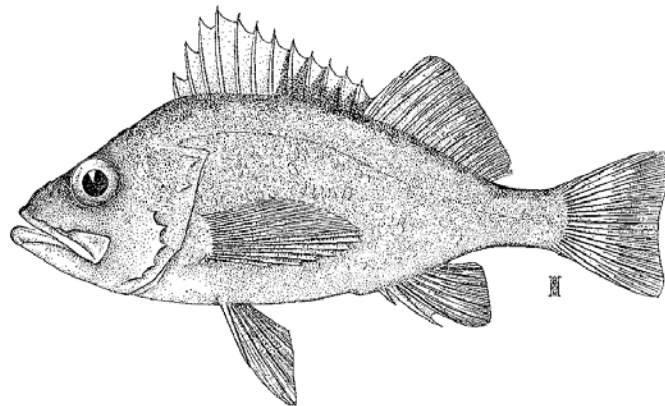


PACIFIC REGION

INTEGRATED FISHERIES MANAGEMENT PLAN

GROUND FISH

**FEBRUARY 21, 2010 TO
FEBRUARY 20, 2011**



Canary Rockfish, *Sebastes pinniger*



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Canada

This Harvest Plan is intended for general purposes only. Where there is a discrepancy between the Harvest Plan and the regulations, the regulations are the final authority. A description of Areas and Subareas referenced in this Harvest Plan can be found in the Pacific Fishery Management Area Regulations.

FOREWORD

The purpose of this Integrated Fisheries Management Plan (IFMP) is to identify the main objectives and requirements for the Groundfish fishery in the Pacific Region, as well as the management measures that will be used to achieve these objectives. This document also serves to communicate the basic information on the fishery and its management to Fisheries and Oceans Canada (DFO) staff, legislated co-management boards and other stakeholders. This IFMP provides a common understanding of the basic “rules” for the sustainable management of the fisheries resource.

This IFMP is not a legally binding instrument which can form the basis of a legal challenge. The IFMP can be modified at any time and does not fetter the Minister's discretionary powers set out in the *Fisheries Act*. The Minister can, for reasons of conservation or for any other valid reasons, modify any provision of the IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

Where DFO is responsible for implementing obligations under land claims agreements, the IFMP will be implemented in a manner consistent with these obligations. In the event that an IFMP is inconsistent with obligations under land claims agreements, the provisions of the land claims agreements will prevail to the extent of the inconsistency.

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1. OVERVIEW OF THE FISHERY

1.1. History

Each year Fisheries and Oceans Canada provides opportunities to First Nations for food, social and ceremonial (FSC) purposes, and the commercial and recreational fisheries to harvest groundfish. There are seven commercial groundfish fisheries on the Pacific Coast: groundfish trawl and hook and line fisheries for halibut, sablefish (which can also use traps), rockfish outside, rockfish inside, lingcod, and dogfish.

Since 2003, the Department has focused on working with the commercial groundfish harvesters and others to address management and sustainability issues in the commercial groundfish fisheries. The Department identified five guiding principles for the commercial groundfish sector:

- a) All rockfish catch must be accounted for.
- b) Rockfish catches will be managed according to established rockfish management areas.
- c) Fish harvesters will be individually accountable for their catch.
- d) New monitoring standards will be established and implemented to meet the above three objectives.
- e) Species and stocks of concern will be closely examined and actions such as reduction of TACs, and other catch limits will be considered and implemented to be consistent with the precautionary approach for management.

Following significant work through the Commercial Groundfish Industry Advisory Committee (CGIAC) and the Commercial Industry Caucus (CIC), a three year pilot was introduced in the commercial groundfish fisheries in 2006. The reforms focus on 100% at-sea monitoring and 100% dockside monitoring, individual vessel accountability for all catch, both retained and released, individual vessel quotas and reallocation of these quotas between vessels and fisheries to cover catch of non-directed species.

The pilot program has now been completed and the 2010/2011 commercial groundfish fishing season marks the first year of permanency. Further details can be found in Section 6.

IFMP documents are available from the DFO Pacific Region Internet site, from any Pacific Fishery Licence Unit (PFLU) or local DFO office.

1.2. Type of Fishery and Participants

1.2.1. First Nations

Aboriginal harvest for food, social and ceremonial purposes may occur coastwide where authorized by a communal licence. There are a number of First Nations and Aboriginal harvesters for groundfish species in the Pacific Region.

1.2.2. Recreational

A recreational fishery may also occur coastwide. A British Columbia Tidal Waters Sport Fishing Licence is required for the recreational harvest of all species of fish. Tidal Waters Sport Fishing Licences can be purchased at many tackle stores and marinas or online by using the DFO website:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/licence-permis/index-eng.htm>

1.2.3. Commercial

There are seven distinct commercial groundfish sector groups, Groundfish trawl (T), Halibut (L), Sablefish (K), Inside Rockfish (ZNI), Outside Rockfish (ZNO) and the Lingcod and Dogfish fisheries that are licensed under Schedule II, but managed as separate fisheries using Individual Vessel Quotas (IVQ). There are approximately 400 active commercial groundfish vessels.

1.2.4. Aquaculture

Fisheries and Oceans Canada continues to support the research and development of the aquaculture sector. The Department will provide the aquaculture industry with reasonable access, by scientific licence, to the wild groundfish resource to assist industry development (growth and diversification). Requests to access the wild resource will be contingent upon stakeholders providing detailed project proposals for review and approval by the Department.

Requests for access to the wild resource will be reviewed based on the provision of specified criteria by the proponent (see details below). Decisions will be provided in writing to the applicant. For 2010/2011, the Department may require observers on vessels conducting collection trips and dockside monitoring of all fish harvested for aquaculture purposes at the vessel's own expense.

Applications for broodstock capture should include:

- a) Proposed time and location(s) where the fish will be captured.
- b) Name, vessel registration number (VRN) and licence number of the vessel to be used.
- c) Description and location of the facility where the fish are to be held (including aquaculture permit number if a fish farm).
- d) Transplants permit application number.
- e) Detailed project description.
- f) Detailed reporting framework.

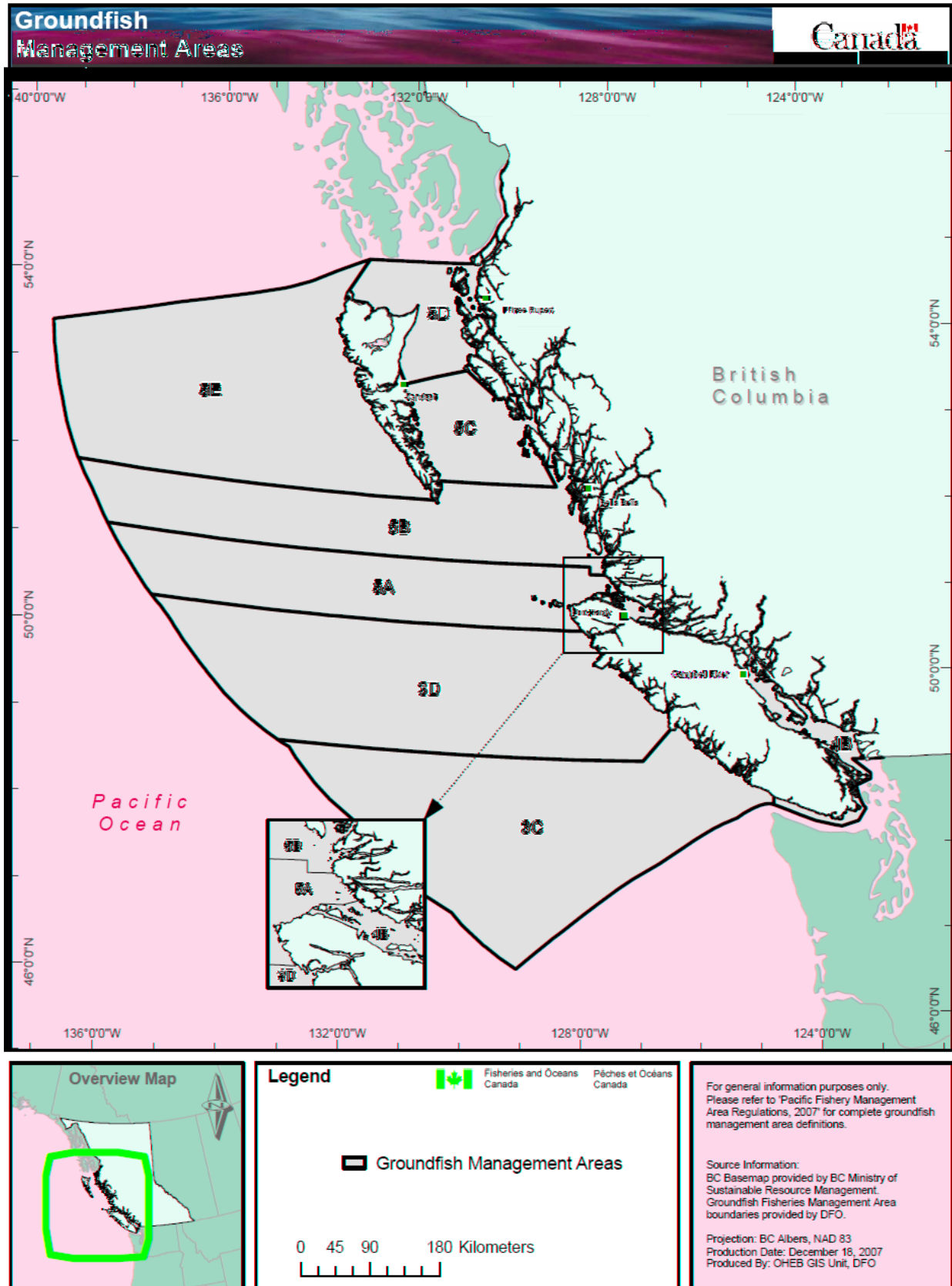
More information can be found at: www.pac.dfo-mpo.gc.ca/aquaculture/default_e.htm

1.3. Location of Fishery

1.3.1. First Nations and Recreational

Aboriginal and recreational harvest may occur coastwide, where appropriately licensed. Closures for the recreational fishery are in effect for parts of the coast and can be found at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/index-eng.htm>.

1.3.2. Commercial Groundfish Management Area Map



Commercial groundfish fisheries are prosecuted coastwide in the Management areas illustrated below. Closures are in effect in various areas by gear type and are described in the harvest plans appended to this IFMP.

1.4. Commercial Fishing Areas

Name	Area/Subarea
3C	Areas 21, 23, 24, 121, 123, and Subareas 124-1 to 124-3 and 125-6.
3D	Areas 25, 26, 126 and Subareas 27-2 to 27-11, 124-4, 125-1 to 125-5, 127-1 and 127-2.
4B	Areas 13 to 20, 28 and 29 and Subareas 12-1 to 12-13, 12-15 to 12-48.
5A	Areas 11, 111 and Subareas 12-14, 27-1, 127-3, 127-4 and 130-1.
5B	Areas 7 to 10, 108 to 110 and Subareas 102-3, 107-2, 107-3, 130-2 and that portion of 130-3 that lies south of the parallel passing through 51 degrees, 56 seconds north latitude)
5C	Areas 6, 106 and Subareas 2-1 to 2-19, 102-2 and 105-2 and 107-1.
5D	Areas 3 to 5, 103, 104 and Subareas 1-2 to 1-5 and 101-4 to 101-10, 102-1 and 105-1.
5E	Area 142 and Subareas 1-1 and 2-31 to 2-100 and 101-1 to 101-3 and that portion of Subarea 130-3 that lies north of the parallel passing through 51 degrees 56 seconds north latitude

Specific information on the management area boundary descriptions (longs and lats) can be found in the *Pacific Fishery Management Area Regulations, 2007* (SOR/2007-77). These regulations can be found at:

<http://laws.justice.gc.ca/en/ShowTdm/cr/SOR-2007-77///en>

1.5. Governance

The *Fisheries Act* and the regulations made thereunder.

- Areas and Subareas, as described in the *Pacific Fishery Management Area Regulations*, are referenced in describing Groundfish Management Areas.
- Fishery (General) Regulations (i.e. Conditions of Licence) and the *Pacific Fishery Regulations, 1993* (i.e. open times).
- The British Columbia Sport Fishing Regulations (1996) and the Aboriginal Communal Fishing Licences Regulations.
- The *Oceans Act*.
- The *Species at Risk Act*.
- Aboriginal Communal Fishing Licence Regulations.

These documents are available on the Internet at:

http://www.pac.dfo-mpo.gc.ca/ops/fm/toppages/actreg_e.htm

In addition, the new national Sustainable Fisheries Framework contains policies for adopting an ecosystem based approach to fisheries management including:

- A Fishery Decision-Making Framework Incorporating the Precautionary Approach;
- Managing Impacts of Fishing on Benthic Habitat, Communities and Species;
- Policy on New Fisheries for Forage Species.

Along with existing economic and shared stewardship policies, these will help the department meet objectives for long-term sustainability, economic prosperity, and improved governance. See the Internet at:

<http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overview-cadre-eng.htm>

Scientific advice for this fishery is peer-reviewed through a committee called the Pacific Region Scientific Advice Review Committee (PSARC).

Several advisory committees and subcommittees have been established to provide advice to the Department on management of groundfish fisheries. Terms of reference, membership and meeting minutes for the Halibut Advisory Board (HAB), Groundfish Trawl Advisory Committee (GTAC), Sablefish Advisory Committee (SAC), Groundfish Hook and Line Advisory Committee (GHLAC), and the Commercial Industry Caucus (CIC) can be found on the Internet at:

http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/consultations/groundfish/default_e.htm.

For a list of members please see Appendix 10.

1.6. Approval Process

The Regional Director General for the Pacific Region approves this plan.

2. STOCK ASSESSMENT AND STATUS

2.1. Biological Synopsis

In addition to work directed at providing stock assessments DFO staff conduct routine data collection and compilation and specialized research on the general biology of groundfish in support of stock assessment. The routine work includes:

- Collection and archiving of catch data from fisher logs, observer and electronic logs and unloading slips.
- Collection of biological specimen data from dockside, at-sea and research cruise sampling.
- Archiving of biological data collected from departmental and contract sources.

2.2. Aboriginal Traditional Knowledge/Traditional Ecological Knowledge

Aboriginal Traditional Knowledge/Traditional Ecological Knowledge in the form of observations and comments provided by First Nations is considered in management decisions when provided.

2.3. Stock Assessment

Stock assessment and research programs involving groundfish are conducted by the Department and through cooperative research programs carried out in conjunction with industry associations. Stock Assessment advice has been provided for over 30 commercially exploited groundfish stocks. Science personnel, in association with fishery managers and groundfish industry representatives, establish assessment priorities and timing schedules for assessments. These programs are intended to support ongoing evaluation of management measures. Opportunities for stakeholder involvement and cooperative ventures in research and assessment activities are pursued.

2.4. Stock Scenarios

2.4.1. Halibut

Pacific halibut is a coastwide stock ranging from California to the Bering Sea. Recent results from a new tagging study provided strong evidence that the net migration of halibut is much more dynamic than previously thought. The results demonstrated that the assumptions supporting closed area stock assessments (i.e. negligible adult migration between regulatory areas) were not valid. As a result a coastwide stock assessment approach was developed in 2007 and is the approach currently used to estimate a coastwide exploitable biomass. This approach uses the same stock assessment model, but fits the model to a coastwide averaged dataset to estimate exploitable biomass. The coastwide exploitable biomass is apportioned among regulatory areas in accordance with survey data adjusted for factors such as depth, hook competition or survey timing. Coastwide exploitable biomass in 2009 was estimated to be 334 million pounds, up from 325 million pounds estimated in 2008. This slight increase reflects the recent recruitment of strong year classes to the legal-sized component of the population. However, it should be noted that coastwide survey and commercial catch per unit effort remained on a downward trend, with some populations in the Gulf of Alaska of concern. Populations in Canadian waters (known as Area 2B) and the western Gulf of Alaska are exhibiting signs of improvement.

2.4.2. Sablefish

Sablefish stock assessment and research surveys conducted in October and November of 2009 marked the seventh year of concurrent standardized and randomized surveys. A vessel chartered from the sablefish trap fleet worked collaboratively with DFO staff to complete survey operations at each of nine localities coast-wide (standardized survey) and at randomly chosen fishing sites within five area and three depth strata (randomized survey). The release of tagged sablefish from traditional tagging areas was again placed in hiatus for 2009, however tagged sablefish were released at all randomized survey set locations. In addition, the times series of abundance index values for mainland inlets visited since 1995 was continued into 2009 along with associated releases of tagged sablefish.

Science work in 2010/11 is focused on evaluating the effects of sablefish discarding by all gear types using the management strategy evaluation process developed in consultation with the sablefish industry over the past several years. In addition, analyses will be conducted to determine whether the stratified random survey can replace the

legacy standardized survey and allow the standardized survey to be discontinued or conducted less frequently.

2.4.3. Canary Rockfish

The status for Canary Rockfish was reviewed within the Pacific Scientific Advice Committee, (PSARC) in December 2009. The analysis assessed the population as one coastwide stock, using a catch at age model that considers five fishery-independent surveys, and age composition data from the commercial fishery.

The stock assessment indicates that the stock has declined from the unfished biomass, but that the decline has been arrested. Based on the most recent assessment, the total allowable catch for Canary Rockfish has been increased to 900 tonnes. At these catch levels the stock is expected to rebuild and remain within levels consistent with the Department's Precautionary Approach.

2.5. Precautionary Approach (PA)

The Department has recently begun implementation of the Sustainable Fisheries Framework (SFF), which is a toolbox of existing and new policies for DFO and other interests to sustainably manage Canadian fisheries in order to conserve fish stocks and support prosperous fisheries.

Fisheries worldwide are under increasing pressure, creating challenges for policy makers, resource managers, and industry leaders to make informed decisions regarding the conservation, recovery, and wise management of these resources. DFO held consultations throughout Canada in 2007 and 2008 to develop strategies to ease ecosystem pressures and enhance the capacity of the resource to sustain growing industry needs. New conservation policies have been developed to implement the ecosystem and precautionary approaches to fisheries management. These new policies, incorporated into development of new Integrated Fisheries Management Plan (IFMP) templates, will join existing policies in a framework to promote sustainable fisheries.

The new fishery decision-making framework incorporating the precautionary approach policy (<http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precaution-eng.htm>) applies to key harvested fish stocks managed by DFO, including commercial, recreational, or subsistence fisheries.

The framework requires that a harvest strategy be incorporated into respective fisheries management plans to keep the removal rate moderate when the stock status is healthy, to promote rebuilding when stock status is low, and to ensure a low risk of serious or irreversible harm to the stock. It also requires a rebuilding plan when a stock reaches low levels.

In general, the precautionary approach in fisheries management is about being cautious when scientific knowledge is uncertain, and not using the absence of adequate scientific information as a reason to postpone or fail to take action to avoid serious harm to fish

stocks or their ecosystem. This approach is widely accepted as an essential part of a sustainable fisheries management.

Applying the precautionary approach to fisheries management decisions entails establishing a harvest strategy that:

- identifies three stock status zones – healthy, cautious, and critical – according to upper stock reference points and limit reference points;
- sets the removal rate at which fish may be harvested within each stock status zone; and
- adjusts the removal rate according to fish stock status variations (i.e., spawning stock biomass or another index/metric relevant to population productivity), based on pre-agreed decision rules.

All new groundfish stock assessments will be written in a manner consistent with the Department's PA approach.

2.6. Research

Listed below, are the Department groups and processes involved in groundfish stock assessment and research.

2.6.1. Science Branch

A goal of the Fisheries and Oceans Canada Science Branch is to provide high quality knowledge, products and scientific advice on Canadian aquatic ecosystems and living resources, with a vision of safe, healthy, productive waters and aquatic ecosystems. More information on the Science Branch can be found at:

http://www-sci.pac.dfo-mpo.gc.ca/default_e.htm

2.6.2. Pacific Scientific Advice Review Committee

Pacific Scientific Advice Review Committee (PSARC) is the Pacific Regional body responsible for review and evaluation of all scientific information on the status of living aquatic resources, their ecosystems, and on biological aspects of stock management. More information on PSARC can be found at:

http://www-sci.pac.dfo-mpo.gc.ca/default_e.htm

2.6.3. Inshore Rockfish Research

2.6.3.1. Inside Waters (Strait of Georgia)

The inside longline research survey was conducted in Statistical Areas 17 through 20 in August and September 2009 onboard the CCGS Neocaligus. This survey is designed to cover the inside waters over three years, rotating through areas from north to south. These surveys are conducted over hard bottom between 41 and 100 m in depth to determine the catch by species and to collect biological samples. These surveys were initiated in 2003 in Areas 12 and 13. With the completion of the survey in 2009, two monitoring cycles through the inside waters will be completed.

2.6.4. Outside Waters Rockfish Research

2.6.4.1. Pacific Halibut Management Association (PHMA) Synoptic Survey

In 2006, a new research survey was planned with the research committee of the Pacific Halibut Management Association. This survey is part of an effort to index groundfish populations in all areas of the coast. The survey grid developed for hard bottom areas are matched alongside those developed for the coastwide trawl surveys. Data from both the longline and trawl surveys will provide coastwide abundance indices and ancillary biological data for the more commonly caught species and provide general distributional data for all the others.

Employing a depth stratified random design, hard bottom areas coastwide will be surveyed with longline gear over a two year period. A target of 200 fishing sets are selected in each year and three commercial fishing vessels are chartered to fish in one of three areas each year. Between August 1 and September 15th, 2009 the southern portion of BC was surveyed.

2.6.5. International Pacific Halibut Commission (IPHC) Standardized Setline Assessment Survey (SSA)

A third technician enumerated all catch and collected biological samples from rockfish species during the International Pacific Halibut Commission (IPHC) Area 2B setline survey. In 2009 the third IPHC technician was funded by DFO. One hundred and seventy stations were completed in 2009.

2.6.6. Groundfish Trawl Multi-Species Surveys

Since 2003, a series of Groundfish Trawl Multi-species surveys have been conducted jointly between the Department and the groundfish industry through the Canadian Groundfish Research and Conservation Society. The purpose of the surveys is to gather fishery independent data to provide usable relative abundance indices for as many benthic and near benthic fish species as is reasonable and obtain supporting biological samples of size and age composition. This survey program is comprised of 4 area specific surveys. Current plans are to continue the surveys on a biennial rotation for each area conducting two surveys annually, one aboard a chartered commercial fishing vessel funded by the industry, and the other aboard a government research trawler.

3. SOCIAL, CULTURAL AND ECONOMIC IMPORTANCE

Socio-economic profiles for each of the groundfish fisheries will be developed in the coming years. This year's management plan highlights summary socio-economic information for the commercial Pacific Halibut fishery developed by the Department's policy branch. A more in-depth profile of the fishery will be available on our website in the fall of 2010 at: <http://wwwdev.ncr.dfo-mpo.ca/ea-ae/economic-analysis-eng.htm>.

3.1. Socio-Economic Profile: Halibut

There are 436 commercial halibut licenses, including those commercial communal licenses issued to First Nations (FL). The table below shows, the number of FL licenses has increased between 2000 and 2008.

Number of Halibut Licences Issued by Category

Year	Number of L Licences	Number of FL Licences
2000	419	17
2001	N/A	N/A
2002	410	26
2003	409	26
2004	410	26
2005	409	27
2006	407	29
2007	402	34
2008	393	42

Source: Commercial Fishing Licences, Quota, and Vessel Valuation
2000 - 2008 Reports

The average wholesale value for Pacific halibut was \$15.06 in 2007, an 11% increase from \$13.54 in 2006. The average wholesale prices for Pacific halibut for the years 2000 to 2007 are provided in the table below.

Halibut Wholesale Value: Average Price of Overall Product forms

Year	2000	2001	2002	2003	2004	2005	2006	2007
Price	\$10.90	\$11.48	\$11.53	\$11.39	\$11.12	\$11.14	\$13.54	\$15.06

Source: B.C. Ministry of the Environment.

On average (2003-2006), the Greater Vancouver region processed 53% of the total halibut landed across B.C., while Skeena-Queen Charlotte, Mount Waddington, and Nanaimo processed 31%, 11%, and 2%, respectively. About 3% of the Canadian Pacific halibut was processed abroad.

