations Branch.

The north coast participants are: Area Manager; Chief of Fisheries Management; Chief of C&P; Senior Biologist of North coast Stock Assessment; and when necessary North Coast Manager of Aboriginal fisheries Sector.

Friday

- The Skeena/Nass Management Coordinator will conduct telephone conversations with members of the Skeena Technical Committee (Which was set up under the Skeena Fisheries Commission auspices) and discuss biological and catch data. Information from the commercial sector will be updated to the members as will the catch estimates for the ESSR fishery and the food, social and ceremonial fishery.

The Committee will be comprised of Native individuals appointed by the Skeena Fisheries Commission, Senior Stock Assessment Biologist, Skeena/Nass salmon biologist, and Skeena/Nass management coordinator.

- Recreational Fishing update, 9 AM: The Recreational Fisheries Coordinator will liaise with the Chairman of the North Coast Sportfish Advisory Board co-management committee on fishing plans. The Recreational Fisheries Coordinator will provide an up-date on commercial fish plans for the week, catch to date and any concerns that are related to the sportfish sector. The update will be for the tidal and non-tidal portions of the Skeena River Watershed.
- The Enforcement Committees will be comprised of C&P staff and Aboriginal Guardians and will be set up in 3 geographic locations. [It should be noted at this time that the following



groups may operate as one committee in-season under the Skeena Watershed Agreement.]

1. Nat'oot'en

o Native members as appointed by the Band and a Fishery Officer from Smithers appointed by the Field Supervisor.

2. Gitksan, Wet'suwet'en and Gitanyow

o Native Members as appointed by the Bands, Field Supervisors from Terrace and Smithers and may include a Fishery Officer from Hazelton appointed by the Field Supervisor.

3. Tsimshian

o Native members as appointed by the Bands, Field Supervisor Terrace, and two Field Supervisors from Prince Rupert.

- While all the meetings are on a scheduled basis, there may be other meetings required in-season to deal with issues that arise and must be dealt with expeditiously. Internal management meetings will be more frequent at the height of the season to deal with extensions and conservation concerns.

## 9 EVALUATION AND PUBLIC CONSULTATION

### 9.1 Escapement Monitoring

Escapement monitoring is an integral part of a management plan whether the function is performed during or after the fishing season. The escapement data is used to estimate run returns for future fishing opportunities, to evaluate management decisions made during the fishing season and to highlight conservation concerns for future runs.

Stream enumeration assessments are conducted at various times from July through to October throughout the Skeena and Nass River Watersheds, as well as coastal systems. Numerous methods are used to collect the data, ranging from stream walks to aerial assessments.

In 1995, agreements will be entered into with the Skeena Fisheries Commission, coordinated by the Manager of AFS, to develop schedules where native guardians will work on data collection in applicable areas. The use of native participants will augment the ability of DFO to maintain and improve stream enumeration work.

Fishery Patrol Vessels and Charter Vessels will participate in this the coastal enumeration program. Stock Assessment will devise a prioritization program for the interior streams of the Skeena and Nass drainages.

## 9.2 Public Consultation

Public Consultation on fishing plans will take place in a variety of forums. Commercial consultation occurs at the North Coast Advisory Board, which generally meets twice per year. Recreational consultation takes place at a number of local sub-committees, which in turn feed into the North Coast Co-Management Committee of the Sport Fish Advisory Board. This committee also meets twice per year. Consultation with the Aboriginal communities will be conducted by the Aboriginal Fisheries Sector with the assistance of Fisheries Management, C&P, and Habitat sectors.