The 2005 British Columbia Ministry of Environment employment survey indicated that approximately 66 thousand person months of employment (5,740 full time equivalents 'FTE'¹) were generated by the seafood processing industry in 2005. Approximately 230 FTEs (4%) were attributed to processing halibut, as shown in the table below.

Estimated Employment Distribution in the Fish Processing Industry Between Species (Year 2005)

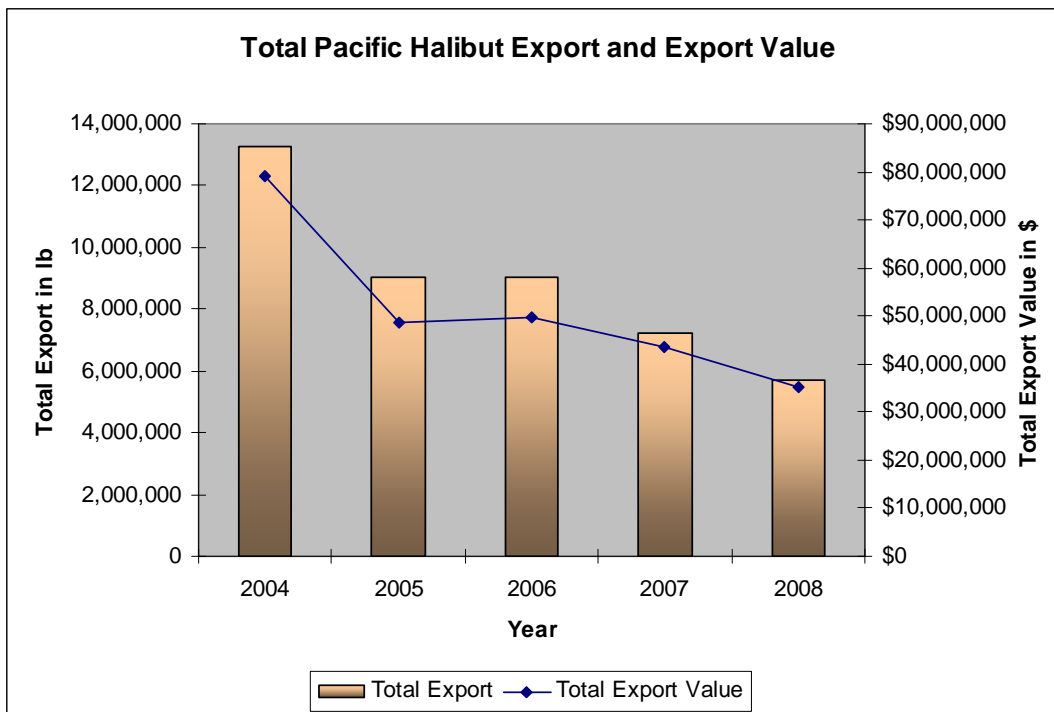
Species	Estimated Person Months	Estimated FTEs	Share of Total Sector Employment
Wild & Cultured Salmon	26,400	2,296	40%
Halibut	2,640	230	4%

¹ 1 FTE = 11.5 Person per Month

Herring	7,260	631	11%
Groundfish	17,820	1,550	27%
Wild & Cultured Shellfish	11,880	1,033	18%
Totals	66,002	5,740	100%

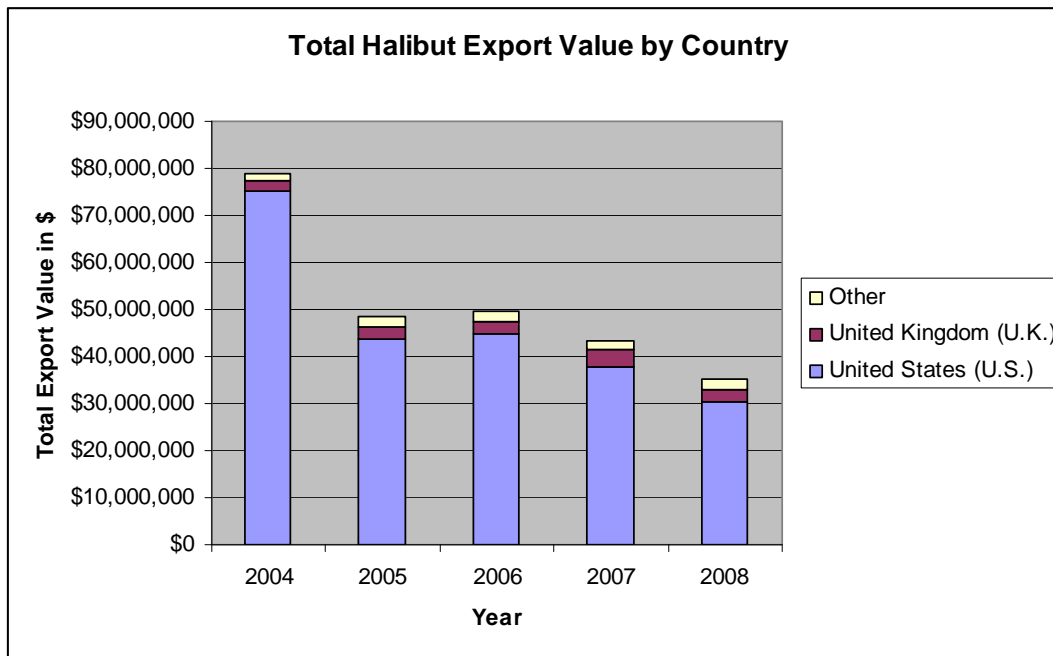
Source: B.C Ministry of the Environment. British Columbia Seafood Processing Employment Survey. 2005.

The total export value was down to \$35,199,147 in 2008 which is approximately 24% less than 2007 (\$43,514,564) and approximately 124% less than in 2004 (\$79,042,065). As shown in the graph below, halibut export volume and values have declined since 2004.



Source: Industry Canada Trade Data Online

Pacific halibut from BC is primarily exported to the United States. Over the period 2004 to 2008, the US accounted for almost 90% of B.C.'s total halibut export value.



Source: Global Trade Information Services. World Trade Atlas Data Base

An estimate of the financial viability and performance of the 181 active halibut vessels for 2007 (shown in the table below) illustrates differences between vessels in the fleet. The fleet was divided into 3 tiers, top (60 vessels), middle (60 vessels) and bottom (61 vessels) based on recorded landings. The top tier accounted for approximately 59% of the total halibut landings, with the remaining 41% divided by the remaining 2 tiers. The 61 vessels in the bottom tier contributed to only 10% of the total landings. The result is that earnings are almost 13 times lower for the bottom tier than for the top tier.

Summary of Three Production Tiers – Aggregate

Number of Vessels:	60	60	61	181*
Halibut Fleet Totals	Top 1/3	Middle 1/3	Bottom 1/3	Total
Landings (lbs)	6,695,678*	3,719,821*	1,134,545*	11,550,044*
Vessel Price (per lb)	\$4.27**	\$4.27**	\$4.27**	\$4.27**
Gross Revenue (Gross Stock)	\$ 28,600,600	\$ 15,889,222	\$ 4,846,213	\$ 49,336,035
Less: Fishery Specific Expenses				
Fuel	675,000	375,000	190,625	1,240,625
At sea monitoring	472,500	262,500	133,438	868,438
Offload Monitor	133,914	74,396	22,691	231,001
Licence / Co-management Fees	918,000	510,000	155,550	1,583,550
Licence/ Quota Lease	4,976,611	2,764,784	843,259	8,584,654
Bait	450,024	300,000	152,500	902,524
Gear maintenance/replacement	90,000	60,000	30,500	180,500
Total Fishery Specific Expenses	7,716,049	4,346,680	1,528,562	13,591,291
Net Revenue (Net Stock)	20,884,552	11,542,542	3,317,650	35,744,744
<i>Less:</i>				
Crew and Captain Shares	8,353,821	4,617,017	1,327,060	14,297,898

Number of Vessels:	60	60	61	181*

achieve the conservation objectives and satisfy socio-economic performance. As such, the program was approved commencing the 2010/2011 fishing season.

4.4. Depleted Species Concern

4.4.1. Species at Risk

The *Species at Risk Act* (SARA) came into force in 2003. The purpose of the Act is “to prevent wildlife species from being extirpated or becoming extinct, and to provide for the recovery of a wildlife species that are extirpated, endangered or threatened as a result of human activity and to manage species of special concern to prevent them from becoming endangered or threatened”.

In addition to the existing prohibitions under the Fisheries Act, it is illegal to kill, harm, harass, capture, take, possess, collect, buy, sell or trade any listed endangered or threatened animal or any part or derivative of an individual. These prohibitions apply unless a person is authorized, by a permit, licence or other similar document issued in accordance with SARA, to engage in an activity affecting the listed species or the residences of its individuals. Species listed as special concern are not included in these prohibitions.

The formal SARA legal listing process begins when the Minister of Environment issues a response statement, detailing how he intends to proceed with the COSEWIC species designations. Response statements can be found on the SARA Public Registry website at: http://www.sararegistry.gc.ca/sar/listing/response_e.cfm.

Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated species in Pacific region currently under consideration for listing under Schedule I of SARA can be found at:

<http://www.pac.dfo-mpo.gc.ca/consultation/sara-lep/index-eng.htm>.

Endangered, threatened, and special concern species in Pacific region currently listed under Schedule I of SARA can be found at:

<http://www.dfo-mpo.gc.ca/species-especies/listing-eng.htm>

Marine or anadromous species of fish in the Pacific region currently listed under Schedule I of SARA are:

Longspine Thornyhead – Special Concern
Rougheye rockfish types I & II – Special Concern
Sixgill shark – Special Concern
Souffin shark (tope) – Special Concern

COSEWIC-designated marine or anadromous species of fish in the Pacific region currently under consideration for listing under Schedule I of SARA are:

Basking shark – Endangered
Bocaccio rockfish – Threatened
Canary rockfish – Threatened

Okanagan Chinook salmon – Threatened
Quillback rockfish – Threatened
Yelloweye rockfish – Special Concern
Darkblotched Rockfish – Special Concern

4.4.2. Inshore Rockfish Conservation

In 2002, an inshore rockfish conservation strategy was established with initial measures introduced for recreational and commercial fisheries. The strategy addresses four areas under the fisheries management and stock assessment regime:

- a) Protect a part of inshore rockfish populations from harvest through the use of rockfish conservation areas.
- b) Collect information on total fishery mortalities through improved catch monitoring programs.
- c) Reduce harvests to levels that are less than the estimates of natural mortality (i.e. less than two percent).
- d) Improve the ability to assess the status of inshore rockfish populations and monitor changes in abundance.

There are 164 Rockfish Conservation Areas (RCAs) in place within BC waters. The most recent additions were implemented February 1, 2007 in the Strait of Georgia area. Fish harvesters are reminded prior to fishing to check with the local DFO office to verify RCA and other closures currently in effect. A description of all RCAs can be found at: http://www.pac.dfo-mpo.gc.ca/recfish/Restricted_Areas/rca_e.htm.

Consultations with First Nations will continue so that management of their fisheries will be consistent with conservation objectives and Departmental obligations with respect to priority access for food, social, and ceremonial purposes.

4.5. Oceans and Habitat Considerations

In 1997, the Government of Canada enacted the *Oceans Act*. This legislation provides a foundation for an integrated and balanced national oceans policy framework supported by regional management and implementation strategies. In 2002, Canada's Oceans Strategy was released to provide the policy framework and strategic approach for modern oceans management in estuarine, coastal, and marine ecosystems. As set out in the *Oceans Act*, the strategy is based on the three principles of sustainable development, integrated management, and the precautionary approach.

PNCIMA: As part of Canada's Oceans Strategy, DFO is initiating an integrated management planning process for the Pacific North Coast Integrated Management Area (PNCIMA). The PNCIMA is bounded by the BC-Alaska border, the base of the shelf slope and the mainland, stretching south as far as Campbell River and the Brooks Peninsula. The PNCIMA initiative marks a shift toward a broader ecosystem approach to ocean management. This is consistent with the Government of Canada's overall direction and with Fisheries and Oceans Canada's new Wild Salmon Policy. The PNCIMA initiative will bring the area's stakeholders together to develop an integrated

management plan for the region that achieves conservation, sustainable resource use, and economic development goals for oceans and coastal areas. The PNCIMA initiative will also function as an umbrella for various ocean management processes, complementing and linking existing processes and tools, including IFMPs.

Marine Protected Areas (MPAs): DFO is also responsible for designating Marine Protected Areas (MPAs) under Canada's *Oceans Act*. Under this authority, DFO has designated two MPAs in the Pacific Region. The Endeavour Hydrothermal Vents, designated in 2003, lie in waters 2,250m deep 250 km southeast of Vancouver Island. The Bowie Seamount, designated in 2008, is 180 km west of Queen Charlotte Islands (Haida Gwaii) rising from a depth of over 3,000 m to within 25 m of the sea surface. Work is ongoing to consider MPA designations for other areas along the Pacific Coast, including the Race Rocks area off Rocky Point south of Victoria (currently designated as a Provincial Ecological Reserve) and the Hecate Strait / Queen Charlotte Sound Glass Sponge Reefs.

National Marine Conservation Areas (NMCAs): The Canada *National Marine Conservation Areas Act* provides for the establishment of National Marine Conservation Areas (NMCAs). Parks Canada, DFO and the Council of the Haida Nation are currently working together to establish the Gwaii Haanas NMCA through the exchange of information on marine resources, fisheries and cultural data and coordinated consultations. Following establishment, measures respecting the management of the Gwaii Haanas NMCA will be articulated in future IFMPs.

DFO is also working with other federal and provincial agencies to coordinate efforts towards establishing a national system of Marine Protected Areas to fulfil Canada's commitments to the UN Convention on Biological Diversity.

More information on integrated management planning and Pacific MPAs under Canada's *Oceans Act* can be found at:

www.pac.dfo-mpo.gc.ca/oceans/default_e.htm

Coldwater Coral and Sponge Conservation Strategy: The Department, with the full support of the groundfish trawl industry, implemented measures to preserve four unique sponge reefs located in waters off central and northern British Columbia. These areas were last amended at the start of the 2007/2008 season.

These sponge reefs, discovered only a decade ago, are some of the few known examples of living *Hexactinellid* sponge reefs in the world today. The reefs cover nearly 1,000 square kilometres of seabed in eastern Queen Charlotte Sound and Hecate Strait. These living fossil structures can reach more than 15 metres in height and are thought to be formed approximately 10,000 years ago. Due to the fragile skeleton nature of the reefs, it is believed that the sponge skeletons are susceptible to damage from physical contact by fishing gear. Additionally, the dense coverage of sponges provides habitat for a variety of invertebrate and fish species.

The Department will assess potential impacts of other gear types to ensure current measures continue to provide the needed protection of the sponge reef ecosystems.

Bowie Seamount: In consultation with interested parties, the Department of Fisheries and Oceans (DFO) has established a Marine Protected Area (MPA) at Bowie Seamount. The Bowie Seamount MPA is located 180 kilometres west of Haida Gwaii (Queen Charlotte Islands) on Canada's Pacific coast and is adjacent to Canada's Exclusive Economic Zone. The MPA comprises the Bowie, Hodgkins and Davidson Seamounts of the Kodiak-Bowie seamount chain and has a total area of approximately 6,131 square kilometres.

The Bowie Seamount MPA has been established to conserve and protect the unique biodiversity and biological productivity of the area's marine ecosystem. The MPA Regulations establish the outer boundary of the MPA as the area of the Pacific Ocean, which includes the Bowie, Hodgkins and Davidson Seamounts — consisting of the seabed, the subsoil and the water column above the seabed — that is bounded by a series of rhumb lines drawn from a point 53°03'07.6" N, 135°50'25.9" W, to a point 53°16'20.9" N, 134°59'55.4" W, then to a point 53°39'49.2" N, 135°17'04.9" W, then to a point 53°39'18.0" N, 135°53'46.5" W, then to a point 53°52'16.7" N, 136°30'23.1" W, then to a point 53°49'19.6" N, 136°47'33.1" W, then to a point 53°40'02.5" N, 136°57'03.5" W, then to a point 53°13'59.2" N, 136°10'00.0" W, then back to the point of commencement which points are shown in the maps below.

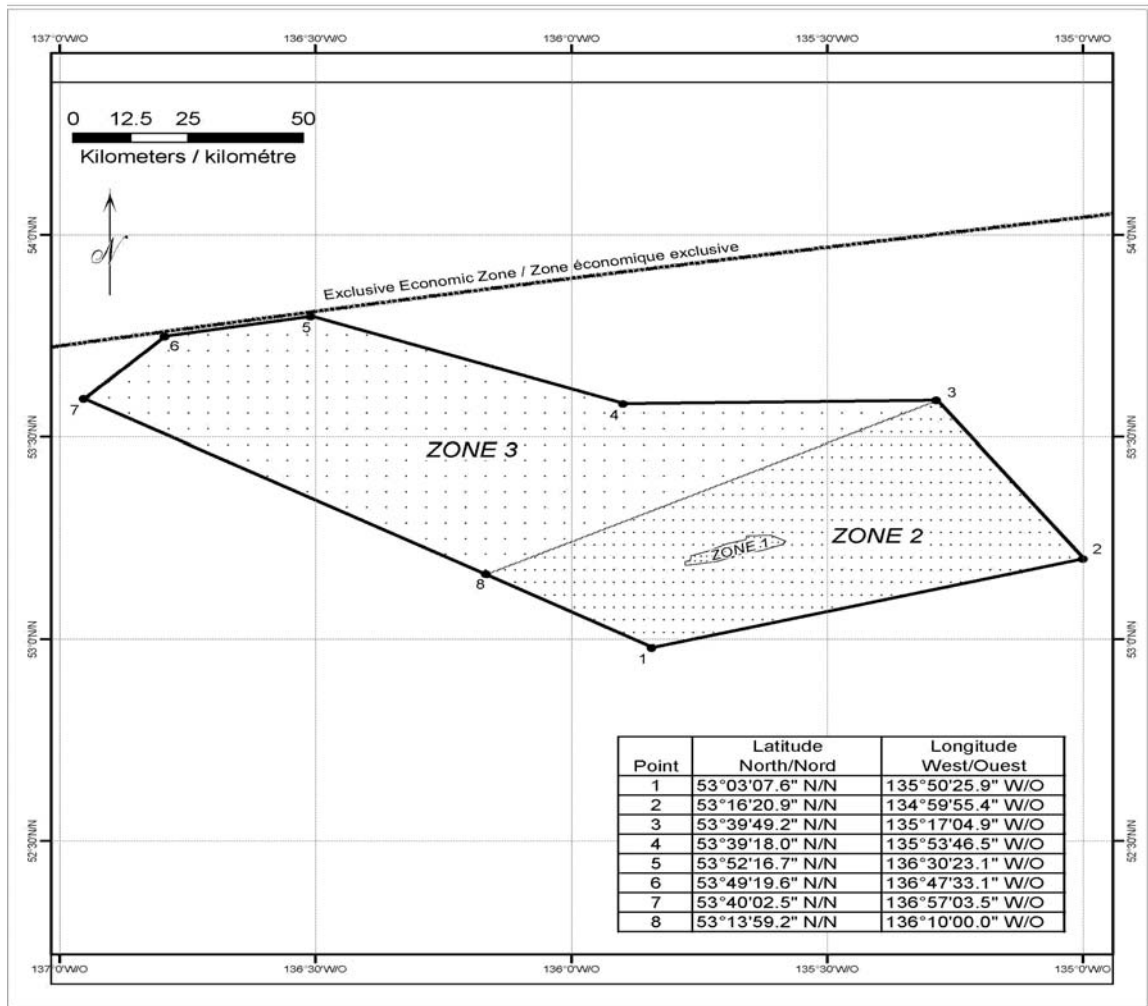
DFO will be developing a Management Plan for the Bowie Seamount MPA in consultation with First Nations, stakeholders, environmental groups, academia, the Province of BC and other federal government departments and agencies. This Management Plan will elaborate on the regulations to achieve and implement the conservation and management objectives for the MPA and will address matters such as monitoring, enforcement and compliance.

Commercial fishing activities within the MPA will be managed through the Integrated Fisheries Management process. Annual fishing plans will be developed in consultation with stakeholders and specific actions (openings and closures) for the Bowie Seamount Marine Protected Area will be taken under the authority of the *Fisheries Act* and its regulations. The sablefish fishery will be restricted to Zone 2 of the MPA, to one vessel per month from April 1st to September 30th and to the use of trap gear only. Further details on the management of the Bowie Seamount can be found in Appendix 7.

**Bowie Seamount
Marine Protected Area
Management Zones**

**Zone de protection marine
Mont sous-marin Bowie
Zones de gestion**

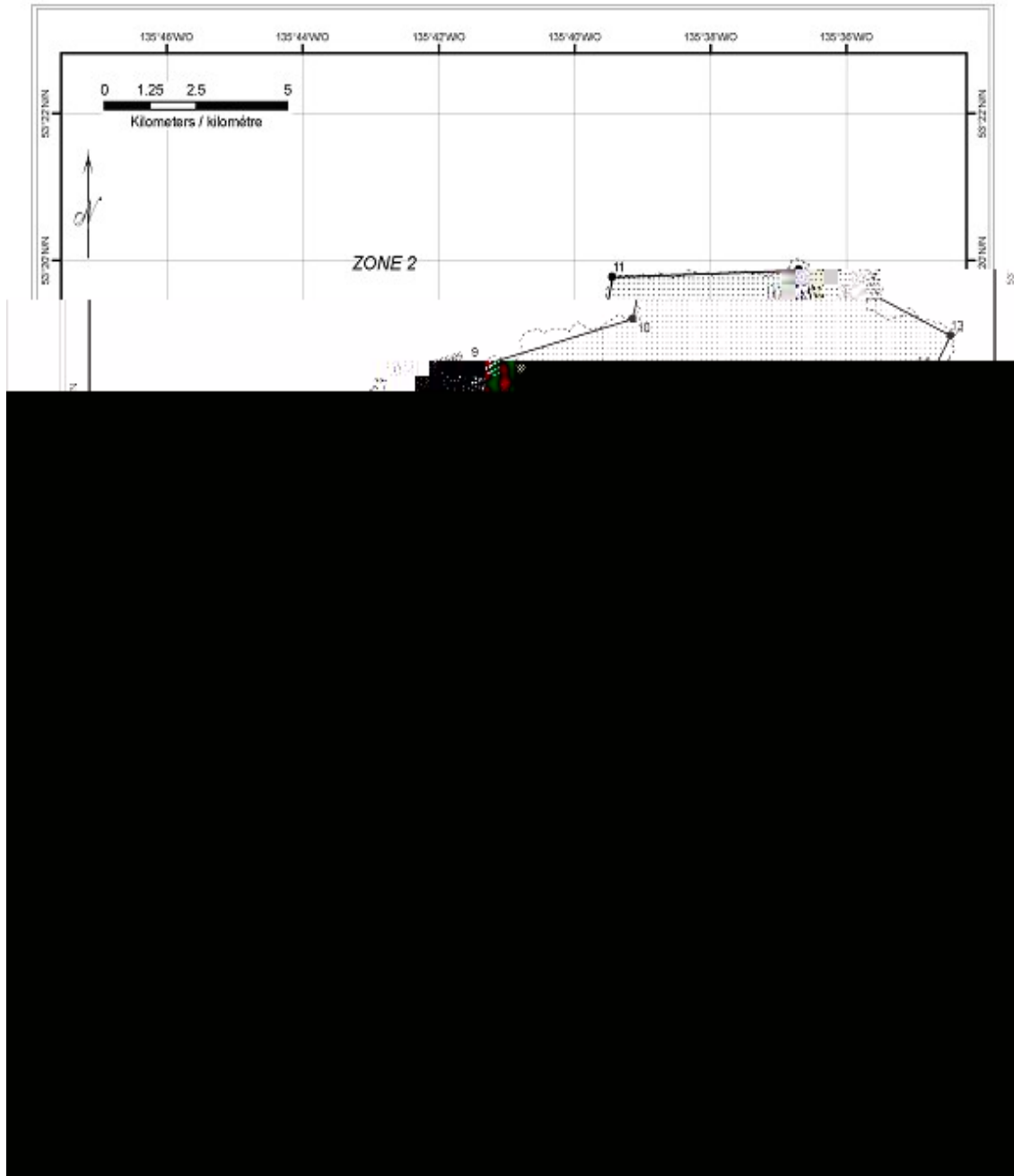
Schedule 1 / Annexe 1



**Bowie Seamount
Marine Protection Area
Management Zones**

**Zone de protection marine
Mont sous-marin Bowie
Zones de gestions**

Schedule 2 / Annexe 2



4.6. Gear Impacts

Gear impacts are a function of the quantity, frequency and area of coverage and the associated physical and biological disturbances. Management changes (the introduction of IVQs, groundfish integration, at-sea monitoring, and many area closures) in the groundfish fisheries over the last two decades have reduced the number of vessels participating in the fishery, the amount and frequency of gear used, and the total area fished. For example, a 2007 Canadian Science Advisory Secretariat report (CSAS Research document 2007/006) found that in recent years there has been a decline in the annual trawl area fished in all depth ranges and areas. Similar data is available for the hook and line and trap fisheries.

Physical and biological characteristics of benthic marine habitats often play an important role in supporting production of commercially important fish and shellfish. Therefore, managing disturbances of bottom habitat is a necessary criterion for assessing fishery sustainability. Quantitative estimates of fishing gear impacts on habitat are an important component of fishery sustainability assessments. For example, British Columbia fisheries for groundfish necessarily contact the bottom with both mobile (e.g., trawls) and non-mobile (e.g., longline and trap) fishing gear. Therefore, research is needed to assess and communicate the risks these fisheries may impose on benthic marine ecosystems. In response, NSERC (National Science and Engineering Research Council) supported research has been recently initiated to assess the potential impacts of bottom-fishing gear on seafloor habitat. The research uses exposure-response models by combining spatial mapping of bottom-fishing effort intensity and habitat (the exposure) with submersible surveys of habitat-forming species density (the response). A better understanding of how bottom habitat responds to fishing disturbances will help the fishing industry design operational changes that reduce or eliminate these impacts. Thus, Canada and the fishing industry will benefit from healthier ecosystems and more sustainable fisheries.

The NSERC supported gear impact research project will develop an exposure-response methodology to assess the impacts of bottom-fishing on British Columbia's benthic marine ecosystems. Specific objectives for this project are:

- Quantify the spatial intensity of trawl, trap, and longline bottom-fishing effort in BC marine waters at relatively fine spatial scales (e.g., 1 to 4 km resolution).
- Map available bottom habitat classifications based on existing databases.
- Conduct site-specific field studies of benthic epifauna density in selected habitats at four levels of fishing intensity based on percentiles of the observed effort distribution for each gear type.
- Develop exposure-response assessment models relating foundation epifauna density to fishing effort intensity for selected habitats.
- Develop initial fishery-scale exposure-response assessment for incorporation into fishery sustainability certification applications and environmental impact assessments.

4.7. International Issues

There has been a proposal submitted to add Spiny Dogfish to Appendix II of the Convention on International Trade in Endangered Species (CITES). This will be discussed during the next CITES Conference of Parties (COP) being held during March 13-16, 2010. A similar proposal was submitted to the last COP in 2007, but was not adopted.

5. ACCESS AND ALLOCATION

5.1. Quotas and Allocations

5.1.1. Halibut Commercial-Recreational Allocation Framework

On October 27, 2003, the Minister of Fisheries and Oceans Canada announced an allocation framework for the commercial and recreational sectors for the Pacific halibut fishery. The framework outlines that a 12 percent recreational catch “ceiling” will be allocated to the recreational sector until both parties can develop an acceptable market-based mechanism that will allow for adjustment of the recreational share through acquisition of additional quota from the commercial sector. Dialogue continues with the commercial and recreational fishing sectors to identify an approach that will achieve this goal.

5.1.2. First Nations

Aboriginal harvest of groundfish for FSC purposes has limits of total groundfish catch identified for each First Nation.

5.1.3. Recreational

Daily and possession limits are in place for various groundfish species. These are described in the British Columbia Tidal Waters Sport Fishing Guide available at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/SFG-GPS-eng.htm>.

5.1.4. Commercial

The commercial total allowable catch for various groundfish species are allocated between the different groundfish sectors. Formal discussions between the hook and line rockfish (ZN), halibut and trawl sectors were initiated in 2000 to establish individual rockfish species allocations between the sectors to modify the 1997 adopted “92/8” trawl/hook and line allocation.. The agreed to allocation of groundfish species between the commercial sectors are as follows:

5.1.4.1. Rockfish Species

Species	Trawl %	ZN Hook and Line %	Halibut %
Canary	87.70%	11.77%	0.53%
Longspine Thornyhead	95.35%	2.29%	2.36%
Pacific ocean perch	99.98%	0.02%	0.00%
Quillback, Copper, China, Tiger	2.56%	87.97%	9.47%
Redstripe	97.23%	2.77%	0.00%
Rougheye	55.80%	41.17%	3.03%
Shortspine Thornyhead	95.40%	2.27%	2.33%
Shortraker	52.30%	43.92%	3.78%
Silvergray	88.43%	10.97%	0.60%
Widow	98.21%	1.79%	0.00%
Yelloweye	2.54%	64.34%	33.12%
Yellowmouth	96.77%	2.49%	0.74%
Yellowtail	98.91%	1.09%	0.00%

5.1.4.2. Non-quota Rockfish Species

Non-quota Species	Trawl %	Halibut/ZN Hook and Line %
Aurora Rockfish	90.00%	10.00%
Black Rockfish	14.00%	86.00%
Blue Rockfish	5.00%	95.00%
Brown Rockfish	5.00%	95.00%
Chillipepper Rockfish	65.00%	35.00%
Darkblotch Rockfish	99.00%	1.00%
Dusky Rockfish	50.00%	50.00%
Greenstripe Rockfish	96.00%	4.00%
Harlequin Rockfish	99.00%	1.00%
Boccacio Rockfish	93.00%	7.00%
Red Banded Rockfish	50.00%	50.00%
Rosethorn Rockfish	65.00%	35.00%
Sharpchin Rockfish	99.00%	1.00%
Shortbelly Rockfish	0.00%	100.00%
Splitnose Rockfish	99.00%	1.00%
Vermillion Rockfish	1.00%	99.00%

5.1.4.3. Other Groundfish

Species	Trawl %	Hook and Line %
Lingcod	74.00%	26.00%
Dogfish	32.00%	68.00%
Hake, pollock, Pacific cod & sole	100.00%	0.00%

Species	Trawl %	K Hook and Line/Trap %
Sablefish	8.75%	91.25%

5.1.5. Annual Commercial Total Allowable Catch

As a result of rounding, the TAC allocations by management area do not sum to the coast-wide total for some species. For the exact TAC values, please contact a member of the Groundfish Management Unit, found in Appendix 2.

Species	Area	TAC All Sectors tonnes	Hook & Line/Trap Tonnes	Trawl tonnes
Yellowtail rockfish	3C	1,006	11	995
	3D, 5A/B, 5C/D/E	3,464	38	3,427
	Coastwide total	4,471	49	4,422
Widow rockfish	Coastwide total	2,358	42	2,316
Canary rockfish	3C/D	625	26	569
	5A/B	183	43	155
	5C/D	66	21	55
	5E	26	21	10
	Coastwide total	900	111	789
Silvergray rockfish	3C/D	244	28	216
	5A/B	476	55	421
	5C/D	432	50	382
	5E	281	33	248
	Coastwide total	1,433	166	1,267
Pacific ocean perch	3C	300	0	300
	3D	230	0	230
	5A/B	2,070	0	2,070
	5C/D	2,818	0	2,818
	5E	730	0	730
	Coastwide total	6,148	1	6,146
Yellowmouth rockfish	3C	224	5	219
	3D, 5A/B	1,162	27	1,135
	5C/D	702	17	685
	5E	357	32	325

Species	Area	TAC All Sectors tonnes	Hook & Line/Trap Tonnes	Trawl tonnes
	Coastwide total	2,444	81	2,364
Rougheye rockfish	Coastwide total	1,140	504	636
Shortraker rockfish	Coastwide total	240	114	126
Redstripe rockfish	3C	178	5	173
	3D, 5A/B	794	22	772
	5C/D	339	9	330
	5E	253	7	246
	Coastwide total	1,564	43	1,521
Shortspine thornyheads	Coastwide total	771	35	735
Longspine thornyheads	Coastwide total	425	20	405
Yelloweye rockfish	3C/D, 5A	83	81	2
	5B	60	58	2
	5C/D	64	62	2
	5E	70	68	2
	4B	7	7	0
	Coastwide total	284	277	7
Quillback, Copper, China and Tiger rockfish	3C/D, 5A	76	74	2
	5B	41	39	1
	5C/5D	66	64	2
	5E	12	12	0
	4B	26	26	0
	Coastwide	220	214	5
Pacific cod	3C/D	500	0	500
	5A/B	390	0	390
	5C/D/E	800	0	800
	Coastwide total	1,690	0	1,690
Dover sole	3C/D	1,375	0	1,375
	5C/D/E	1,100	0	1,100
	5A/B	598	0	598
	Coastwide total	3,073	0	3,073
Rock sole	3C/D	102	0	102
	5A/B	450	0	450
	5C/D	673	0	673
	Coastwide total	1,225	0	1,225
Lemon sole	3C/D, 5A/B	186	0	186
	5C/D/E	636	0	636
	Coastwide total	822	0	822
Petrале sole	Coastwide	700	0	700
Lingcod*	3C	950	150	800
	3D	400	180	220
	5A/B	1,062	200	862

Species	Area	TAC All Sectors tonnes	Hook & Line/Trap Tonnes	Trawl tonnes
	4B (Area 12 only)	38	38	0
	5C/D/E	1,000	420	580
	Coastwide total ^o	3,450	988	2,462
Dogfish	4B	3,000	2,040	960
	Rest of Coast	12,000	8,160	3,840
	Coastwide total	15,000	10,200	4,800
Sablefish	Coastwide total	2,217	2,023	194
Pollock	Gulf	1,115	0	1,115
	5A/B (includes Area 12)	1,790	0	1,790
	5C/D/E	1,320	0	1,320
	Coastwide total	4,225	0	4,225
Gulf Hake	Gulf	7,000	0	7,000
Offshore Hake	Rest of Coast	TBA	0	TBA
Halibut*	Coastwide	2,993	2,993	*
Big Skate	5C/D	567	N/A	567
Longnose Skate	5C/D	47	N/A	47
Arrowtooth Flounder	Coastwide total	15,000	N/A	15,000

* The Lingcod coastwide total includes the 38 tonne allocation to cover 4B trip limits. This tonnage is not allocated to licence holders, nor is it transferable.

**The groundfish trawl fishery has a bycatch mortality cap of 454 tonnes that is not part of the allocated commercial TAC. Halibut caught while fishing under the authority of a groundfish trawl licence cannot be retained and must be returned to the water as quickly as possible.

5.1.5.1. Hook and Line Rockfish TACs – Halibut and ZN

Species	Area	ZN tonnes	Halibut Tonnes	Research tonnes
Canary rockfish	3C/D	23	1	
	5A/B	40	2	
	5C/D	18	1	
	5E	19	1	
	Coastwide total	101	5	6
Silvergray rockfish	3C/D	26	1	
	5A/B	50	3	
	5C/D	45	2	
	5E	30	2	
	Coastwide total	151	8	7
Yellowmouth rockfish	3C	4	1	
	3D, 5A/B	20	6	
	5C/D	13	4	

Species	Area	ZN tonnes	Halibut Tonnes	Research tonnes
	5E	24	7	
	Coastwide total	60	18	3
Rougheye rockfish	Coastwide	451	33	20
Shortraker rockfish	Coastwide	102	9	4
Shortspine thornyhead	Coastwide	17	17	1
Longspine thornyhead	Coastwide	10	10	0
Yelloweye rockfish	3C/D, 5A	66	13	
	5B	30	26	
	5C/5D	39	22	
	5E	37	29	
	4B	6	1	
	Coastwide	178	92	7
Quillback, Copper, China and Tiger rockfish	3C/D, 5A	67	4	
	5B	35	3	
	5C/5D	51	10	
	5E	7	4	
	4B	25	0	
	Coastwide	185	21	7

5.1.5.2. Species Area Groups

All groundfish hook and line licence holders will be permitted to hold quota for up to 29 species/area group of holdings. Landings of other groundfish will be managed through trip limits or landings allowances. Additional species areas groups are in place for the groundfish trawl fishery and can be found in Appendix 8.

Pacific Halibut (Coastwide)	Silvergray rockfish (5E)
Sablefish (Coastwide)	Yelloweye rockfish (3C, 3D, 5A)
Lingcod (3D)	Yelloweye rockfish (5B)
Lingcod (3C)	Yelloweye rockfish (5C, 5D)
Lingcod (5A, 5B)	Yelloweye rockfish (5E)
Lingcod (5C, 5D, 5E)	Yelloweye rockfish (4B)
Dogfish (3C, 3D, 5A, 5B, 5C, 5D, 5E)	Quillback, Copper, China and Tiger rockfish (3C, 3D, 5A)
Dogfish (4B)	Quillback, Copper, China and Tiger rockfish (5B)
Canary rockfish (3C, 3D)	Quillback, Copper, China and Tiger rockfish (5C, 5D)
Canary rockfish (5A, 5B)	Quillback, Copper, China and Tiger rockfish (5E)
Canary rockfish (5C, 5D)	Quillback, Copper, China and Tiger rockfish (4B)
Canary rockfish (5E)	Rougheye rockfish (Coastwide)
Silvergray rockfish (3C, 3D)	Shortraker rockfish (Coastwide)
Silvergray rockfish (5A, 5B)	Shortspine thornyhead (Coastwide)
Silvergray rockfish (5C, 5D)	

5.2. Outgoing Sector Caps

The following caps are the amount of quota species, in pounds, permitted to leave a sector.

Species	Area	Sector						
		Halibut (pounds)	Sablefish (pounds)	ZN Outside (pounds)	ZN Inside (pounds)	Trawl (pounds)	Dogfish (pounds)	Lingcod (pounds)
Canary rockfish	3C, 3D	1,741	No Limit	38,675	0	103,460	No Limit	No Limit
	5A, 5B	2,977	No Limit	66,132	0	50,706	No Limit	No Limit
	5C, 5D	1,380	No Limit	30,638	0	19,841	No Limit	No Limit
	5E	1,436	No Limit	31,981	0	7,111	No Limit	No Limit
Lingcod	3C	No Limit	No Limit	No Limit	0	226,367	No Limit	330,690
	3D	No Limit	No Limit	No Limit	0	93,699	No Limit	396,830
	5A, 5B	No Limit	No Limit	No Limit	0	351,680	No Limit	440,920
	5C, 5D, 5E	No Limit	No Limit	No Limit	0	443,835	No Limit	925,930
Pacific Halibut	Coastwide	893,863	No Limit	No Limit	No Limit	0	No Limit	No Limit
Quillback, Copper, China and Tiger rockfish	3C, 3D, 5A	8,892	No Limit	148,417	0	0	No Limit	No Limit
	5B	7,122	No Limit	76,767	0	0	No Limit	No Limit
	5C, 5D	22,817	No Limit	112,592	0	0	No Limit	No Limit
	5E	8,530	No Limit	15,353	0	0	No Limit	No Limit
	4B	No Limit	0	0	3,000	0	0	0
Roughey rockfish	Coastwide	73,129	No Limit	993,633	0	494,322	No Limit	No Limit
Sablefish	Coastwide	No Limit	590,127	No Limit	0	42,873	No Limit	No Limit
Shortraker rockfish	Coastwide	19,301	No Limit	224,263	0	69,999	No Limit	No Limit
Shortspine thornyhead	Coastwide	38,462	No Limit	37,496	0	381,843	No Limit	No Limit
Silvergrey rockfish	3C, 3D	3,091	No Limit	56,519	0	23,104	No Limit	No Limit
	5A, 5B	6,031	No Limit	110,258	0	45,480	No Limit	No Limit

Species	Area	Sector						
		Halibut (pounds)	Sablefish (pounds)	ZN Outside (pounds)	ZN Inside (pounds)	Trawl (pounds)	Dogfish (pounds)	Lingcod (pounds)
	5C, 5D	35,473	No Limit	100,066	0	40,697	No Limit	No Limit
	5E	3,560	No Limit	65,089	0	34,451	No Limit	No Limit
Spiny Dogfish	3C, 3D, 5A, 5B, 5C, 5D, 5E	No Limit	No Limit	No Limit	0	4,232,832	16,190,582	No Limit
	4B	No Limit	0	0	No Limit	1,750,000	25,000	0
Yelloweye rockfish	3C, 3D, 5A	29,268	No Limit	144,404	0	0	No Limit	No Limit
	5B	56,945	No Limit	67,045	0	0	No Limit	No Limit
	5C, 5D	49,209	No Limit	85,955	0	0	No Limit	No Limit
	5E	64,638	No Limit	82,517	0	0	No Limit	No Limit
	4B	No Limit	0	0	8,000	0	0	0

5.3. Incoming Sector Caps

The following caps are the amount of quota species, by pounds, permitted to enter a sector.

Species	Area	Sector						
		Halibut (pounds)	Sablefish (pounds)	ZN Outside (pounds)	ZN Inside (pounds)	Trawl (pounds)	Dogfish (pounds)	Lingcod (pounds)
Canary rockfish	3C, 3D	24,863	52,809	2,000	0	119,978	11,682	4,673
	5A, 5B	13,686	43,099	2,000	0	29,179	2,683	2,236
	5C, 5D	10,922	4,710	2,000	0	11,983	4,202	2,801
	5E	10,625	6,503	2,000	0	13,289	1,446	1,033
Lingcod	3C	93,353	57,347	55,000	0	139,613	95,000	30,000°
	3D	131,211	77,632	200,000	0	31,441	30,243	20,000°
	5A, 5B	256,192	84,119	250,000	0	95,244	32,045	75,000°
	5C, 5D, 5E	549,647	133,623	250,000	0	192,863	43,632	200,000°
Pacific Halibut	Coastwide	0	192,726	200,000	35,000	0	386,137	80,000
Quillback, Copper, China and Tiger rockfish	3C, 3D, 5A	54,000	3,000	9,000	0	0	28,000	7,282
	5B	16,000	1,000	5,691	0	0	5,000	2,258
	5C, 5D	45,000	2,000	14,000	0	0	2,600	8,122
	5E	10,000	2,000	5,746	0	0	300	583
	4B	No Limit	0	0	0	0	3,000	0
Rougheye rockfish	Coastwide	350,000	400,000	154,322	0	250,000	10,000	100
Sablefish	Coastwide	400,000	0	100,000	0	100,000	30,000	3,000
Shortraker rockfish	Coastwide	80,000	100,000	35,274	0	22,695	5,000	100
Shortspine thornyhead	Coastwide	189,562	150,000	57,320	0	16,134	5,000	100
Silvergrey rockfish	3C, 3D	20,000	7,000	8,818	0	25,000	2,500	5,545
	5A, 5B	50,000	20,000	17,637	0	47,151	3,000	5,500

Species	Area	Sector						
		Halibut (pounds)	Sablefish (pounds)	ZN Outside (pounds)	ZN Inside (pounds)	Trawl (pounds)	Dogfish (pounds)	Lingcod (pounds)
	5C, 5D	50,000	6,000	10,000	0	68,799	4,000	2,862
	5E	40,000	20,000	11,023	0	20,342	500	2,232
Spiny Dogfish	3C, 3D, 5A, 5B, 5C, 5D, 5E	5,000,000	2,000,000	400,000	0	189,388	4,232,832	0
	4B	500,000	0	0	25,000	0	1,250,000	0
Yelloweye rockfish	3C, 3D, 5A	91,539	19,121	15,062	0	0	30,000	17,950
	5B	54,685	6,000	46,478	0	0	5,000	5,048
	5C, 5D	67,245	6,000	30,128	0	0	5,562	24,807
	5E	69,344	22,825	41,320	0	0	300	13,366
	4B	0	0	0	0	0	8,000	0

° Incoming quota must have originated from the Trawl sector.

6. MANAGEMENT MEASURES FOR DURATION OF PLAN

The 2010/2011 commercial groundfish fishing season marks the first year of the permanent implementation of the Commercial Groundfish Integration Program. It is important that all vessel owners, licence holders and harvesters thoroughly review this management plan and licence conditions prior to fishing.

6.1. Commercial Sector Groups

There are seven distinct commercial groundfish sector groups, Groundfish trawl (T), Halibut (L), Sablefish (K), Inside Rockfish (ZNI), Outside Rockfish (ZNO) and the Lingcod and Dogfish fisheries that are licensed under Schedule II, but managed as separate fisheries using IVQs.

6.2. Individual Vessel Accountability

Vessels are individually accountable for their catch, both directed and non-directed. Subject to species, area, time and gear closures, along with vessel caps and trip limits, vessels will be permitted to land non-directed catch.

Vessels are required to acquire IVQ to account for mortality of all legal/marketable sized groundfish that are managed under species and area TACs as referenced in Section 5.1.5. for the hook and line and trawl sectors. Other groundfish species will be managed under trip limits or will have no limits. Harvesters should reference licence conditions for more details. A vessel's catch is calculated by adding both landed weight and the estimated mortality of all catch either utilized at-sea or released at-sea. Vessels landing fish in excess of the IVQ holdings identified in licence conditions and the allowable overage will be restricted from further fishing opportunities until such time as additional IVQ has been acquired.

DFO and the groundfish trawl industry have agreed to a two step approach to instil full responsibility for catch by eliminating the designation of catch as marketable and non-marketable for fish released at-sea. Beginning in the 2010/2011 season, vessels will be responsible for fifty (50) percent of the mortality associated with non-marketable catch for quota applicable species. This will increase to one hundred (100) percent responsibility in the 2011/2012 season. The objective is to ensure full accountability and responsibility for catch of all quota species while continuing to provide incentive for better utilization of catch, reduce at-sea releases and development of improved fishing practices.

6.3. Sector Caps

To ensure that harvesters have access to non-directed catch from other sectors, sector caps have been established that limit the amount of IVQ from one sector that may be accessed by any other sector. In addition, each sector has identified a quantity of IVQ that is permitted to leave the sector. The sector access caps and access provided are listed in Section 5.2 and Section 5.3.

6.4. Reallocations of Individual Quota

Subject to annual species caps and sector holding caps, the temporary reallocations of IVQ between vessels and between commercial sectors will be permitted.

Permanent reallocations of IVQ are restricted to intra-sector reallocations, specifically Halibut species within the Halibut sector, Sablefish species within the Sablefish sector, and several groundfish species within the Groundfish Trawl sector. All temporary and permanent reallocations are subject to the individual sector rules. In the coming year, the Groundfish Management Unit (GMU) will work to make the necessary changes to our quota management system to allow for permanent intra-sector reallocations for the remaining species. We anticipate permanent intra-sector reallocations will be permitted for the 2011/2012 fishing season.

6.5. Multiple Hail-outs

A vessel may hail out for one directed commercial groundfish fishery only, except when hailing out for both Halibut and Sablefish fishing.

6.6. At-Sea Monitoring

Timely and accurate information on harvesting practices and the catch composition and location is essential to assess the status of fish stocks and to ensure the conservation and long-term sustainability of fish resources. Effective monitoring and accurate catch reporting are integral to resource management, enforcement of fisheries rules and the development of effective management plans. Monitoring of all catch, both landed and at-sea releases is critical to sustainable fisheries management. At-sea monitoring encourages responsible fishing and provides information supportive of Canada's international obligations for fisheries.

Complete 100 percent monitoring on all commercial groundfish fishing trips is required to monitor at-sea releases and record fishing activity, location, date and time.

Trawl monitoring requirements can be found in the Groundfish Trawl Commercial Harvest Plan Appendix 8. Monitoring requirements for all groundfish hook and line/trap fisheries can be found in Appendix 1.

6.7. In-Season Updates

Important changes are made to the IFMP throughout the season. The following revisions have occurred to date:

Version	Date of Issue	Summary of Changes
1.0	21-Feb-2010	Initial IFMP issued for the opening of the Halibut, Sablefish, Rockfish, Groundfish Trawl, Lingcod, and Dogfish seasons.
1.1	24-Mar-2010	Corrections made to 5.2 and 5.3 of the IFMP; corrections made to 6.2.1. of Appendix 4; corrections made to 7.2.1. of Appendix 5; and corrections made to 6.3.2 of Appendix 6.

Version	Date of Issue	Summary of Changes
1.2	18-April-2010	Changes made to section 5.3 of the IFMP, increasing the ZNO incoming sector cap for 3C,3D,5A Quillback, Copper, China, Tiger to 1000 pounds; updates were made to contact information in Appendix 2; corrections made to sections 5.1 and 6.1 of Appendix 3; corrections made to section 6.5 of Appendix 6; corrections made to Appendix 10.
1.3	31-May-2010	Changes made to section 5.3 of the IFMP, increasing the ZNO incoming sector cap for 3C, 3D, 5A Quillback, Copper, China, Tiger to 4000 pounds; decreasing the Halibut incoming sector cap for 3C,3D,5A Quillback, Copper, China, Tiger to 59,000 pounds and 5B Quillback, Copper, China, Tiger to 18,000 pounds; decreasing the Dogfish incoming sector cap for 3C,3D,5A Quillback, Copper, China, Tiger to 28,000 pounds and increasing the Dogfish incoming sector cap for 5B Quillback, Copper, China, Tiger to 5,000 pounds. Changes made to section 6.3 of Appendix 4 increasing the trip limit of Pacific Cod to 150 pounds.
1.4	7-October-2010	Changes made to section 5.3 of the IFMP, increasing the Halibut sector's incoming sector cap for 3C Lingcod from 73, 353 pounds to 93,353 pounds; decreasing the Dogfish sector's incoming sector cap for 3C Lingcod from 100,000 pounds to 95,000 pounds; decreasing the Sablefish sector's incoming sector cap for 3C Lingcod from 62,347 pounds to 57,347 pounds; decreasing the Rockfish Outside sector's incoming sector cap for 3C Lingcod from 60,000 pounds to 55,000 pounds; decreasing the Trawl sector's incoming sector cap for 3C Lingcod from 144,613 pounds to 139,613 pounds.
1.5	20-October-2010	Changes made to section 6.1 of appendix 7, increasing the Sablefish sector's licence species cap for Yelloweye from 6,652 pounds to 9,000 pounds.
1.6	22-October-2010	Changes made to section 6.3 of appendix 4, decreasing the Rockfish Inside sector's trip limit for Lingcod from 800 pounds to 400 pounds. This change was previously announced and implemented on May 1, 2010.
1.7	20-December-2010	Changes made to section 6.2 of appendix 4, increasing the Rockfish Inside sector's licence species cap for Quillback, Copper, Tiger, China from 10,000 pounds to 15,000 pounds; changes made to section 5.2 of the IFMP, increasing the Halibut sector's outgoing sector cap for 5C, 5D Silvergray from 5,473 pounds to 35,473 pounds; changes made to section 5.3 of the IFMP, increasing the Trawl sector's incoming sector cap for 5C, 5D Silvergray from 38,799 pounds to 68,799 pounds; changes made to section 5.3 of the IFMP decreasing the Halibut sector's incoming sector cap for 3C,3D,5A Quillback, Copper, Tiger, China Rockfish from 59,000 pounds to 54,000 pounds, for 5B Quillback, Copper, Tiger, China Rockfish from 18,000 pounds to 16,000 pounds, for 5C,5D Quillback, Copper, Tiger, China

Version	Date of Issue	Summary of Changes
		Rockfish from 50,000 pounds to 45,000 pounds, for 5E Quillback, Copper, Tiger, China Rockfish from 15,000 pounds to 10,000 pounds; changes made to section 5.3 of the IFMP increasing the Rockfish Outside sector's incoming sector cap for 3C,3D,5A Quillback, Copper, Tiger, China Rockfish from 4,000 pounds to 9,000 pounds, for 5B Quillback, Copper, Tiger, China Rockfish from 3,691 pounds to 5,691 pounds, for 5C,5D Quillback, Copper, Tiger, China Rockfish from 9,000 pounds to 14,000 pounds, for 5E Quillback, Copper, Tiger, China Rockfish from 746 pounds to 5,746 pounds.

For announcements of in-season updates to the IFMP, please refer to:

- Pacific Region Management Plan website at:
<http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/MPLANS/MPlans.htm#Groundfish>
- Fishery Notice website at:
<http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm>

In-season sector catch and sector cap summaries are updated daily and may be found at:
<http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/index-eng.htm>

7. SHARED STEWARDSHIP ARRANGEMENTS

7.1. Commercial Industry

A Joint Project Agreement (JPA), exists between Fisheries and Oceans Canada and Wild Canadian Sablefish Ltd. (WCS). Further information can be found in the Sablefish Harvest Plan, Appendix 7.

7.2. Fisheries and Oceans Canada

The groundfish fisheries in British Columbia are managed through the Groundfish Management Unit. This includes six Fisheries Management personnel directly involved in the management of this fishery. In addition, a groundfish stock assessment unit, located at the Pacific Biological Station contributes to annual stock assessments for groundfish species. Contributions to the IFMP are provided by Fisheries Management the Science Branch, C&P, the Pacific Fishery Licence Unit, the Treaty and Aboriginal Policy Directorate, and numerous administrative personnel. A list of DFO contacts is provided in Appendix 2.

8. COMPLIANCE PLAN

8.1. Overview

As part of the Fisheries and Aquaculture Management Branch, the Conservation and Protection (C&P) unit has a large role in facilitating compliance of the acts and regulations associated with Canada's aquatic resource. Through modern community

policing practices, C&P uses education, partnering, enforcement and problem solving to assist in the conservation and protection of the fishery resources.

There are approximately 170 fishery officers stationed in the Pacific Region, which encompasses the province of British Columbia and Yukon Territory. They are designated as “fishery officers” under Section 5 of the *Fisheries Act* and have full enforcement powers and responsibilities outlined in the *Fisheries Act*, *Coastal Fisheries Protection Act*, the *Criminal Code of Canada* and the *Constitution Act*.

Certified Observers perform duties best described as “Observe, Record and Report.” Duties are related to monitoring of fishing activities, examination and measurement of fishing gear, collection of biological samples, recording scientific data, monitoring the landing of fish and verification of the weight and species of fish caught and retained. Certified Observers are not enforcement personnel.

Observers working under the Dockside Monitoring Program (DMP) conduct dockside monitoring weigh-out inspections at all approved landing locations and document all landing. Observers interview the fisher, assigning catch to the appropriate stock area, spot-check harvest logs for consistency with verbal reports and notify the Department of any occurrences observed during the interview, logbook review and offload process.

Fishery officers are tasked with the responsibility of responding coast-wide to calls from the general public, other agencies, observers and other industry users reporting all types of occurrences including commercial groundfish landings. Fishery officers inspect and investigate groundfish vessels for compliance with terms and Conditions of Licences, *Fisheries Act* and related Regulations and variation orders.

8.2. Enforcement Issues

Certified observers perform a key role in observing, documenting and reporting to DFO fishing related occurrences. Occurrence reporting procedures are reviewed with the objective of ensuring that fishery officers coast-wide are able to provide prompt response to significant enforcement issues.

Fishery officers conduct licence condition enforcement inspections both dockside and at sea. Due to the complexity of transferable Individual Vessel Quota (IVQ) and the related licence amendment system, tracking of catch quantities under the IVQ system is primarily performed administratively under the dockside monitoring program.

8.3. Priorities for 2010/2011

Fishery officers will investigate all incidents of closed area fishing such as RCAs, sponge reef protection areas, and other closed areas.

Fishery officers will continue to enforce compliance with hail-out, hail-in and other elements of the DMP and at-sea observer program.

Fishery officers will conduct investigations and enforcement actions in response to the retention of groundfish caught, retained or possessed without licence authority. Priority will be placed on occurrences where retention for the purpose of sale is indicated.

Fishery Officers will investigate incidents of unauthorized dual fishing.

8.4. Fishery Patrol Vessels

All at-sea patrols will be conducted using program vessels (mostly 7.33 metre and 9.2 metre rigid hull inflatable vessels) and Canadian Coast Guard (CCG) vessels. CCG vessels are staffed and operated by CCG staff, and marine enforcement officers. Fishery Officers are deployed onboard CCG vessels throughout the year to patrol specific fisheries.

8.5. Air Surveillance

Patrol coverage using chartered aircraft with a fishery officer onboard, is utilised to identify concentrations and distribution of fishing vessels. Air surveillance resources are utilized throughout the year to ensure compliance with the Fisheries Act, Regulations and licence conditions. Flight reports, photographs and other data collected from the over flights are readily available to departmental managers and fishery officers through an Internet-based flight information system.

9. APPENDICES

Appendix 1: Groundfish Hook and Line/Trap Monitoring Requirements (At-Sea and Dockside), Mortality Rates, and Size Limits

Appendix 2: DFO Contact Information

Appendix 3: Schedule II – Other Groundfish Species Commercial Harvest Plan

Appendix 4: Rockfish by Hook and Line (Inside ZN) Commercial Harvest Plan

Appendix 5: Rockfish by Hook and Line (Outside ZN) Commercial Harvest Plan

Appendix 6: Halibut Commercial Harvest Plan

Appendix 7: Sablefish Commercial Harvest Plan

Appendix 8: Groundfish Trawl Commercial Harvest Plan

Appendix 9: Vessel Safety

Appendix 10: Commercial Groundfish Advisory Committee Contacts

10. GLOSSARY

Accountability All harvesters are required to account for or accurately record all catch, both retained and released, for all species when fishing. As such, all catch becomes “accounted” for. Verification of accountability occurs through the monitoring program.

Area/Subarea As in Section 2 of the *Pacific Fishery Management Area Regulations*, available through the Internet at:

www.dfo-mpo.gc.ca/communic/policy/dnload_e.htm

CGIAC	Commercial Groundfish Integrated Advisory Committee.
CIC	Commercial Industry Caucus: A sub-committee of the former CGIAC consisting of commercial groundfish vessel representatives and processors.
Communal Commercial Licence	Issued to First Nations organizations pursuant to the <i>Aboriginal Communal Fishing Licences Regulations</i> for participation in the general commercial fishery.
Communal Licence	Issued to First Nations organizations pursuant to the <i>Aboriginal Communal Fishing Licences Regulations</i> , to conduct fishing and related activities.
COSEWIC	Committee on the Status of Endangered Wildlife in Canada.
C&P	Conservation and Protection Branch
DMP	Dockside Monitoring Program: Program conducted by a company that has been designated by the Department, which verifies the species composition and landed weight of all fish landed from a commercial fishing vessel.
FSC	A fishery conducted by First Nations for food, social and ceremonial purposes.
ITQ	Individual Transferable Quotas. The subdivision of a TAC into tradable shares to each commercial groundfish licence holder at the beginning of each season that are transferable between commercial groundfish licences (also referred to as Individual Vessel Quotas)
IVQ	Individual Vessel Quotas. The subdivision of a TAC into tradable shares to each commercial groundfish licence holder at the beginning of each season that are transferable between commercial groundfish licences (also referred to as Individual Transferable Quotas)
Observer	An individual who has been designated as an observer by the Regional Director General for Pacific Region pursuant to Section 39 of the <i>Fishery (General) Regulations</i> .
PSARC	Pacific Scientific Advice Review Committee.
RCA	Rockfish Conservation Area. An area that is closed for the protection of various inshore rockfish species to fishing activities that negatively impact rockfish.

Responsibility	For those species that have a TAC and IVQ, harvesters must acquire sufficient quota to cover the mortality of retained and released species.
SARA	<i>Species At Risk Act</i>
TAC	Total allowable catch: The amount of catch that may be taken annually from a stock.
Tonne	Metric tonne, 1000 kg, or 2204.6 lbs.
Validation	The verification, by an observer, of the weight of fish landed.

Appendix 1: Groundfish Hook and Line/Trap Monitoring Requirements (At-Sea and Dockside), Mortality Rates, and Size Limits

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1. CATCH MONITORING

Information on all catch is necessary for the proper management of the fishery. Monitoring of all catch, both landed and at-sea releases is critical to sustainable fisheries management. Mandatory 100 percent monitoring on all commercial groundfish hook and line and trap fishing trips will be required to provide a full and reliable accounting of all catches in these fisheries, both retained and released, and record fishing activity, location, date and time. This requirement may be met either through at-sea observer coverage or through the use of an Electronic Monitoring (EM) system on each trip. In addition, all landings must be validated through a dockside monitoring program.

2. AT SEA OBSERVER COVERAGE

Under Section 46 of the *Fishery (General) Regulations*, the licence holder or master of a fishing vessel shall, at the request of the Regional Director General, permit an observer to go on board that vessel to perform the designated duties for the period of time specified and arrange for embarkation or disembarkation of the observer at the times and places specified. The vessel master shall provide all reasonable assistance to the observer.

Archipelago Marine Research Ltd. (AMR) is the designated service provider for at-sea Observers. Contact AMR at (1-800-663-7152) to arrange for at-sea observer services or to inquire about costs of this service. Other vessel requirements are outlined in AMR's services agreement that each vessel must complete before an Observer is deployed.

3. ELECTRONIC MONITORING SYSTEM

The EM system allows for auditing, on a trip and set basis, the species caught, retained and released at sea. Using an EM system is an alternative to the requirement to carry an at-sea observer. Vessels that do not ensure that the EM system is functional for the entire trip, that the cameras have a clear view of the fishing area at all times, or that release rockfish at-sea, may be required on subsequent trips to carry an at-sea observer.

3.1. Systems Requirements

Any electronic monitoring system must be approved by the Department and must include the following minimum specifications and component requirements:

- a) a video and sensor data-logging engine (control box), equipped with monitor and keyboard to verify correct power supply and EM system software and hardware performance, equipped with an external control to allow the user to manually insert time-stamped event markers into the sensor record;
- b) operating software to record imagery during fishing events;
- c) peripheral sensor devices suitable for fishing-deck work environment, including GPS, an electronic hydraulic pressure transducer, and a winch rotation sensor;

- d) a minimum of two closed circuit television cameras, suitable for fishing-deck work environment, configured with an adjustable focal length lens to provide a clear view of the catch retrieval process and the measurement of released fish.
- e) have the sensor box connected to a monitor and keyboard to allow the user to view recorded EM imagery and conduct system checks to test system functionality.

Video images captured by the EM system shall meet the following minimum specifications:

- a) image files shall be viewable on Windows media player; if a non-standard Windows media player Codec is used, it shall be provided to Archipelago Marine Research Ltd. for image analysis;
- b) minimum resolution of 640 X 480 dpi and the ability to vary lens choice to ensure an appropriate field of view;
- c) imagery must have a burned-in caption showing vessel identifier, date, time and location;
- d) image files must capture 100% of each catch retrieval event, including a 10 to 30 minute run-on (depending on gear type) after each event;
- e) image frame rates shall be not less than 5 frames per second for catch retrieval imagery; and
- f) image quality must be sufficient to allow clear identification of species.

Sensor data captured by the EM system shall meet the following minimum specifications:

- a) Sensor data should be recorded to an ASCII file at a minimum frequency of once every 10 seconds;
- b) Sensor data format must meet the specifications outlined below:

Date,Time,UTCOffset,Lat,Latmin,Lon,Lonmin,Gpsok,Speed,Heading,Voltage,Saterr,
Video,Event,Drum,Pressure

080602,120041,-07.00,48,26.1305,123,23.7711,1,00.0,277,11.97,005,0,01,0,0

080602,120051,-07.00,48,26.1305,123,23.7711,1,00.0,257,11.95,005,0,00,0,0

080602,120101,-07.00,48,26.1305,123,23.7711,1,00.0,249,11.95,005,0,00,0,0

080602,120111,-07.00,48,26.1305,123,23.7711,1,00.0,252,11.95,005,0,00,0,0

Comma Delimited Data Format

The date, time, latitude, longitude, speed, heading and satellite error are all delivered by the GPS in National Marine Electronics Association (NMEA) 0183 Version 2.0 format. All data are numeric except the comma separators. Sensor sample interval is 10 seconds.

- 1) **DATE** – fixed width, 6 characters, YYMMDD
- 2) **TIME** – fixed width, 6 characters, HHMMDD, Pacific Standard Time year round.

- 3) **LAT** – Latitude degrees, fixed width, 2 characters
- 4) **LATMIN** – Latitude minutes, fixed width 6 characters including decimal point with 3 decimal characters
- 5) **LON** – Longitude degrees, fixed with 3 characters
- 6) **LONMIN** – Longitude minutes, fixed width 6 characters including decimal point with 3 decimal characters
- 7) **SPD** – Speed knots, fixed width 4 characters including decimal point with 1 decimal character
- 8) **HDG** – Heading degrees, fixed width 3 characters
- 9) **SATERR** – Estimated horizontal position error in metres (radius), fixed width, 3 characters. The horizontal position error (HPE) is delivered in the NMEA 0183 – GPS data stream
- 10) **VIDEO** – Video on/off, fixed width, single character (0 or 1)
- 11) **EVENT** – Operator initiated event marker, fixed width, 1 character (0 or 1)
- 12) **COUNT** – Rotation sensor – drum revolutions during sample interval, column width variable
- 13) **PRES** – Hydraulic pressure reading, pounds per square inch (PSI), column width variable.

3.2. Requirements prior to fishing when using EM:

The vessel master must make arrangements with an approved EM system service provider to install an EM system on board their vessel. The EM system must be functioning prior to hailing out. A functionality test confirming all systems are working must be completed and a Functionality Test Certificate Number (FTCN) will then be provided by the EM service provider for recording in the fishing log. The FTCN will expire thirty days from issuance; a valid FCTN is required to hail out.

- a) When hailing out, the vessel owner or master must provide the hail service provider with, in addition to the usual trip details, either an FTCN or the name and observer ID number of the embarking at sea groundfish observer for the trip.
- b) A hail out number will only be issued if either the FTCN (confirming a fully operational EM System) or the name of an embarking at sea observer is included in the hail information. The vessel must not depart port until a hail out number has been issued.
- c) A Quota Status Verification Number (QSVN) must also be provided at the time of hail, this number is to be recorded on the validation record at offload.
- d) Vessels must hail out to the designated hail service provider and must receive a hail out number prior to departing on the trip. The hail out number must be recorded in the fishing log Hail out requirements are fully described in licence conditions.

3.3. Requirements while fishing with EM:

- a) Accurate recording of all fish caught and released in the fishing log is key to both accurate determination of catch and cost-effective fishing log audit. All halibut and sablefish caught and either retained or released must be accurately recorded by piece count and estimated weight in the fishing log. All other species must be accurately and fully recorded as piece counts. Exception being sablefish vessels are not required

to record piece counts of retained sablefish in their logbook and piece counts for sablefish will not be required at dockside. Dogfish vessels are not required to record piece counts of retained dogfish in their logbook and piece counts for dogfish will not be required at dockside. However, Dogfish vessels are required to record piece counts of released dogfish in their logbook. Lingcod vessels are still required to record piece counts of lingcod, retained and released, in their logbook (by area), however piece counts will not be required at dockside. In addition, the set and haul details including fishing time and location must be accurately recorded.

- b) Where an EM system is in use on a vessel, the vessel master shall ensure all components of the system are fully operational during the entire fishing trip from the time the vessel master declares at hail-out until the vessel returns to port to offload and the technician removes the trip information. The EM system must not be turned off at any time. Vessels masters may also conduct periodic system functionality checks via monitor and keyboard. These checks record EM system performance and have it recorded with a time and date stamp on the system hard drive.
- c) If any or all of the EM system equipment becomes inoperative or malfunctions in any way, the vessel master shall immediately contact the EM system service provider. If the EM system cannot be repaired at sea, the vessel master shall stop fishing by hauling gear and returning to port as soon as possible. Trip data will be reviewed to ensure no fishing occurred after equipment failure. For Sablefish trap vessels, traps can be left in the water (for no more than four days) if the vessel is returning to port to repair the equipment and subsequently returning to the fishing grounds to complete the trip. If the EM system cannot be repaired at port, the vessel must hail-in as soon as possible.
- d) All rockfish species must be retained and landed. See appendices 4 and 5 for further details.
- e) All releases of groundfish species must occur within view of the camera equipment.
- f) Vessel operators and crew should avoid positioning themselves between the camera and the catch as this hampers accurate recording of catch during image review. All catch should be visible to the camera.

3.4. Measurement grid

- a) The use of a measurement grid is optional, however if the vessel master opts not to use a grid then all releases of lingcod, sablefish and halibut will be deemed legal size and all releases of dogfish will be deemed marketable and the appropriate mortality rates will be applied (see Section 7). The vessel master will then be responsible to acquire the necessary quota to address these.
- b) If a measurement grid is used then all sub-legal lingcod, sablefish, halibut and unmarketable dogfish must be held against the grid matching the specifications outlined below in (d). Vessel masters are reminded that fish are to be held against the measurement grid for at least three seconds before release without doing other activities (i.e. removing a hook). The calmer the fish, the easier they are to measure. The objective is to allow video viewers to visually gage the length of the fish. If the grid is used improperly, the fish cannot be measured and the released fish will be deemed legal size.

- c) The exceptions to this are released sablefish on a directed sablefish trip, released halibut on a directed halibut trip, released dogfish on a directed dogfish trip and released lingcod on a directed lingcod trip. On these trips all targeted species that are released at-sea will be assumed to be sub-legal or unmarketable and do not have to be measured. All levels of releases will be monitored in season to assess this requirement. See size limits in Section 9.
- d) Recommended measurement grid specifications:
1. For vessels that choose to discard fish at the rail (Figure 1), or after the fish have come over the rail (Figure 2), measurement stations at the hauling area should have the following delineations:
 - i. Control Level
 - Green band above the bumper
 - ii. Bumper
 - Raised material (e.g. existing rail or rubber or angle iron) at bottom of control level, it must be sufficient to act as a control point to hold the tip of the fish against
 - iii. Measurement Bands
 - Red band spanning 55-65cm from the bumper
 - Yellow band spanning 75-81cm from the bumper
 - Red band spanning 81-91cm from the bumper
 - Red band spanning 91-97cm from the bumper

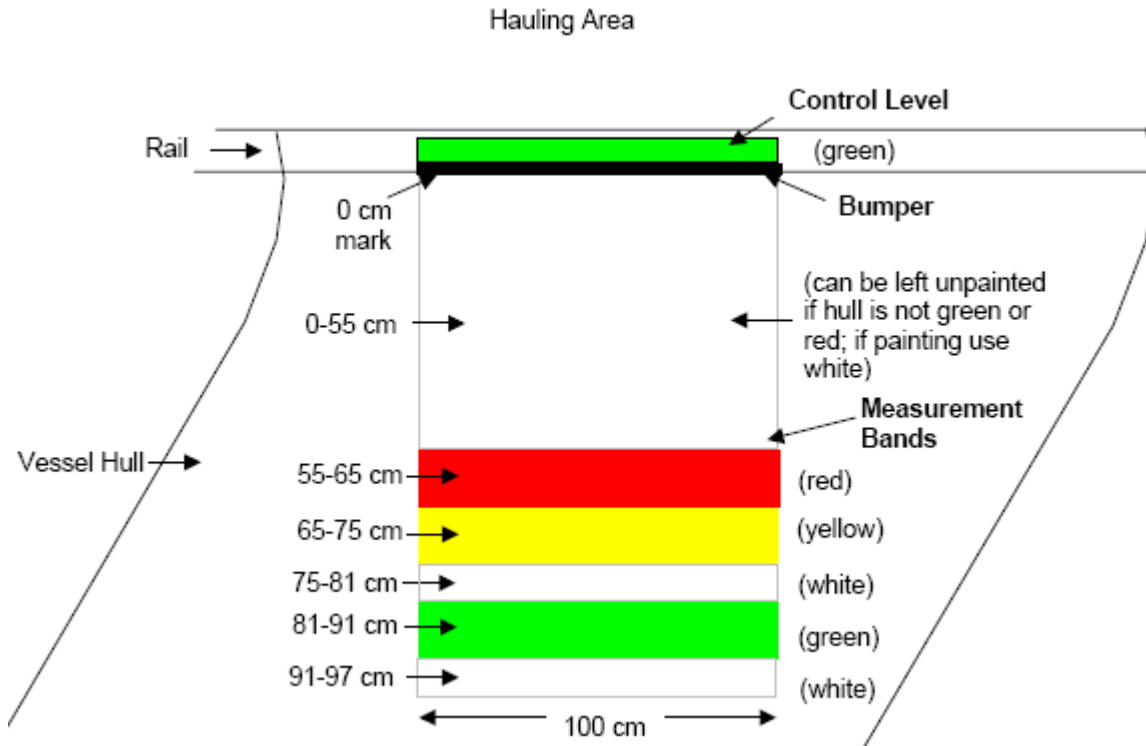


Figure 1. Measurement grid recommendations for vessels releasing at the rail.

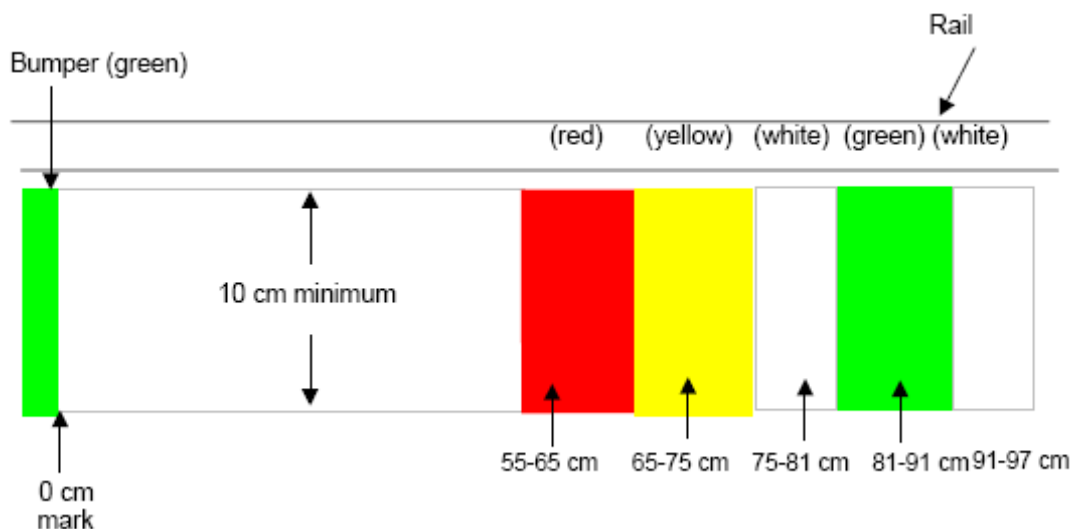


Figure 2. Measurement grid recommendations for vessels releasing after fish have come over the rail.

4. INTEGRATED GROUNDFISH FISHING LOG

An Integrated Groundfish Fishing Log (“fishing log”) will be available from Archipelago Marine Research Ltd. It is the responsibility of the vessel owner or master to ensure that the Integrated Groundfish Fishing Log be completed fully and accurately. The fishing log shall be updated prior to the landing or sale of groundfish taken during that fishing trip. (See page 15 for example)

The white copy of the completed pages of the fishing log will be collected by the groundfish dockside observer. When halibut has been landed, the yellow copy of the completed pages from the fishing log should remain in the logbook until removed by IPHC personnel or mailed within seven days of the vessel’s last trip to:

International Pacific Halibut Commission
P.O. Box 95009
Seattle, WA
United States 98145 – 2009

5. HAIL PROGRAM

Prior to leaving port for a fishing trip, and prior to landing catch, the vessel masters must indentify their intentions by way of hailing. Hail-out and hail-in reports may be made either via telephone, or electronically via the e-hail program, as described in the conditions of licence.

To hail via telephone, a vessel master shall contact the designated groundfish hail service provider, Archipelago Marine Research Ltd. (AMR), at 1-877-819-1888 (24 hours per day; seven days per week).

To participate in the e-hail program, a vessel master shall contact the designated electronic groundfish electronic hail service provider, Electric Edge Systems Group Inc. (Electric Edge), at 1-250-480-0642 or by e-mail at info@electricedgesystemes.com (08:00 to 16:00, Monday to Friday) to inquire about costs and technical support.

The e-hails system consists of software that runs on an onboard computer, as well as a central, web-accessible portal that processes hails as they are received from vessels. E-hails provide a traceable electronic record of hail data and an automated confirmation of hails, with an accompanying hail-out number, which is e-mailed back to the vessel. Hails are not complete until a confirmation is received. Valid electronic hails are automatically forwarded to the designated dockside monitoring (DMP) service provider upon receipt.

5.1. E-hail System Requirements

Any vessel using the electronic hail program must meet the following minimum specifications and component requirements:

- a) Windows-based personal computer, installed with Windows XP or a later version of a Windows operating system;
- b) At-sea e-mail sending capabilities via:
 - (i) “Skymate” satellite communications equipment and account; or
 - (ii) “Boatracs” satellite communications equipment and account
- c) Compatible web browser software:
 - (i) Microsoft Internet Explorer version 7.0 or higher web browser
 - (ii) Mozilla Firefox version 3.0 or higher web browser
- d) At least 100 megabytes of hard drive space available for the installation and operation of the electronic hail software.

6. BAIT

Commercial fishers wishing to use licensed catch as bait may do so (with the exception of rockfish). All such catch must be accurately recorded in the Integrated Groundfish Fishing Log. Rockfish may not be used as bait but must be retained and landed. Pacific cod landings are subject to a trip limit, (refer to licence conditions for details), however, any amount of Pacific cod caught can be used for bait provided that the fish is recorded in the logbook.

Octopus caught incidentally may be retained and used for bait but cannot be landed and sold.

If a quota species is used as bait, the vessel will be assessed the average weight for that species (see Section 9).

7. DOCKSIDE MONITORING AND VALIDATION

7.1. Hail-in

Vessels must hail-in to the designated hail service provider prior to the landing of any fish. The landing of any species of fish can not commence unless a groundfish dockside observer is present and has given permission to commence the landing. All requests for dockside observer services will be handled as quickly as possible; however vessel masters are urged to provide as much advance notice as practical (e.g., 24 hours) to avoid delays. Response times will vary depending on many circumstances such as observer availability, time of hail and location of offload. Hail-in requirements are fully described in licence conditions.

7.2. Designated Landing Locations

All hook and line and trap groundfish species shall be landed only at the approved landing ports listed in the licence conditions. To get an estimate of costs and rates for different landing locations, contact AMR.

7.3. Landing

All fish landed must be separated, piece counted and weighed by individual species and by product type. The only exceptions to the piece count requirement are halibut, lingcod, dogfish and sablefish landed on directed trips.

Sub-sampling methods are set out in licence condition for species, (other than halibut and lingcod), where the landed weight is greater than 2,500 lbs.

All fish caught and retained must be landed at designated offloading locations and validated by a groundfish dockside observer using a dockside weight verification system. AMR is the designated service provider for this program, and will provide DFO designated groundfish dockside observers to verify individual vessel quota status. Specific requirements are included in conditions of licence.

The dockside monitoring program (DMP) is a cooperative process between vessel masters, processors and validators whereby all parties must work together to ensure the timely and accurate collection of catch landing data. Vessel masters are ultimately responsible to ensure the offload process meets the needs of all parties, in particular regarding piece counts. Should offload conditions (e.g. processing plant operations, lighting at the offload) inhibit the ability of the validator to conduct an accurate piece count, the observer is obliged to immediately bring this to the attention of both the plant foreman and the vessel master to have the issue resolved.

At the completion of an offload, vessel masters or a designate must review the validation record and sign off on the piece counts; acknowledging that piece counts are a key component of the audit process (Section 11). In the case where a discrepancy exists between the vessel master's count and the validation record, a recount may be requested.

Where a recount is carried out, it should be done in a way that minimizes impact and expense for the offloader. In those cases where the new counts are more than 5% out, AMR will not bill vessel for the extra time unless concerns regarding the validator's ability to carry out accurate piece counts were not addressed. If the recount of the species in question is completed and the new counts are within 5% of the original count, the costs of doing the extra time will be borne by the vessel and added to the Validation Record.

No fish may be offloaded at sea. No landing of any fish is to commence until a designated groundfish dockside observer is on-site and approves the commencement of the landing.

The observer will inspect fishholds, lazarettes, baitholds, and other areas where fish might be stored. After landing is completed, observer will inspect the fishholds, and the above-mentioned areas, to ensure that all fish on board have been landed. It is the responsibility of the vessel owner or master to provide safe access to the vessel's holds for inspection, and to ensure that the vessel does not leave the landing site prior to completion of the fishhold inspection by observer.

Once landing commences all product on-board are to be landed and weighed on a scale approved by either Industry Canada or the State of Washington Weights and Measures.

The groundfish dockside observer will verify and record in the Groundfish Validation Log the weights and, where required, the pieces of all fish landed. The observer will convert landed halibut weights to a net dressed, head-off weight. Rockfish and all other groundfish species will be converted to a round weight, using conversion factors set out in the conditions of licence.

The white copy of the completed pages from the Validation Record must remain with the groundfish dockside observer for subsequent keypunching and data entry. The yellow page must be delivered to the buyer or must accompany the load and be delivered to the buyer if the fish are trucked to the buyer.

The IPHC stock assessment is based on biological data obtained through port sampling, surveys and special projects. Since the 1930s, biologists have collected otoliths for ageing and lengths of fish. Under Section 48 of the *Fishery (General) Regulations*, the vessel master must make available for sampling any fish when requested by an authorized representative of the IPHC.

7.4. Halibut Tagging

All halibut landed in Canada including Canadian-caught halibut landed in the United States will be tagged. Under this program all halibut are tagged by the Department certified observer at the point of initial offloading with a unique serial number that will tie each fish to a particular offload. These numbers are recorded by the observer in the Validation Record completed for each landing.

The objectives of the program are twofold: to act as an enforcement tool to decrease the amount of illegally caught halibut entering the market, and to assist in marketing Canadian halibut as a distinct and high quality product.

7.5. Transport of validated fish

If the fish are to be transported to another location after landing, the vessel master should obtain a transit slip from the groundfish dockside observer, who will issue one transit slip for each vehicle or vessel transporting groundfish.

Vessels with validated fish onboard shall not engage in any commercial fishing until all validated fish have been removed from the vessel.

7.6. Dockside Audit

Following each dockside validation the groundfish dockside observer will compare the weight of all validated fish against the vessel's total remaining allowable catch (including allowable overages). Vessels that are not in an excess overage position for any species area group will be given a Quota Status Verification Number (QSVN) to provide to the hail service provider on the vessel's next hail out. There may be a one trip allowance for vessels to clear excess overages for non directed catch. Vessels that remain in an excess overage position for any species area group will be restricted from further fishing activity for that fishery for the remainder of the fishing year, or until such time that sufficient quota holdings are reallocated to the licence to cover any overages. Vessels must have quota for their targeted species (i.e. halibut on a halibut trip) prior to hailing out.

8. MORTALITY RATES

Vessels will be assessed mortality for legal/marketable sized fish released at-sea, for those species and areas for which a quota has been established. Mortality rates are set out below.

Gear		Lingcod	Sablefish	Dogfish	Rockfish	Halibut
Hook & Line	Jig	4%	15%	6%	100%	5%
Hook & Line	Longline	4%	15%	6%	100%	16%
Hook & Line	Troll	2%	15%	6%	100%	5%
Trap		4%	9%	6%	100%	10%

9. AVERAGE WEIGHTS

The mortality can be determined by calculating the mortality rate (as laid out above) by the predetermined average weights in pounds listed below. (For example a longline caught legal sized released halibut would be $0.16 \times 21 \text{ lb.} = 3.4 \text{ lb.}$)

Spiny Dogfish	9	China Rockfish	3	Shortraker Rockfish	9
Pacific Halibut	21	Copper Rockfish	3	Shortspine Thornyhead	3
Lingcod	12	Quillback Rockfish	3	Silvergray Rockfish	5
Sablefish	8	Rougheye Rockfish	4	Tiger Rockfish	3
Canary Rockfish	6	Yelloweye Rockfish	7		

Dogfish, Sablefish and ZN vessels that encounter halibut or lingcod as non-directed catch after their season closes will be responsible for the mortality of these species.

10. SIZE LIMITS

10.1. Halibut

No person shall catch and retain a halibut that head on is less than 32 inches (81.3 cm), measured in a straight line, passing over the pectoral fin, from the tip of the lower jaw with the mouth closed to the extreme end of the middle of the tail or head off less than 24

inches (61.0 cm), measured in a straight line from the base of the pectoral fin at its most anterior point to the extreme end of the middle of the tail.

10.2. Lingcod

No person shall catch and retain a lingcod that head on is less than 65 cm in length, measured from the tip of the nose to the tip of the tail or head off is less than 50 cm in length, measured along the shortest length of the body to the tip of the tail.

10.3. Sablefish

No person shall catch and retain a sablefish that is less than 55 cm in length, measured from the tip of the nose to the fork of the tail or where the head has been removed, 39 cm in length measured from the origin of the first dorsal fin to the fork of the tail.

10.4. Dogfish-Unmarketable

Dogfish that is less than 66 cm in length, may be released at-sea, and will not be deducted from IVQ holdings.

11. RESTRICTIONS

It is unlawful to have Pacific halibut on board taken by recreational fishing if there are any other fish on board the vessel destined for commercial use.

12. FISHING LOG AUDIT

At the time of landing the video and sensor data from the EM system will be removed from the EM system by the EM system service provider. Following every trip landing there will be an audit of the accuracy of the completed fishing log. The audit uses the video and sensor data to confirm catch by species group, DMP piece counts to confirm retained catch, and the VMS output to confirm location of fishing. AMR is the designated service provider for the audit and will run a series of tests so that the following comparisons will be made:

- a) Fishing log total retained piece counts compared to DMP validation - to verify the accuracy of logbook with respect to landed and validated catch.
- b) Fishing log piece counts compared to EM Video - to compare the observed catches and releases against the fishing log record. Ten percent (10%) of all sets per trip (minimum 1 set) will be randomly selected for video review.
- c) Fishing log set start location, time, date and total number of fishing events compared to EM sensor data – to verify the accuracy of the logbook in relation to time, date and area of catch and number of fishing events.
- d) All test results produced from the audit are combined in a weighted average to produce a trip score to provide a single value ranging from 0 ('poor') through 10 ('good') to describe general audit results.
- e) Trip scores will be considered cumulatively in determining a vessel's annual score. Annual scores, ranging in value from 0 ('poor') through 10 ('good'), are determined

by averaging a vessel's trip scores accrued over the past calendar year (i.e. irrespective of season) to provide a sense of a vessel's audit history.

- f) After the audit is complete, the logbook and the DMP together form the official trip record.

Audits that are not within acceptable range may result in the following:

- a) Letters identifying unsuccessful tests, requests for additional information to explain discrepancies, and a delay in receiving catch details;
- b) Additional time required to resolve and correct fishing trip data at additional cost to the vessel;
- c) Complete (100%) review of all EM imagery data at additional cost to the vessel; and
- d) Catch detail being based on EM data rather than logbook data.
- e) Requirement to take an at-sea observer.

13. QUOTA STATUS REPORT

Following the completion of each offload and subsequent audit, the designated EM data analysis service provider will reconcile all catch information; both landed and discarded, versus current quota holdings and produce a quota status report (QSR). The QSR will be forwarded to the identified contact for the vessel. Vessel masters should be advised that it can take up to 5-7 days for completion of a QSR.

There may be a one trip allowance for vessels to clear excess overages for non-directed catch. Vessels that remain in an overage position for any species area group will be restricted from further fishing activity for that fishery for the remainder of the fishing year, or until such time that sufficient quota holdings are reallocated to the licence to cover any overages.

14. FISHER IDENTIFICATION NUMBERS

DFO has introduced unique Fisher Identification Numbers (FIN) that will be assigned to all Pacific commercial harvesters. Once a FIN has been assigned to a fisher, that individual will reference the FIN when identifying him or herself in subsequent business dealings with both the department and service contractors, completing the FIN field on logbooks, noting the FIN when hauling and landing catch, etc. A FIN will be automatically generated for fishers when their new year's FRC licence is issued. Once the FIN is issued to a fish harvester it will not change from year to year.

15. FISH SLIPS

Vessel Masters must obtain copies of all fish slips from fish buyers and keep available copies when required by the Department. Vessel masters are required to ensure fish slip records are mailed directly to the Department no later than seven days after landing. Fish slips must be mailed to:

Fisheries and Oceans Canada
Regional Data Unit
Suite 200 - 401 Burrard Street
Vancouver, B.C. V6C 3S4

Any fishers selling fish to the public are reminded that they must obtain a Fish Vending Licence, available from any provincial government agent, and as licensed vendors they will be required to record all public fish sales on fish slips.

16. INTEGRATED GROUND FISH FISHING LOGBOOK

YEAR: 2007 INTEGRATED GROUND FISH FISHING LOGBOOK

Vessel: <u>Groundfish #1</u>	FTCN: <u>123456789</u>	DATE: <u>April 01, 2007</u>
VRN: <u>12345</u>		
Captain: <u>Robert Jones</u>		
FIN: <u>12345</u>	# of Crew: <u>4</u>	Trip #: <u>13</u>
Tab #1: <u>L 001</u>	Tab #2: <u>K 09</u>	
Hall Out #(s): <u>2790 0001/2670 0123</u>		
Hall In #(s): <u>2790 0099/2670 0999</u>		
Target Species: <u>Halibut/Sablefish</u>		
Bait Spp. <u>SA</u>	Spp. Wt. <u>8</u>	
Bait Spp. <u>HO</u>	Spp. Wt. <u>8</u>	

GEAR ID	Gear Type	Length of Skate (in feet)	HOOK/TRAP				ESCAPE RING	
			Type	Size	Spacing	# per skate	# per trap	Diameter
A	<u>SN</u>	<u>1850</u>	<u>BC</u>	<u>14</u>	<u>10</u>	<u>200</u>		
B								
C								
D								

Set/Haul	Set #	Haul #	Set/Haul	Set #	Haul #
Gear/Skate Details	<u>A</u>	<u>4</u>	Gear/Skate Details	<u>A</u>	<u>2</u>
Catch Area (GMU)	<u>5C</u>		Catch Area (GMU)	<u>5A</u>	
Set Start Date/Time	<u>(mm/dd) 04/22</u>	<u>(hh:mm) 06:13</u>	Set Start Date/Time	<u>(mm/dd) 04/24</u>	<u>(hh:mm) 16:40</u>
Haul Start Date/Time	<u>(mm/dd) 04/22</u>	<u>(hh:mm) 13:56</u>	Haul Start Date/Time	<u>(mm/dd) 04/25</u>	<u>(hh:mm) 22:36</u>
Haul End Date/Time	<u>(mm/dd)</u>	<u>(hh:mm)</u>	Haul End Date/Time	<u>(mm/dd) 04/26</u>	<u>(hh:mm) 16:36</u>
Set Start Lat		<u>52 26.28</u>	Set Start Lat		<u>51 10.10</u>
Set Start Long	<u>1</u>	<u>30 51.35</u>	Set Start Long	<u>1</u>	<u>29 30.50</u>
Set End Lat		<u>52 32.19</u>	Set End Lat		<u>51 08.00</u>
Set End Long	<u>1</u>	<u>30 50.00</u>	Set End Long	<u>1</u>	<u>29 40.10</u>
Depth in fathoms	Start <u>44</u>	Min <u>33</u>	Depth in fathoms	Start <u>100</u>	Min <u>80</u>
	End <u>60</u>	Max <u>64</u>		End <u>120</u>	Max <u>120</u>

Species Name	Retained			Released			Species Name	Retained			Released		
	Weight	Pieces	Bait	Weight	Pieces	Liced		Weight	Pieces	Bait	Weight	Pieces	Liced
Halibut - Legal	<u>600</u>	<u>28</u>				<u>4</u>	Halibut - Legal	<u>100</u>	<u>4</u>				
Halibut - Sub-L							Halibut - Sub-L						
Sablefish - Legal					<u>5</u>		Sablefish - Legal	<u>1000</u>	<u>125</u>				
Sablefish - Sub-L							Sablefish - Sub-L			<u>200</u>	<u>30</u>		
Lingcod - Legal	<u>100</u>	<u>10</u>					Lingcod - Legal						
Lingcod - Sub-L							Lingcod - Sub-L						
Dogfish - Mark.							Dogfish - Mark.					<u>13</u>	
Dogfish - UnMark.							Dogfish - UnMark.						

Species Name	Pieces	Bait	Pieces	Liced	Species Name	Pieces	Bait	Pieces	Liced
Yelloweye	<u>17</u>				Yelloweye				
Quillback					Quillback				
Rougheye	<u>3</u>				Rougheye	<u>13</u>			
SS Thornyhead					SS Thornyhead				
Redbanded					Redbanded	<u>10</u>			
Big Skate			<u>3</u>		Big Skate			<u>10</u>	
Longnose Skate					Longnose Skate				
Turbot	<u>2</u>				Turbot				
Pacific Cod					Pacific Cod			<u>13</u>	
Shortfin Mako			<u>26</u>		Shortfin Mako	<u>2</u>		<u>41</u>	
Sablefish					Sablefish				
Sablefish					Sablefish				

Tagged Fish/Tag #(s): _____

Collected by: _____

IPHC USE: _____

Comments: Apr 23 - heavy rain, strong N.W. wind, saw 2 whales while hauling set #1 3pm.

Appendix 2: DFO Contact Information

Observe, Record and Report 800-465-4336

Groundfish Activity Lines/In-Season Updates

Halibut 604-666-2993

Regional Headquarters

Regional Resource Manager, Groundfish	Tamee Mawani	604-666-9033
Trawl Co-ordinator	Barry Ackerman	604-666-3991
Halibut/Sablefish Co-ordinator	Adam Keizer	604-666-0912
A/Hook and Line Co-ordinator	Rob Tadey	604-666-3279
Trawl Quota Officer	Gerry Dunsmore	604-666-0010
Hook and Line Quota Officer	Louise Yada	604-666-5865
	Facsimile	604-666-8525
SARA Groundfish Recovery Planner	Wanli Ou	604-666-9118
Regional Aquaculture Co-ordinator		604-666-7009

Groundfish Stock Assessment

Regional Groundfish Section Head	Greg Workman	250-756-7113
Elasmobranches/Lingcod	Jackie King	250-756-7176
Inshore Rockfish	Lynne Yamanaka	250-756-7211
Flatfish	Jeff Fargo	250-756-7165
Groundfish Research Scientist	Robin Forrest	250-756-7205
Port Sampling/Observer Programs	Greg Workman	250-756-7113
Sablefish	Rob Kronlund	250-756-7108
Shelf Rockfish	Rick Stanley	250-756-7134
Slope Rockfish	Andrew Edwards	250-756-7146
	Rowan Haigh	250-756-7123
Pacific Hake	Chris Grandin	250-756-7170

Enforcement

A/Groundfish Enforcement Co-ordinator	Frank Snelgrove	604-666-6464
Detachment Supervisor, Prince Rupert	Linda Higgins	250-627-3430
Detachment Supervisor, Queen Charlotte City	Scott Keehn	250-559-8580
Detachment Supervisor, Bella Coola/Bella Bella	Bob Tupniak	250-799-5698
Detachment Supervisor, Campbell River/Port Hardy	Joe Knight	250-754-0221
Detachment Supervisor, Port Alberni/West Coast	Jim Robson	250-720-4450
Detachment Supervisor, Victoria	Larry Paike	250-363-3252
Detachment Supervisor, Nanaimo	Bryan Jubinville	250-754-0235
Detachment Supervisor, Steveston	Ken Green	604-664-9251

Recreational Fisheries

Recreational Fisheries Co-ordinator	Devona Adams	604-666-3271
North Coast Resource Manager	Mark Reagan	250-627-3409
Central Coast Resource Manager	Kristen Smith	250-799-5346
South Coast Resource Manager	Joe Knight/Bill Shaw	250-756-7152
Lower Fraser River Resource Manager	Debra Sneddon	604-666-6509

Treaty and Aboriginal Policy Directorate

Director Treaty and Aboriginal Policy Directorate	Kaarina McGivney	604-666-7478
Regional Manager, Aboriginal Fisheries Strategy	Jeff Johansen	604-666-8385

First Nations Fisheries

North Coast Resource Manager	Karen-Kimura Miller	250-627-3020
Central Coast Resource Manager (Areas 7-10)	Kristen Smith	250-799-5346
Central Coast Resource Manager (Areas 11-13 and 27)	Kent Spencer	250-286-5885
Lower Fraser River Resource Manager	Debra Sneddon	604-666-8426
South Coast AFS Implementation Officer (WCVI)	Paul Preston	250-720-8941
South Coast AFS Implementation Officer (SOG)	Jonathan Joe	250-756-7243

Regional Data Unit		604-666-2716
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Licensing

Pacific Fishery Licence Unit Suite 200-401 Burrard Street Vancouver, B.C. V6C 3S4	Facsimile	604-666-0566 604-666-5855
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Pacific Fishery Licence Unit 417-2nd Avenue West Prince Rupert, B.C. V8J 1G8	Facsimile	250-627-3413 250-627-3496
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Pacific Fishery Licence Unit 60 Front Street Nanaimo, B.C. V9R 5H7	Facsimile	250-754-0400 250-754-0403
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Appendix 3: Schedule II – Other Groundfish Species Commercial Harvest Plan

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1. MANAGEMENT CHANGES FOR 2010/2011

1.1. In-Season Changes/Updates

Important in-season updates to the IFMP are available on

- Pacific Region Management Plan website at: <http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/MPLANS/MPlans.htm#Groundfish>
- Fishery Notice website at: http://www-ops2.pac.dfo-po.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=commercial.

In-season sector catch and sector cap summaries are updated daily and may be found at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/index-eng.htm>

1.2. Commercial Groundfish Integration Program – Impact to Schedule II

Following public consultation and a comprehensive evaluation of the Commercial Groundfish Integration Pilot Program (CGIPP), the Department has accepted the Commercial Groundfish Integration Program as the best means to address conservation objectives. As such, the lingcod and dogfish ITQ allocations have now been permanently allocated to Schedule II licence eligibilities. These ITQ allocations, expressed as a percentage, are defined as a fixed share of the total allowable catch (TAC).

The Schedule II licence eligibility that has received the ITQ allocation during the pilot phase of the Commercial Groundfish Integration Program will continue to receive the ITQ allocation.

In the coming year, the Groundfish Management Unit (GMU) will work to make the necessary changes to the Department's Quota Management System to allow for permanent intra-sector (i.e. Lingcod licence eligibility to Lingcod licence eligibility) reallocations to occur. GMU anticipates that permanent intra-sector reallocations will be permitted for the 2011/2012 fishing season.

Individuals that wish to have their lingcod and dogfish ITQ allocated to a different Schedule II licence eligibility that exists on the vessel, may make a request to the GMU.

2. SPECIES

Lingcod (*Ophiodon elongates*)

Spiny Dogfish (*Squalus acanthius*)

Rockfish (*Sebastes sp.*) and Longspine/Shortspine Thornyheads (*Sebastolobus sp.*)

Halibut (*Hippoglossus stenolepis*)

Sablefish (*Anoplopoma fimbria*)

Skate (*Rajidae*)

Sole and Flounder (*Pleuronectiformes* other than *Hippoglossus stenolepis*)
Pacific cod (*Gadus macrocephalus*)

3. GEAR

Fishing for Schedule II – Other Species is permitted by hook and line gear, specifically longline, jig, and troll. When conducting a directed Lingcod trip only troll and jig gear is permitted; directed fishing for Lingcod with longline gear is not permitted.

4. LICENSING

4.1. Licence Category

A Schedule II species, category C, communal commercial FC or any vessel based licence is required to commercially harvest Schedule II - Other Species. “Schedule II” refers to Schedule II, Part II of the *Pacific Fishery Regulations, 1993*. Category C, Schedule II - Other Species licence eligibilities are limited entry and vessel based. Category FC are party based licence eligibilities.

Vessels fishing under the authority of a Schedule II-Other Species licence may also be designated to fish under the authority of a category Z licence.

4.2. Licence Fees

Category C licence fees are \$30.00. There is no annual licence fee for communal commercial licences.

4.3. Licence Application and Issuance

Category C applications must be completed and submitted with the required annual fee to a Pacific Fishery Licence Unit (PFLU) by February 20 of each year. Category C licence eligibilities must be applied for and issued annually regardless of whether or not fishing is carried out.

The vessel owner or an authorized representative must sign the application form. If the licence eligibility holder is a company or aboriginal group, the PFLU must have on record a copy of either a Confirmation of Signing Authorities form or an Amendment to Confirmation of Signing Authorities form listing the signing authorities. Only an authorized signing authority for a licence eligibility may sign application forms.

Prior to annual licence issuance, licence eligibility holders are required to:

- a) Meet any Ministerial conditions placed on licence eligibility.
- b) Identify on the application, parties authorized to request licence amendments, Quota Status Reports (QSR), Licence Status Reports (LSRs) and/or submit quota reallocation requests. Designation and Authorization Forms are available from the Pacific Fishery Licencing Units, or online at: <http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/groundfish/forms/forms.htm>.

- c) Ensure any conditions of the previous year's licence such as completion and submission of fishing logbooks is met and accepted by the Groundfish Management Unit (GMU).

4.4. Licence Amendments and Documents

Prior to commencing to harvest under the authority of a category C, Schedule II – Other Species licence the licence eligibility holder or an authorized representative must request and receive a 2010/2011 licence amendment from the Groundfish Management Unit. Licence Amendment Request Forms are available from the Pacific Fishery Licencing Units, or online at: <http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/groundfish/forms/forms.htm>.

Schedule II - Other Species licence documents are valid from the date of issue to February 20, 2011. Replacements for lost or destroyed licence documents may be obtained by completing a Declaration Concerning Licence Documents form. Please contact a PFLU for further details.

4.5. Vessel Replacements

The vessel owner(s) of a Schedule II - Other Species licensed vessel may make application to replace a commercial fishing vessel with a vessel that does not exceed the length of the vessel to be replaced. Both the replacement vessel and the vessel being replaced must have a survey on file with the PFLU or submitted with the vessel replacement application. Vessels must be surveyed according to Fisheries and Oceans Canada Vessel Measurement guidelines. Vessel owners considering replacing current vessels should contact a PFLU for complete information.

4.6. Open Times

With the exception of those seasonal and permanent closures noted in this plan, or closures announced in-season, the Schedule II species fishery will be open from February 21, 2010 to February 20, 2011. From November 15, 2010 until March 31, 2011 a spawning closure for the hook and line Lingcod fishery will be in effect for all areas.

5. LINGCOD INDIVIDUAL TRANSFERABLE QUOTAS (ITQ)

5.1. Species Area Groups

Lingcod will be managed by the following management areas: 3C, 3D, 5A/B, 5C/D/E and 4B. ITQ may not be re-allocated from one area to the other.

5.2. Annual ITQ Caps

All schedule II licences will have annual ITQ caps for some of their directed and non-directed catch. Temporary reallocations up to the species caps listed below will be a permitted.

5.2.1. Licence Species Caps

A licence may only hold up to a maximum of 10% of the area TAC for Lingcod, and up to a maximum of 5% of the overall TAC for Lingcod. Temporary reallocations of ITQ, up to the area caps listed below, will be permitted.

Species	Areas	Licence Species Cap (pounds)
Lingcod	3C	33,069
Lingcod	3D	39,683
Lingcod	5A, 5B	44,092
Lingcod	5C, 5D, 5E	92,593
Lingcod	Coastwide	104,719

5.2.2. Quota Holdings Caps

Species	Areas	Quota Holdings Cap (% of Lingcod ITQ)
Canary rockfish	Coastwide	2.00
Dogfish	Coastwide	1.00
Halibut	Coastwide	15.00
Silvergray rockfish	Coastwide	2.00
Quillback, Copper, China and Tiger rockfish	Coastwide	2.00
Yelloweye rockfish	Coastwide	4.00

5.2.3. Sector Holdings Caps

A licence may hold up to 25% Lingcod quota from the Trawl sector, as a percentage of the licence's total coastwide Lingcod holdings.

5.3. Trip Limits

For some species of groundfish caught while fishing Lingcod (Schedule II) there will be trip limits:

Species	Trip Limit (pounds)
Pacific Cod	500
Skate	6,000
Other Rockfish	500 (under 10,000 lbs of Lingcod landed) 750 (greater than 10,000 lbs of Lingcod landed)

There is no limit on sole and flounder permitted to be landed.

5.4. Fishing Restrictions for ITQ Excess Overage

Licences that exceed their total Lingcod ITQ holdings by more than 10% or 100 pounds (whichever is greater) will be restricted from further fishing activity for the remainder of the fishing year, or until such time that sufficient ITQ is reallocated to the licence to cover any overages.

Licences that exceed their total non-directed ITQ holdings by more than 30% or 100 pounds (whichever is greater) will be restricted from further fishing activity for the remainder of the fishing year, or until such time that sufficient ITQ is reallocated to the licence to cover any overages.

Licences with catch that exceeds their annual ITQ species caps will be restricted from fishing for the remainder of the fishing season.

Licences that do not reconcile excess overages by February 20, 2011, will carry excess overages into the new season (see section 5.6.2). If a licence remains in excess overage following initial allocations of ITQ, the licence will be restricted from fishing until temporary reallocations for the 2011/2012 season are processed in mid-March.

5.5. Rules for Carryover of ITQ Overage and Underage

5.5.1. Carryover of Directed and Non-Directed ITQ Underage

Licences will be permitted to carryover uncaught ITQ up to 30% of their total directed or non-directed species (except Sablefish and dogfish) ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence's ITQ holdings in 2011/2012. Any amount above the 30% will be forgone.

For Sablefish, licences will be permitted to carryover uncaught ITQ up to 15% of their Sablefish ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence's ITQ holdings in 2011/2012. Any amount above the 15% will be forgone.

For dogfish, licences will be permitted to carryover uncaught ITQ up to 10% of their dogfish ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence's ITQ holdings in 2011/2012. Any amount above the 10% will be forgone.

5.5.2. Carryover of Lingcod and Non-Directed ITQ Overage

A licence's catch may be up to 10% over the total Lingcod ITQ (this amount includes any reallocations made during the year) or 100 pounds, whichever is greater. For the proper conservation and management of the resource, the amount of the overage will be deducted from the licence's ITQ in the 2011/2012 fishing season and will count against the annual vessel cap for the following season.

A licence's catch may be up to 30% over the total directed or non-directed species ITQ (this amount includes any reallocations made during the year) or 100 pounds, whichever is greater. For the proper conservation and management of the resource, the amount of the overage will be deducted from the licence's ITQ in the 2011/2012 fishing season and will count against the annual vessel cap for the following season.

5.6. Retention of Lingcod by Salmon Troll

All vessels wishing to retain any amount of Lingcod must have their fish validated through the established dockside monitoring program. In addition to this, any vessel wishing to land Lingcod must hold or acquire sufficient quota to do so.

Requirements include the following (less than 500 lbs of Lingcod per landing):

- Vessel must have sufficient ITQ
- Transportation requirement – All Lingcod must be transported by the licensed vessel either directly to land or to a fish pen
- Hail in and Hail out requirements through the designated service provider
- Specific locations and times at which landing of fish is permitted
- Landing requirements – The landing of any fish of any species is not permitted unless a designated observer is present to authorize the commencement of weight verification.

Vessels wishing to retain and land **more than 500 lbs** of Lingcod per landing must, in addition to all of the above, meet the new electronic monitoring requirements (see Appendix 1).

6. DOGFISH INDIVIDUAL TRANSFERABLE QUOTAS (ITQ)

6.1. Species Area Groups

Dogfish will be managed by the following management areas: 3C/D/5A/B/C/D/E and 4B. ITQ may not be re-allocated from one area to the other.

6.2. Dogfish Development Quota (DDQ)

The remaining 10% of the dogfish TAC will be made available to fish harvesters through a Dogfish Development Quota (DDQ). The purpose of the DDQ is to ensure the continued viability and ongoing development of the dogfish industry.

Commencing with the 2010/2011 groundfish season, the DDQ program will proceed for two years and undergo an evaluation at the end of that term.

The application process requires interested dogfish processors to submit a joint application between their company and the licensed vessel(s) interested in fishing the dogfish quota. The Dogfish Development Committee will provide advice to the Minister of Fisheries and Oceans on how the remaining 10% of the TAC should be allocated to vessels each year. Application packages and further information on the DDQ process are available online at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/dogfish-aiguillat/index-eng.htm>

6.3. Annual ITQ Caps

All schedule II licences will have annual ITQ caps for some of their directed and non-directed catch. Temporary reallocations up to the species caps listed below will be permitted.

6.3.1. Licence Species Caps

Species	Areas	Licence Species Cap (pounds)
Dogfish	Coastwide	1,500,000*

*Vessels whose initial quota allocation exceeds this amount will be allowed to hold ITQ up to the initial allocation.

6.3.2. Quota Holdings Caps

Species	Areas	Quota Holdings Cap (% of Dogfish ITQ)
Canary rockfish	Coastwide	0.50
Halibut [†]	Coastwide	5.80
Lingcod	Coastwide	3.00
Rougheye rockfish	Coastwide	0.25
Sablefish	Coastwide	1.00
Silvergray rockfish	Coastwide	0.50
Shortraker rockfish	Coastwide	0.04
Shortspine Thornyhead	Coastwide	0.50
Quillback, China, Copper and Tiger rockfish	3C, 3D, 5A, 5B, 5C, 5D, 5E	0.50 (of dogfish coastwide ITQ)
Quillback, China, Copper and Tiger rockfish	4B	0.25 (of dogfish 4B ITQ)
Yelloweye rockfish	3C, 3D, 5A, 5B, 5C, 5D, 5E	0.50 (of dogfish coastwide ITQ)
Yelloweye rockfish	4B	1.00 (of dogfish 4B ITQ)

[†]Halibut is also capped by a Quota Landings cap. A licence will be limited by the most restrictive cap.

6.3.3. Quota Landings Caps

Species	Areas	Quota Landings Cap (pounds)		
Halibut °	Coastwide	23,000 if < 200,000 lbs dogfish landed		46,000 if < 400,000 lbs dogfish landed
Yelloweye*	3C, 3D , 5A, 5B, 5C, 5D, 5E	2,000 if < 400,000 lbs of dogfish landed	3,000 if < 600,000 lbs of dogfish landed	4,000 if < 800,000 lbs of dogfish landed †

°Halibut is also capped by a Quota Holdings cap. A licence will be limited by the most restrictive cap.

*Yelloweye is also capped by a Quota Holdings cap of 0.5%. A licence will be limited by the most restrictive cap.

†Reallocations can continue to occur in blocks up to 1,000 lbs for every 200,000 lbs of dogfish landed, up to a total of 1,500,000 lbs of dogfish landed.

6.4. Trip Limits

For non-directed species of groundfish caught while fishing dogfish there will be trip limits:

Species	Trip Limit (pounds)
Sablefish	15% of dogfish landed per trip
Halibut	30% of dogfish landed per trip during the following times*: <ul style="list-style-type: none"> • March 06 – June 15, 2010 • September 15 – November 15, 2010 20% of dogfish landed per trip during the following times*: <ul style="list-style-type: none"> • June 16 – September 14, 2010 • November 16, 2010 – February 20, 2011
Pacific Cod	500
Skate	6,000
Lingcod (4B)	800
Other Rockfish	Greater of 500 lbs or 2% of dogfish landed per trip

*Subject to Halibut fishery being open.

There is no limit on sole and flounder permitted to be landed.

6.5. Fishing Restrictions for ITQ Excess Overage

Licences that exceed their total dogfish ITQ holdings by more than 10% or 5000 pounds (whichever is greater) will be restricted from further fishing activity for the remainder of the fishing year, or until such time that sufficient ITQ is reallocated to the licence to cover any overages.

Licences that exceed their total non-directed ITQ holdings by more than 30% or 100 pounds (whichever is greater) will be restricted from further fishing activity for the

remainder of the fishing year, or until such time that sufficient ITQ is reallocated to the licence to cover any overages.

Licences with catch that exceeds their annual ITQ species caps will be restricted from fishing for the remainder of the fishing season.

Licences that do not reconcile excess overages by February 20, 2011, will carry excess overages into the new season (see section 6.6.2). If a licence remains in excess overage following initial allocations of ITQ, the licence will be restricted from fishing until temporary reallocations for the 2011/2012 season are processed in mid-March.

6.6. Rules for Carryover of ITQ Overage and Underage

6.6.1. Carryover of Directed and Non-Directed Species ITQ Underage

Licences will be permitted to carryover uncaught ITQ up to 10% of their total dogfish and Halibut species ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence's ITQ holdings in 2011/2012. Any amount above the 10% will be forgone.

Licences will be permitted to carryover uncaught ITQ up to 30% of their total rockfish and Lingcod species ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence's ITQ holdings in 2011/2012. Any amount above the 30% will be forgone.

Licences will be permitted to carryover uncaught ITQ up to 15% of their total Sablefish species ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence's ITQ holdings in 2011/2012. Any amount above the 15% will be forgone.

6.6.2. Carryover of Directed and Non-Directed Species ITQ Overage

A licence's catch may be up to 10% over the total dogfish species ITQ (this amount includes any reallocations made during the year) or 5000 pounds, whichever is greater. For the proper conservation and management of the resource, the amount of the overage will be deducted from the licence's ITQ (by area) in the 2011/2012 fishing season and the overage will count against the annual ITQ caps for the following season.

A licence's catch may be up to 30% over the total non-directed species ITQ (this amount includes any reallocations made during the year) or 100 pounds, whichever is greater. For the proper conservation and management of the resource, the amount of the overage will be deducted from the licence's ITQ (by area) in the 2011/2012 fishing season and the overage will count against the annual ITQ caps for the following season.

7. REALLOCATION PROCEDURES

7.1. Reallocation of Directed and Non-Directed Species ITQ

The following guidelines for the reallocation of directed and non-directed species ITQ will be in effect for the 2010/2011 Lingcod and dogfish fisheries.

- 7.1.1. Subject to annual ITQ caps and sector caps, upon application, licence eligibility holders will be permitted to make unlimited temporary reallocations of directed and non-directed species ITQs. A “Temporary Reallocation Request for Integrated Groundfish Fisheries” must be faxed to the GMU and, if approved, a licence amendment will be issued to reflect new ITQ amounts. The most current licence amendment must be onboard when fishing.
- 7.1.2. The 2010/2011 licence must be issued prior to any ITQ being reallocated.
- 7.1.3. Request for temporary reallocation requests for the 2010/2011 season must be received by 16:00 hours Pacific Time on February 20th, 2011 in order to be processed.
- 7.1.4. The minimum quantity of ITQ that may be reallocated is one pound.
- 7.1.5. Temporary reallocations are only valid for the current fishing season.
- 7.1.6. Reallocations for the 2010/2011 season will not be processed until 8:00 hours local time March 15, 2010.

8. CLOSURES

8.1. Rockfish Conservation Areas

Effective February 1, 2007 a new suite of Rockfish Conservation Areas (RCAs) came into effect. Designation of the final 164 closed areas is a result of over three years of consultation with many stakeholders. The RCAs can also be downloaded from the Department's internet site at:

http://www.pac.dfo-mpo.gc.ca/recfish/Restricted_Areas/RCAs/default_e.htm

8.2. Permanent Closures

8.2.1. Strait of Georgia Lingcod

Closed year-round in Areas and Subareas 12-1 to 12-6, 12-8, 12-11, 12-12, 12-15 to 12-48, 13 to 19, 20-5 to 20-7, 28 and 29.

8.2.2. Georgia Strait and WCVI Closures

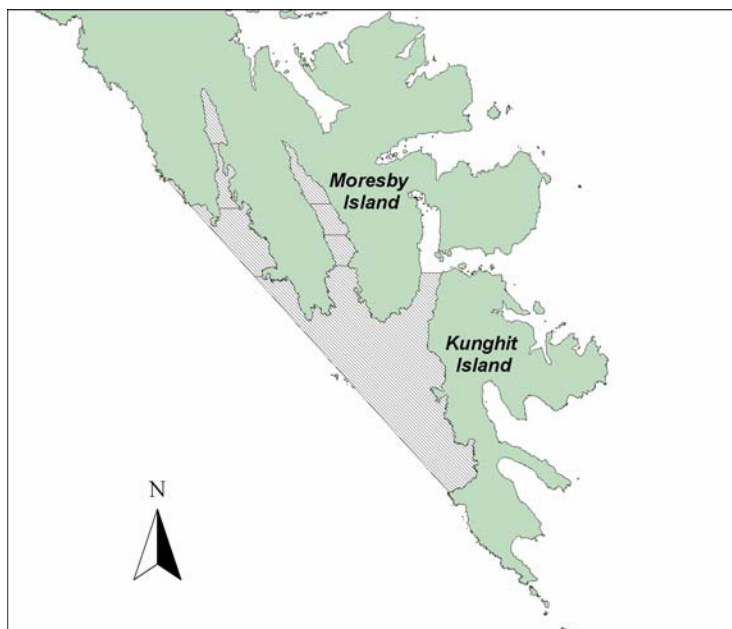
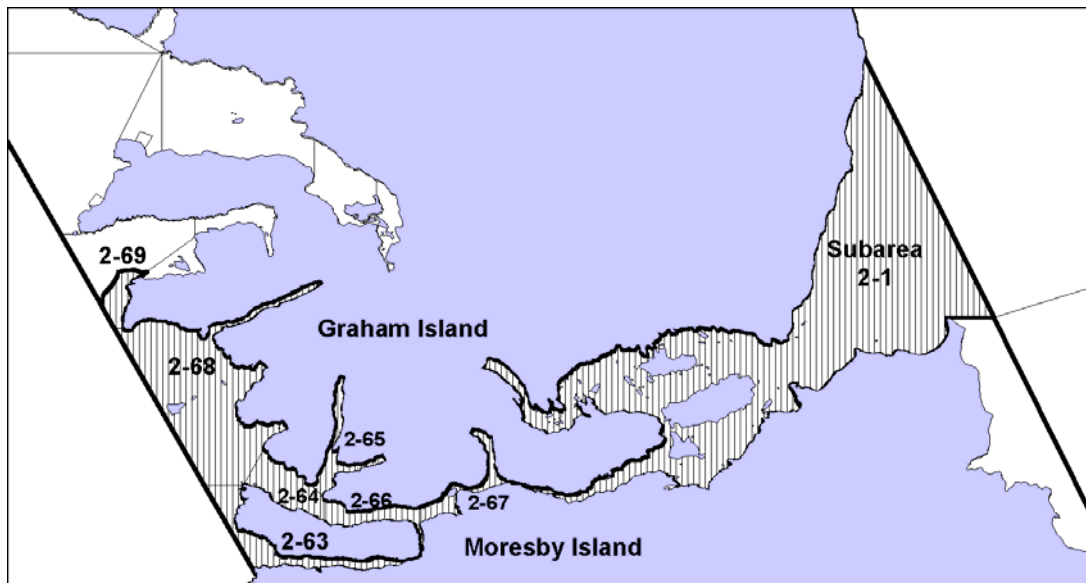
Area/Subarea	Rationale for Closure
13-2 to 13-9, 13-11 and 13-27	Closed to all commercial fishing.
14-11 and 14-14	Harbour areas.
16-3 and 16-4	Harbour areas.
17-7 and 17-14	Harbour areas.
17-20 and 17-21	Protect shallow water environment.
18-8	Harbour areas.
19-1	Harbour areas.
19-6	Protect shallow water environment.
19-7 to 19-12	Designated sport-fishing area (open for dogfish only).
20-6 and 20-7	Harbour areas.
28	Designated sport-fishing areas.
29-7 to 29-17	Protect shallow water environment and Fraser River.
22	Protect shallow fresh water environment.

8.3. Year-Round Closures

The following areas will be closed February 21, 2010 to February 20, 2011 to reduce harvesting pressure and provide improved access for First Nations food, social and ceremonial purposes.

8.3.1. Queen Charlottes

Subareas 2-1, 2-31 to 2-37, 2-63 to 2-68; and that portion of Subarea 2-69 from Hunter Point to Fame Point shoreward of the 50 fathom contour line as shown on Chart No. 3869 as published by the Canadian Hydrographic Service of the Department. These areas are closed year round for all commercial groundfish fisheries. The intent of the closure is to reduce harvesting pressure on localized stocks of fish and to provide improved access for First Nations food, social and ceremonial purposes.



8.3.2. Swiftsure Commercial

Those portions of Subareas 121-1 and 121-2 inside a line:
that begins at 48°34.0' N 125°06.0' W
then true east to 48°34.0' N 124°54.2' W
then to 48°29.62' N 124°43.4' W
then following the International Boundary
between Canada and the United States of
America to 48°29.3' N 124°58.0' W
then to the beginning point.

8.3.3. Swiftsure Recreational

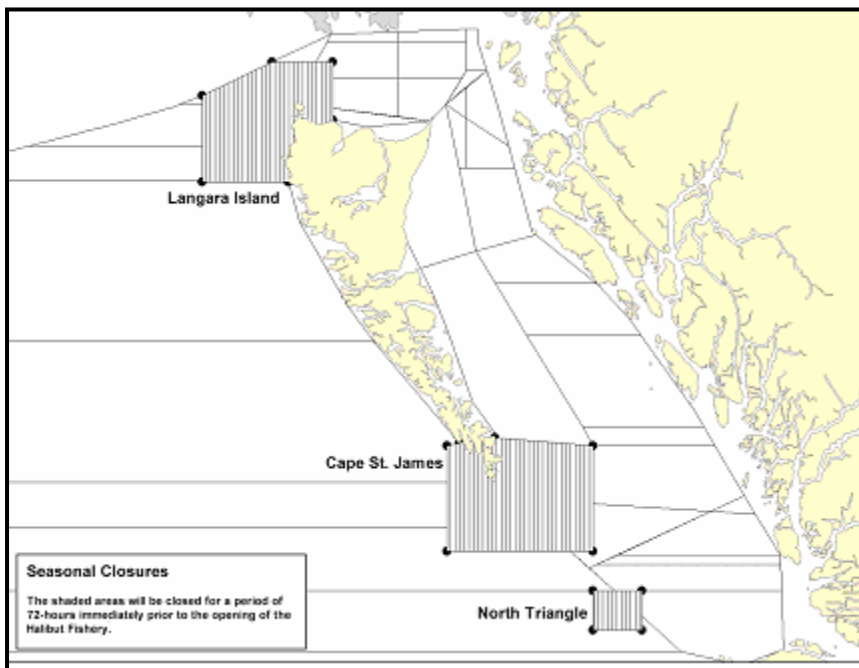
Those portions of Subareas 121-1 and 121-2 inside a line:
that begins at 48°34.0' N 125°06.0' W
then true east to 48°34.0' N 124°54.2' W
then to 48°29.62' N 124°43.4' W
then following the International Boundary
between Canada and the United States of
America to 48°29.55' N 124°56.2' W
then to the beginning point.



8.4. Seasonal Closures

These closures go into effect 72 hours prior to the halibut opening each year for all commercial hook and line fishing vessels. Their intent is to ensure a fair and orderly opening for the halibut fishery.

Coast-wide Map of 72-Hour “Halibut Opening” Closure



Those portions of Area 101 that are:
east of the meridian passing through 134°00.0' west longitude;
west of the meridian passing through 132°40.0' west longitude; and
south of the parallel passing through 54°30.0' north latitude.

Those portions of Subareas 102-2, 102-3, 108-2, 130-2, 130-3 and 142-1 that are inside a line that:

that begins at	52°11.0' N	131°22.16' W
then westerly to	52°10.0' N	131°30.0' W
then true south to	51°30.0' N	131°30.0' W
then true east to	51°30.0' N	130°00.0' W
then true north to	52°10.0' N	130°00.0' W
then westerly to	52°13.0' N	131°00.3' W

Those portions of Area 111 and Subarea 130-1 that lie inside a line that:
begins at 51°15.0' N 130°00.0' W
then true east to 51°15.0' N 129°30.0' W
then true south to 51°00.0' N 129°30.0' W
then true west to 51°00.0' N 130°00.0' W
then true north to the beginning point.

Appendix 4: Rockfish by Hook and Line (Inside ZN) Commercial Harvest Plan

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1. MANAGEMENT CHANGES FOR 2010/2011

1.1. In-Season Changes/Updates

Important in-season updates to the IFMP are available on:

- Pacific Region Management Plan website at: <http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/MPLANS/MPlans.htm#Groundfish>
- Fishery Notice website at: http://www-ops2.pac.dfo-po.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=commercial.

In-season sector catch and sector cap summaries are updated daily and may be found at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/index-eng.htm>

1.2. Commercial Groundfish Integration Program

Following public consultation and a comprehensive evaluation of the Commercial Groundfish Integration Pilot Program (CGIPP), the Department has accepted the Commercial Groundfish Integration Program as the best means to address conservation objectives. As such, the rockfish ITQ allocations have now been permanently allocated to Rockfish (Inside) licence eligibilities. These ITQ allocations, expressed as a percentage, are defined as a fixed share of the total allowable catch (TAC).

The Rockfish licence eligibility that has received the ITQ allocation during the pilot phase of the Commercial Groundfish Integration Program will continue to receive the ITQ allocation.

In the coming year, the Groundfish Management Unit (GMU) will work to make the necessary changes to the Department's Quota Management System to allow for permanent intra-sector (i.e. Rockfish Inside licence eligibility to Rockfish Inside licence eligibility) reallocations to occur. GMU anticipates that permanent intra-sector reallocations will be permitted for the 2011/2012 fishing season.

2. SPECIES

Rockfish (*Sebastes sp.*) and Longspine/Shortspine Thornyheads (*Sebastolobus sp.*)
Halibut (*Hippoglossus stenolepis*)
Lingcod (*Ophiodon elongates*)
Spiny Dogfish (*Squalus acanthius*)
Skate (*Rajidae*)
Sole and Flounder (*Pleuronectiformes* other than *Hippoglossus stenolepis*)
Pacific cod (*Gadus macrocephalus*)
Greenlings (*Hexagrammos sp.*)

3. GEAR

Fishing under a category ZN is permitted to occur by hook and line gear, specifically longline, jig, and troll. A provision exists to permit vessels to fish using trap gear.

3.1. Provision to use trap gear

Vessels interested in using trap gear to fish rockfish for the 2010/2011 season will be required to submit a request and should contact the Hook and Line Co-ordinator for additional information. Requests will be reviewed and if eligible, a vessel will be issued a licence amendment to allow for use of trap gear when fishing rockfish.

4. FISHING AREAS

Subject to closures listed in Section 7, the Inside Quota Management Area for rockfish is defined as: Areas 13 to 19, 28, 29 and Subareas 12-1 to 12-13, 12-15 to 12-48, and 20-4 to 20-7. Areas and Subareas are described in the *Pacific Fishery Management Area Regulations, 2007*.

5. LICENSING

5.1. Licence Category

A rockfish commercial category ZN or communal commercial category FZN licence eligibility is limited entry and party based.

5.2. Licence Fees

The annual licence application fee is \$100.

5.3. Licence Application and Issuance

Category ZN applications must be completed and submitted with the required annual fee to a Pacific Fishery Licence Unit (PFLU) by February 20 of each year. Category ZN rockfish licence eligibilities must be applied for and issued annually regardless of whether or not fishing is carried out.

The licence eligibility holder or an authorized representative must sign the application form. If the licence eligibility holder is a company or aboriginal group, the PFLU must have on record a copy of either a Confirmation of Signing Authorities form or an Amendment to Confirmation of Signing Authorities form listing the signing authorities. Only an authorized signing authority for a licence eligibility may sign application forms.

Vessels may be designated with up to 8 'Inside rockfish' licences at one time during a season.

Prior to annual licence issuance, licence eligibility holders are required to:

- a) Meet any Ministerial conditions placed on licence eligibility.
- b) Identify parties authorized to request licence amendments, Quota Status Reports (QSR), Licence Status Reports (LSRs) and/or submit quota reallocation requests. Designation and Authorization Forms are available from the Pacific Fishery

- Licencing Units, or online at: <http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/groundfish/forms/forms.htm>.
- c) Ensure any conditions of the previous year's licence such as completion and submission of fishing logbooks is met and accepted by the Groundfish Management Unit (GMU).
 - d) Designate a registered commercial fishing vessel that is eligible for any vessel based licence (i.e.) salmon, schedule II species, geoduck, Sablefish, Halibut, crab, shrimp by trawl and prawn and shrimp by trap, a valid communal commercial licence or a valid salmon category N licence. Designated vessels may not exceed the maximum vessel length (MVL) of the initial licence designated; however the MVL is waived for additional designated licences.

5.4. Licence Options

Prior to licence issuance licence eligibility holders must make a selection between two licence options.

Option 1 - This option is for vessels that may participate in the directed ZN fishery. The overall length of the vessel cannot exceed the maximum vessel length (MVL) of the licence eligibility. The vessel still has the opportunity to reallocate rockfish quota to 8.061Sablefl6(x5 Tw4(ssel caM)5(V)3(Lrall len5 TD0 Te[l6(enc)4ssel e)4.5(l (MVL)d; howal8 TD.0bL,

5.7. Licence Eligibility Nominations

Rockfish category ZN licence eligibilities may be nominated from one party to another. A nomination for Category Z Licence Eligibility form must be completed by the licence eligibility holder. Valid current year licence documents and validation tabs must be returned. Communal commercial rockfish category FZN licence eligibilities may not be nominated as these are allocated annually to First Nation groups.

5.8. Open Times

With the exception of those seasonal and permanent closures noted in this plan, or closures announced in-season, the Rockfish by Hook and Line (Inside ZN) fishery will be open from February 21, 2010 to February 20, 2011.

6. ROCKFISH INDIVIDUAL TRANSFERABLE QUOTAS (ITQ)

6.1. Initial Individual Quota Allocation

An inside ZN/FZN licence eligibility will be allocated an equal share of the TACs for inside ZN/FZN rockfish quota by species area groups.

Species	Areas	TAC (tonnes)	TAC (pounds)	Licence Allocation (pounds)
Number of licences	71			
Quillback, Copper, China, Tiger rockfish	4B	25	55,443	781
Yelloweye rockfish	4B	6	12,893	182

6.2. Annual ITQ Caps

All ZN licences will have annual ITQ caps for some of their directed and non-directed catch. Temporary reallocations up to the species caps listed below will be a permitted.

6.2.1. Licence Species Caps

Species	Areas	Licence Species Cap (pounds)
Dogfish	4B	1,250
Halibut	Coastwide	3,500
Quillback, Copper, China and Tiger rockfish	4B	15,000
Yelloweye rockfish	4B	1,456

6.2.2. Stacking Licences

ITQ will automatically be reallocated to the initial rockfish licence designated to the vessel. Vessels may be designated with up to 8 inside rockfish licences, however, only one inside rockfish licence per vessel may hold ITQ.

6.3. Trip Limits

For some species of groundfish caught while fishing Rockfish by Hook and Line (Inside ZN) fishery there will be trip limits:

Species	Trip Limit (pounds)
Halibut	800
Kelp Greenlings	Must be equal to or less than the total of Quillback, Copper, China, Tiger that is landed
Lingcod (4B)	400
Other Rockfish	Must be equal to or less than the total of Quillback, Copper, China, Tiger that is landed
Pacific Cod	150
Skate	50
Sole and flounder	No limit

6.4. Fishing Restrictions for ITQ Excess Overages

Licences that exceed their total directed or non-directed species ITQ holdings by more than 10% or 100 pounds (whichever is greater) will be restricted from further fishing activity for the remainder of the fishing year, or until such time that sufficient ITQ is reallocated to the licence to cover any overages. Licences with catch that exceeds their annual ITQ species caps will be restricted from fishing for the remainder of the fishing season.

Licenses that do not reconcile excess overages by February 20, 2011, will carry excess overages into the new season (see section 6.6.2). If a licence remains in excess overage following initial allocations of ITQ, the licence will be restricted from fishing until temporary reallocations for the 2011/2012 season are processed in mid-March.

6.5. Reallocation of Directed and Non-Directed Species ITQ

The following guidelines for the reallocation of directed and non-directed species ITQ will be in effect for the 2010/2011 ZN fishery.

6.5.1. Subject to annual ITQ caps and sector caps, upon application, licence eligibility holders will be permitted to make unlimited temporary reallocations of directed and non-directed species ITQs. A “Temporary Reallocation Request for Integrated Groundfish Fisheries” must be faxed to the GMU and, if approved, a licence amendment will be issued to reflect new ITQ amounts. The most current licence amendment must be onboard when fishing.

6.5.2. The 2010/2011 ZN licence must be issued prior to any ITQ being reallocated.

- 6.5.3. Request for temporary reallocation requests for the 2010/2011 season must be received by 16:00 hours Pacific Time on February 20th, 2011 in order to be processed.
- 6.5.4. ITQ that has already been caught or deemed “fished” cannot be reallocated.
- 6.5.5. The minimum quantity of ITQ that may be reallocated is one pound.
- 6.5.6. Temporary reallocations are only valid for the current fishing season.
- 6.5.7 Reallocations for the 2010/2011 season will not be processed until 8:00 hours local time March 15, 2010.

6.6. Rules for Carryover of ITQ Overage and Underage

6.6.1. Carryover of Directed and Non-Directed Species ITQ Underage

Licences will be permitted to carryover uncaught ITQ up to 10% of their total directed or non-directed species ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence’s ITQ holdings in 2011/2012. Any amount above the 10% will be forgone.

6.6.2. Carryover of Directed and Non-Directed Species ITQ Overage

A licence’s catch may be up to 10% over the total directed or non-directed species ITQ (this amount includes any reallocations made during the year) or 100 pounds, whichever is greater. For the proper conservation and management of the resource, the amount of the overage will be deducted from the licence’s ITQ (by area) in the 2011/2012 fishing season and the overage will count against the annual ITQ caps for the following season.

7. CLOSURES

7.1. Rockfish Conservation Areas

Effective February 1, 2007 a new suite of Rockfish Conservation Areas (RCAs) came into effect. Designation of the final 164 closed areas is a result of over three years of consultation with many stakeholders. The RCAs can also be downloaded from the Department's internet site at:

http://www.pac.dfo-mpo.gc.ca/reefish/Restricted_Areas/RCAs/default_e.htm

7.2. Permanent Closures:

Area/Subarea	Rationale for Closure
13-2 to 13-9, 13-11 and 13-27	Closed to all commercial fishing.
14-11 and 14-14	Harbour areas.
16-3 and 16-4	Harbour areas.
17-7 and 17-14	Harbour areas.
17-20 and 17-21	Protect shallow water environment.

Area/Subarea	Rationale for Closure
18-8	Harbour areas.
19-1	Harbour areas.
19-6	Protect shallow water environment.
19-7 to 19-12	Designated sport-fishing area (open for dogfish only).
20-6 and 20-7	Harbour areas.
Area 28	Designated sport-fishing area.
29-7 to 29-17	Protect shallow water environment and Fraser River.

Appendix 5: Rockfish by Hook and Line (Outside ZN) Commercial Harvest Plan

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1. MANAGEMENT CHANGES FOR 2010/2011

1.1. In-Season Changes/Updates

Important in-season updates to the IFMP are available on:

- Pacific Region Management Plan website at: <http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/MPLANS/MPlans.htm#Groundfish>
- Fishery Notice website at: http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=commercial

In-season sector catch and sector cap summaries are updated daily and may be found at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/index-eng.htm>

1.2. Commercial Groundfish Integration Program

Following public consultation and a comprehensive evaluation of the Commercial Groundfish Integration Pilot Program (CGIPP), the Department has accepted the Commercial Groundfish Integration Program as the best means to address conservation objectives. As such, the rockfish ITQ allocations have now been permanently allocated to Rockfish (Outside) licence eligibilities. These ITQ allocations, expressed as a percentage, are defined as a fixed share of the total allowable catch (TAC).

The Rockfish licence eligibility that has received the ITQ allocation during the pilot phase of the Commercial Groundfish Integration Program will continue to receive the ITQ allocation.

In the coming year, the Groundfish Management Unit (GMU) will work to make the necessary changes to the Department's Quota Management System to allow for permanent intra-sector (i.e. Rockfish Outside licence eligibility to Rockfish Outside licence eligibility) reallocations to occur. GMU anticipates that permanent intra-sector reallocations will be permitted for the 2011/2012 fishing season.

2. SPECIES

Rockfish (*Sebastes sp.*) and Longspine/Shortspine Thornyheads (*Sebastolobus sp.*)

Halibut (*Hippoglossus stenolepis*)

Lingcod (*Ophiodon elongates*)

Spiny Dogfish (*Squalus acanthius*)

Sablefish (*Anoplopoma fimbria*)

Skate (*Rajidae*)

Sole and Flounder (*Pleuronectiformes* other than *Hippoglossus stenolepis*)

Pacific cod (*Gadus macrocephalus*)

Greenlings (*Hexagrammos sp.*)

3. GEAR

Fishing under a category ZN is permitted to occur by hook and line gear, specifically longline, jig, and troll. A provision exists to permit vessels to fish using trap gear.

3.1. Provision to use trap gear

Vessels interested in using trap gear to fish rockfish for the 2010/2011 season will be required to submit a request and should contact the Hook and Line Co-ordinator for additional information. Requests will be reviewed and if eligible, a vessel will be issued a licence amendment to allow for use of trap gear when fishing rockfish.

4. FISHING AREAS

Subject to those closures listed in Section 7, the outside management areas include: Areas 1 to 11, 21, 23 to 27, 101 to 111, 121, 123 to 127, 130, 142 and Subareas 12-14 and 20-1 to 20-3. Areas and Subareas are described in the *Pacific Fishery Management Area Regulations, 2007*.

5. LICENSING

5.1. Licence Category

A rockfish commercial category ZN or a communal commercial category FZN licence is limited entry and party based.

5.2. Licence Fees

The annual licence application fee is \$100.

5.3. Licence Application and Issuance

Category ZN applications must be completed and submitted with the required annual fee to a Pacific Fishery Licence Unit (PFLU) by February 20 of each year. Category ZN rockfish licence eligibilities must be applied for and issued annually regardless of whether or not fishing is carried out.

The licence eligibility holder or an authorized representative must sign the application form. If the licence eligibility holder is a company or aboriginal group, the PFLU must have on record a copy of either a Confirmation of Signing Authorities form or an Amendment to Confirmation of Signing Authorities form listing the signing authorities. Only an authorized signing authority for a licence eligibility may sign application forms.

Vessels may not be designated with more than one 'Outside rockfish' licences during a season.

Prior to annual licence issuance, licence eligibility holders are required to:

- a) Meet any Ministerial conditions placed on licence eligibility.
- b) Identify parties authorized to request licence amendments, Quota Status Reports (QSR), Licence Status Reports (LSRs) and/or submit quota reallocation requests.

- Designation and Authorization Forms are available from the Pacific Fishery Licencing Units, or online at: <http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/groundfish/forms/forms.htm>.
- c) Ensure any conditions of the previous year's licence such as completion and submission of fishing logbooks is met and accepted by the Groundfish Management Unit (GMU).
 - d) Designate a registered commercial fishing vessel that is eligible for any vessel based licence (i.e.) salmon, schedule II species, geoduck, Sablefish, Halibut, crab, shrimp by trawl and prawn and shrimp by trap, a valid communal commercial licence or a valid salmon category N licence. Designated vessels may not exceed the maximum vessel length (MVL) of the licence designated.

5.4. Licence Options

Prior to licence issuance licence eligibility holders must make a selection between two licence options.

Option 1 - This option is for vessels that may participate in the directed ZN fishery. The overall length of the vessel cannot exceed the maximum vessel length (MVL) of the licence eligibility. The vessel still has the opportunity to reallocate rockfish quota to another vessel.

Option 2 - This option is for vessels that will not participate in the directed ZN fishery and will reallocate rockfish quota to other licence eligibilities. The overall length of the vessel can exceed the MVL of the licence eligibility.

If a vessel chooses option 2 at the beginning of the season and later wishes to change to option 1 this may be done through the PFLU as long as the vessel meets all the length requirements.

5.5. Licence Amendments and Documents

Prior to commencing to harvest under the authority of a category ZN licence the licence eligibility holder or an authorized representative must request and receive a 2010/2011 licence amendment from the Groundfish Management Unit. Licence Amendment Request Forms are available from the Pacific Fishery Licencing Units, or online at: <http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/groundfish/forms/forms.htm>.

'Outside rockfish' licence documents are valid from the date of issue to February 20, 2011. Replacements for lost or destroyed licence documents may be obtained by completing a Declaration Concerning Licence Documents form. Please contact a PFLU for further details.

5.6. Vessel Redesignations

Redesignation of category ZN licences is allowed as long as all conditions of licence – such as the completion and submission of all logbooks – have been met.

A completed Application for Category Z Vessel Redesignation form must be completed by the licence eligibility holder and submitted to a PFLU. Valid current year licence documents and validation tabs must be returned.

5.7. Licence Eligibility Nominations

Rockfish category ZN licence eligibilities may be nominated from one party to another. A nomination for Category Z Licence Eligibility form must be completed by the licence eligibility holder. Valid current year licence documents and validation tabs must be returned. Communal commercial rockfish category FZN licence eligibilities may not be nominated as these are allocated annually to First Nation groups.

5.8. Open Times

With the exception of those seasonal and permanent closures noted in this plan, or closures announced in-season, the Rockfish by Hook and Line (Outside ZN) fishery will be open from February 21, 2010 to February 20, 2011.

6. RESEARCH ALLOCATION

To support rockfish research the Groundfish Hook and Line Advisory Committee (GHLAC) has agreed to set aside five percent of the allocations for research purposes.

The following table indicates the 2010/2011 outside rockfish research allocation:

Species/Aggregate	Quota (tonnes)
Yelloweye rockfish	7
Quillback, Copper, China and Tiger rockfish	7
Silvergrey rockfish	7
Canary rockfish	6
Rougheye rockfish	20
Shortraker rockfish	4
Yellowmouth rockfish	3
Yellowtail rockfish	2
Shortspine Thornyheads	1

7. ROCKFISH INDIVIDUAL TRANSFERABLE QUOTAS (ITQ)

7.1. Initial Individual Quota Allocation

An outside ZN/FZN licence eligibility will be allocated an equal share of the TACs for outside ZN/FZN rockfish quota by species area groups.

Species	Areas	TAC* (tonnes)	TAC* (pounds)	Licence Allocation (pounds)
Number of licences	191			
Yelloweye rockfish	3C/D, 5A	66	144,404	756
	5B	30	67,045	351
	5C/D	39	85,955	450
	5E	37	82,517	432
	Total	172	379,920	1,989
Quillback, Copper, China and Tiger rockfish	3C/D, 5A	67	148,417	777
	5B	35	76,767	402
	5C/D	51	112,592	589
	5E	7	15,353	80
	Total	160	353,129	1,849
Canary rockfish	3C/D	23	51249	268
	5A/B	40	87633	459
	5C/D	18	40599	213
	5E	19	42379	222
	Total	101	221859	1162
Silvergray rockfish	3C/D	26	56,519	296
	5A/B	50	110,258	577
	5C/D	45	100,066	524
	5E	30	65,089	341
	Total	151	331,931	1,738
Shortraker rockfish	Coastwide	102	224,263	1,174
Rougheye rockfish	Coastwide	451	993,633	5,202
Shortspine Thornyhead	Coastwide	17	37,496	196

*TAC allocated following deductions for research as noted in section 6.

7.2. Annual ITQ Caps

All ZN licences will have annual ITQ caps for some of their directed and non-directed catch. Temporary reallocations up to the species caps listed below will be permitted.

7.2.1. Licence Species Caps

Species	Areas	Licence Species Cap (pounds)
Dogfish	Coastwide	100,000
Canary rockfish	Coastwide	10,000
Rougeye rockfish	Coastwide	100,000
Sablefish	Coastwide	15,000
Silvergray rockfish	Coastwide	30,000
Shortraker rockfish	Coastwide	50,000
Shortspine Thornyhead	Coastwide	4,000
Quillback, China, Copper and Tiger rockfish	Coastwide	30,000
Yelloweye rockfish	Coastwide	10,000

7.2.2. Quota Landings Caps

Species	Areas	Quota Landings Cap (pounds)				
Halibut	Coastwide	7,500 if < 20,000 quota rockfish landed	10,000 if 20,000-40,000 quota rockfish landed	15,000 if 40,000-60,000 quota rockfish landed	20,000 if > 60,000 quota rockfish landed	
Lingcod	Coastwide	5,000 if < 8,000 quota rockfish landed	10,000 if 8,000-20,000 quota rockfish landed	15,000 if 20,000-40,000 quota rockfish landed	20,000 if 40,000-60,000 quota rockfish landed	25,000 if > 60,000 quota rockfish landed

7.3. Trip Limits

For some species of groundfish caught while fishing Rockfish by Hook and Line (Outside ZN) fishery there will be trip limits:

Species	Trip Limit (pounds)
Black Rockfish	1,000
Kelp Greenlings	500
Other Rockfish	8,000

Species	Trip Limit (pounds)
Pacific Cod	500
Sablefish	Round Sablefish equal to 22% of rockfish landed
Skate	6,000
Sole and Flounder	No limit

7.4. Fishing Restrictions for ITQ Excess Overage

Licences that exceed their total directed or non-directed species ITQ holdings by more than 30% or 100 pounds (whichever is greater) will be restricted from further fishing activity for the remainder of the fishing year, or until such time that sufficient ITQ is reallocated to the licence to cover any overages. Licences with catch that exceeds their annual ITQ species caps will be restricted from fishing for the remainder of the fishing season.

Licenses that do not reconcile excess overages by February 20, 2011, will carry excess overages into the new season (see section 7.6.2). If a licence remains in excess overage following initial allocations of ITQ, the licence will be restricted from fishing until temporary reallocations for the 2011/2012 season are processed in mid-March.

7.5. Reallocation of Directed and Non-Directed Species ITQ

The following guidelines for the reallocation of directed and non-directed species ITQ will be in effect for the 2010/2011 ZN fishery.

- 7.5.1. Subject to annual ITQ caps and sector caps, upon application, licence eligibility holders will be permitted to make unlimited temporary reallocations of directed and non-directed species ITQs. A “Temporary Reallocation Request for Integrated Groundfish Fisheries” must be faxed to the GMU and, if approved, a licence amendment will be issued to reflect new ITQ amounts. The most current licence amendment must be onboard when fishing.
- 7.5.2. The 2010/2011 ZN licence must be issued prior to any ITQ being reallocated.
- 7.5.3. Request for temporary reallocation requests for the 2010/2011 season must be received by 16:00 hours Pacific Time on February 20th, 2011 in order to be processed.
- 7.5.4. ITQ that has already been caught or deemed “fished” cannot be reallocated.
- 7.5.5. The minimum quantity of ITQ that may be reallocated is one pound.
- 7.5.6. Temporary reallocations are only valid for the current fishing season.
- 7.5.7. Reallocations for the 2010/2011 season will not be processed until 8:00 hours local time March 15, 2010.

7.6. Rules for Carryover of ITQ Overage and Underage

7.6.1. Carryover of Directed and Non-Directed Species ITQ Underage

Licences will be permitted to carryover uncaught ITQ up to 30% of their total directed or non-directed species (except Sablefish and dogfish) ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence's ITQ holdings in 2011/2012. Any amount above the 30% will be forgone.

For Sablefish, licences will be permitted to carryover uncaught ITQ up to 15% of their Sablefish ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence's ITQ holdings in 2011/2012. Any amount above the 15% will be forgone.

For dogfish, licences will be permitted to carryover uncaught ITQ up to 10% of their dogfish ITQ at the end of the 2010/2011. This amount includes any reallocations made during the year. This underage poundage will be added to the licence's ITQ holdings in 2011/2012. Any amount above the 10% will be forgone.

7.6.2. Carryover of Directed and Non-Directed Species ITQ Overage

A licence's catch may be up to 30% over the total directed or non-directed species ITQ (this amount includes any reallocations made during the year) or 100 pounds, whichever is greater. For the proper conservation and management of the resource, the amount of the overage will be deducted from the licence's ITQ in the 2011/2012 fishing season and the overage will count against the annual ITQ caps for the following season.

8. CLOSURES

8.1. Rockfish Conservation Areas

Effective February 1, 2007 a new suite of Rockfish Conservation Areas (RCAs) came into effect. Designation of the final 164 closed areas is a result of over three years of consultation with many stakeholders. The RCAs can also be downloaded from the Department's internet site at:

http://www.pac.dfo-mpo.gc.ca/recfish/Restricted_Areas/RCAs/default_e.htm

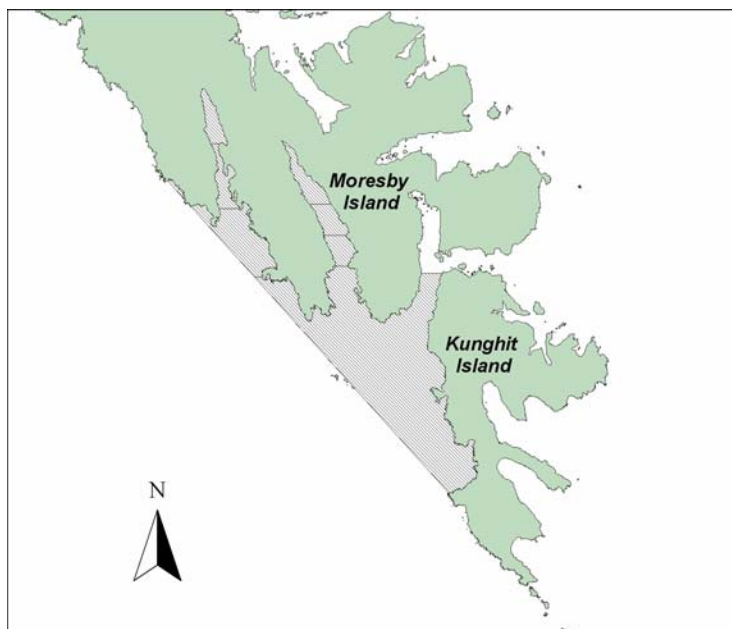
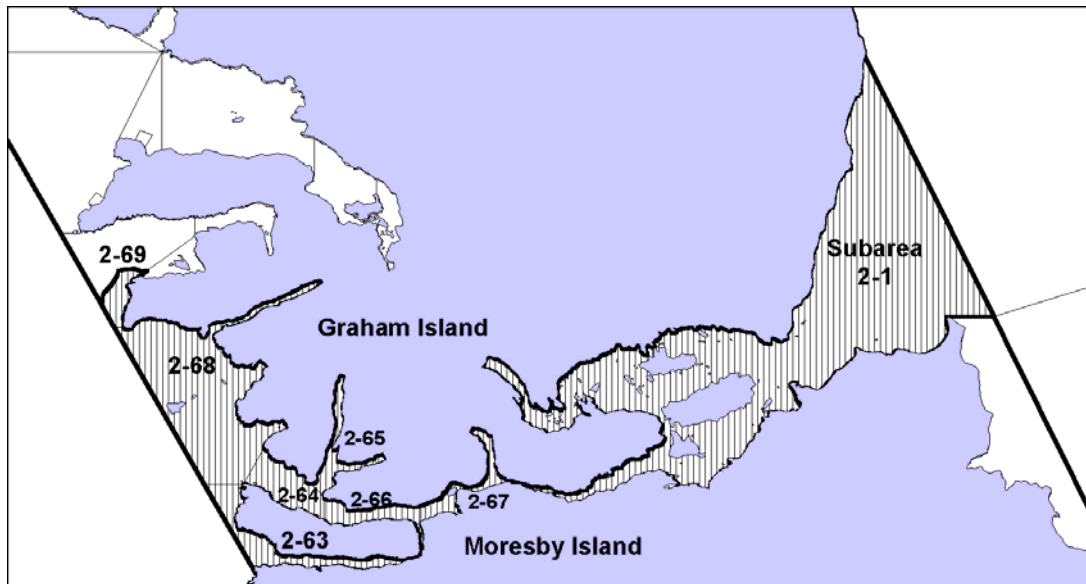
8.2. Year-Round Closures

The following areas will be closed February 21, 2010 to February 20, 2011 to reduce harvesting pressure and provide improved access for First Nations food, social and ceremonial purposes.

8.2.1. Queen Charlottes

Subareas 2-1, 2-31 to 2-37, 2-63 to 2-68; and that portion of Subarea 2-69 from Hunter Point to Fame Point shoreward of the 50 fathom contour line as shown on

Chart No. 3869 as published by the Canadian Hydrographic Service of the Department. These areas are closed year round for all commercial groundfish fisheries. The intent of the closure is to reduce harvesting pressure on localized stocks of fish and to provide improved access for First Nations food, social and ceremonial purposes.



8.2.2. Swiftsure Commercial

Those portions of Subareas 121-1 and 121-2 inside a line:

that begins at	48°34.0' N	125°06.0' W
then true east to	48°34.0' N	124°54.2' W
then to	48°29.62' N	124°43.4' W
then following the International Boundary between Canada and the United States of America to	48°29.3' N	124°58.0' W
then to the beginning point.		

8.2.3. Swiftsure Recreational

Those portions of Subareas 121-1 and 121-2 inside a line:

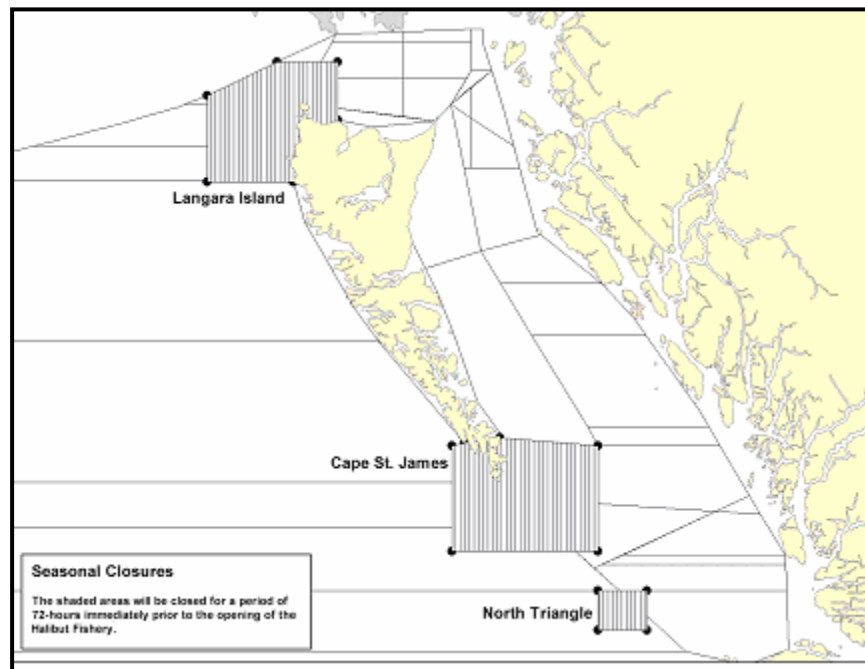
that begins at	48°34.0' N	125°06.0' W
then true east to	48°34.0' N	124°54.2' W
then to	48°29.62' N	124°43.4' W
then following the International Boundary between Canada and the United States of America to	48°29.55' N	124°56.2' W
then to the beginning point.		



8.3. Seasonal Closures

These closures go into effect 72 hours prior to the halibut opening each year for all commercial hook and line fishing vessels. Their intent is to ensure a fair and orderly opening for the Halibut fishery.

Coast-wide Map of 72-Hour “Halibut Opening” Closure



Those portions of Area 101 that are:
 east of the meridian passing through 134°00.0' west longitude;
 west of the meridian passing through 132°40.0' west longitude; and
 south of the parallel passing through 54°30.0' north latitude.

Those portions of Subareas 102-2, 102-3, 108-2, 130-2, 130-3 and 142-1 that are inside a line that:

that begins at	52°11.0' N	131°22.16' W
then westerly to	52°10.0' N	131°30.0' W
then true south to	51°30.0' N	131°30.0' W
then true east to	51°30.0' N	130°00.0' W
then true north to	52°10.0' N	130°00.0' W
then westerly to	52°13.0' N	131°00.3' W

Those portions of Area 111 and Subarea 130-1 that lie inside a line that:

begins at	51°15.0' N	130°00.0' W
then true east to	51°15.0' N	129°30.0' W
then true south to	51°00.0' N	129°30.0' W
then true west to	51°00.0' N	130°00.0' W
then true north to the beginning point.		

Appendix 6: Halibut Commercial Harvest Plan

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1. MANAGEMENT CHANGES FOR 2010/2011

1.1. In-Season Changes/Updates

In-season updates are available on the Fishery Notice website at: http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=commercial

In-season Sector Catch and Sector Cap summaries are updated daily and can be found at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/index-eng.htm>

2. SPECIES

The following species are permitted to be retained under Part 1 and Schedule II, Part 2 of a valid Halibut licence condition with the appropriate amendment.

Halibut (*Hippoglossus stenolepis*)

Rockfish (*Sebastes spp. and Sebastolobus spp.*)

Lingcod (*Ophiodon elongates*)

Spiny Dogfish (*Squalus acanthius*)

Sablefish (*Anoplopoma fimbria*)

Skate (*Rajidae*)

Sole and Flounder (*Pleuronectiformes other than Hippoglossus stenolepis*)

Pacific cod (*Gadus macrocephalus*)

3. GEAR

Hook and line.

4. QUOTAS AND OPEN TIMES

4.1. Season Length

The 2010 Halibut fishery will commence 12:00 hours local time, March 6, 2010 and will close at 12:00 hours local time, November 15, 2010. Following the closure of the fishery, all Halibut must be landed and validated by a Fisheries and Oceans Canada designated groundfish dockside observer no later than 23:59 hours local time, November 22, 2010.

4.2. Fishing Areas

Subject to closures described in section 9 and variation orders, the waters in which commercial Halibut fishing is permitted to be carried out are:

Areas 1 to 11, 21, 23 to 27, 101 to 111, 121, 123 to 127, 130, 142, Subareas 12-14, 20-1 to 20-3 (Groundfish Management Areas 3C, 3D, 5A, 5B, 5C, 5D, and 5E).

To harvest Halibut in Subareas 12-1 to 12-13, 12-15 to 12-48, 19-3 to 19-5, 20-4 to 20-5 (Groundfish Management Area 4B), an amendment to the Halibut conditions of licence is required from the Halibut Co-ordinator, please see section 6.1.

When hailed out on a combination Halibut and Sablefish trip, a vessel can only fish in areas open to directed Sablefish fishing. While fishing under authority of a Halibut, Rockfish or a Schedule II species licence only, non-directed legal-sized Sablefish caught as bycatch may be retained from any area or subarea open to fishing under the authority of a Halibut, Rockfish or a Schedule II species commercial licence, except Groundfish Management Area 4B (subject to closures described in section 10 and variation orders).

4.3. Annual Total Allowable Catch

For 2010, the International Pacific Halibut Commission recommended a Canadian catch limit of 7,500,000 pounds (fresh, dressed head-off weight) for Area 2B, Canada's Pacific waters. For commercial/recreational allocation purposes, the total allowable catch (TAC) was adjusted to 7,512,000 pounds (fresh, dressed head-off weight) to include commercial wastage (12,000 pounds).

The 2010 TAC for the Canadian commercial Pacific Halibut fishery is 6,598,560 pounds of fresh, dressed head-off Halibut.

5. LICENSING

5.1. Licence Category

A commercial Halibut category L or communal commercial Halibut category FL licence is required to commercially harvest Pacific Halibut. Category L Halibut eligibilities are limited entry and vessel-based. Category FL eligibilities are party-based; a First Nations group is the licence eligibility holder and the eligibility must be designated to a commercially registered fishing vessel that meets established length restrictions.

Vessels authorized to fish under authority of a Halibut licence are also permitted to catch and retain other groundfish species by hook and line gear as outlined in conditions of licence. These vessels are also permitted to catch and retain species described in Schedule II, Part 2 of the *Pacific Fishery Regulations, 1993*, catch and retain other groundfish species, transport non-groundfish species caught by other vessels and be designated to fish under the authority of a category Z licence as outlined in Conditions of Licence.

5.2. Licence Fees

The commercial Halibut licence fee is based on the following formula: \$310 multiplied by the number of tonnes of Halibut initially allocated to the licence, less 40 percent of that product, up to a maximum reduction of \$1000.

5.3. Licence Application and Issuance

Category L applications must be completed and submitted with the required fee to a Pacific Fishery Licence Unit (PFLU) by February 20 of each year, in order to maintain the eligibility, regardless of whether fishing will take place or not.

The vessel owner(s)/licence eligibility holder may sign the application form. If the vessel owner(s)/licence eligibility holder is a company or First Nations group, only an authorized signing authority may sign the application. The PFLU must have on record a copy of either a Confirmation of Signing Authorities or an Amendment to Confirmation of Signing Authorities listing the signing authorities. Licence eligibility holders/vessel owners are required to list parties authorized to request amendments on the application form and meet any Ministerial conditions placed on the licence eligibility.

Prior to annual application, vessel owner(s)/licence eligibility holders are required to:

- 1) indicate on the application if you do not intend to harvest under the authority of the Halibut licence in 2010,
- 2) list on the application all parties authorized to request licence amendments, licence status reports and/or reallocation history detail reports, and
- 3) meet any Ministerial conditions placed on the licence eligibility.

5.4. Licence Amendment

The Halibut licence must be issued prior to the processing of a request for licence amendment or reallocation of Individual Vessel Quota (IVQ). The vessel owner/master must have on board a valid Halibut licence amendment prior to fishing. This amendment outlines the total amount of fish by species that the vessel can land for the fishing season. Without this amendment the vessel is not permitted to catch, retain or land any fish.

A 'Request for Licence Amendment' must be completed by the vessel owner/licence eligibility holder or the designated agent and faxed to the Groundfish Management Unit at (604) 666-8525. Request forms are available on the internet at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/form-eng.htm>

5.5. Licence Documents

Halibut licence eligibilities are valid from the date of issue to February 20, 2011. Replacements for lost or destroyed licence documents may be obtained by completing a Declaration Concerning Licence Documents form. Please contact a PFLU for further details.

5.6. Vessel Replacement

The owner(s) of a category L licensed Halibut vessel may make an application to replace the commercial fishing vessel. Both the replacement vessel and the vessel being replaced must have a survey on file with the PFLU or submitted with the vessel replacement application. Vessels must be surveyed according to the Department guidelines.

Communal commercial licenses are not eligible for vessel replacement as the licence eligibility is party-based and is not held by the vessel but designated to a vessel annually.

A single category L Halibut licence eligibility may be placed on a vessel that does not hold another vessel based licence eligibility up to the overall length (OAL) of the original vessel, (the vessel licensed as at January 31, 1993.)

A single category L Halibut licence eligibility may be placed on a vessel that does hold another vessel based licence eligibility, up to the maximum vessel length (MVL) of the Halibut licence eligibility; the MVL being the length of the original vessel licensed as at January 31, 1993, plus 25 feet.)

An L Halibut licence eligibility may be split from other licence eligibilities and placed on a vessel that does not exceed the MVL, as long as the replacing vessel holds another vessel based licence eligibility.

Where the replacing vessel has a category C, Schedule II species licence eligibility, the C licence eligibility is relinquished (permanently retired), except when the placement is temporary, then the C licence eligibility is held until the Halibut licence eligibility is permanently placed on a vessel.

When a Schedule II licence eligibility is relinquished from a vessel with an OAL less than the MVL but greater than the OAL of the vessel licensed as at January 31, 1993, in future, the licence eligibility may be placed on an unlicensed vessel up to the OAL of the vessel that relinquished the C licence eligibility. There is no change to the MVL for the Halibut licence eligibility.

Vessels may hold more than one Halibut licence eligibility in a year, but not at the same time.

Vessels may not fish Halibut under the authority of more than one licence eligibility a year.

When vessel owners wish to swap two married Halibut licence eligibilities, neither licence may exceed the MVL assigned to the licence eligibility.

5.7. Temporary Vessel Replacement

The temporary placement of Halibut licence eligibilities is only allowed when the vessel to be replaced becomes a total loss. Temporary replacement vessels may not have harvested Halibut in the current fishing year and may not exceed the MVL of the Halibut licence eligibility. If a Halibut licence eligibility is temporarily split from other vessel licence eligibilities, the remaining eligibilities may not be placed on a third vessel.

6. SECTOR RULES

6.1. 4B (Strait of Georgia) Halibut Fishery

Those vessels participating in a directed Halibut fishery in area 4B will be responsible and accountable for intercepted species. As such, any dogfish or Quillback, Copper,

China and Tiger rockfish caught while fishing area 4B waters will require the acquisition of sufficient quota to cover the catch.

There is a small allocation of Yelloweye rockfish available for those vessels fishing the area 4B waters. Vessels will be restricted to annual caps of 200 pounds (round weight) of Yelloweye, 200 pounds (round weight) of Quillback, Copper, China, and Tiger rockfish and 1,000 pounds (round weight) of dogfish for bycatch purposes.

The Department will closely monitor the fishing activity in the 4B area, and if the Yelloweye TAC for area 4B is reached, the fishery in this area will be closed. Once individual vessels have reached their annual limits they will be restricted from further directed Halibut fishing in area 4B for the remainder of the season.

Those vessels wishing to participate in this fishery will require an amendment to the Halibut Conditions of Licence which may be obtained by contacting the Halibut Co-ordinator.

6.2. Rockfish IVQ

Each licensed Halibut vessel is allocated IVQ by area of the following rockfish species: Yelloweye, Quillback/Copper/China/Tiger, Canary, Silvergray, Rougheye, Shortraker, and Shortspine Thornyhead. Rockfish IVQ are calculated by multiplying the species area TAC by the Halibut IVQ percentage held by a licensed vessel at the start of the season (before any overage/underage is added). Rockfish IVQ will be subject to temporary reallocation guidelines and annual species caps outlined below.

6.3. Annual IVQ Caps

All Halibut licences are subject to annual IVQ caps for non-directed species caught while fishing Halibut. These annual IVQ caps are graduated for some species based on the amount of Halibut landed, for other species there is a set amount. Temporary reallocations of IVQ, up to the species caps listed below, will be permitted. No vessel may hold quota holdings in excess of the annual quota caps.

6.3.1. Licence Species Caps

Species	Areas	Licence Species Cap (round weight pounds)
Rougheye rockfish	Coastwide	30,000
Quillback,Copper, China and Tiger rockfish	Coastwide	7,000
Silvergray rockfish	Coastwide	5,000
Canary rockfish	Coastwide	3,500
Shortspine Thornyhead	Coastwide	8,000
Lingcod	Coastwide	30,000
Sablefish	Coastwide	25,000

6.3.2. Quota Landings Caps

Species	Areas	Quota Landings Caps (round weight pounds)	Quota Landings Caps (round weight pounds)
Yelloweye rockfish	Coastwide	7,000 if 0 < Halibut* landed < 32,993	9,000 if 32,993 < Halibut* landed < 65,986
		10,000 if > 65,986 of Halibut* landed	
Shortraker rockfish	Coastwide	4,000 if 0 < Halibut* landed < 32,993	8,000 if 32,993 < Halibut* landed < 65,986
		10,000 if > 65,986 of Halibut* landed	
Shortraker rockfish	Coastwide	Caps increase in 2,000 blocks up to 10,000, once a 2,000 block is caught	
Rougheye rockfish	Coastwide	Caps increase in 4,000 blocks up to 30,000, once a 4,000 block is caught	
Shortspine thornyhead	Coastwide	Caps increase in 4,000 blocks up to 8,000, once a 4,000 block is caught	
Sablefish	Coastwide	Caps increase in 5,000 blocks up to 25,000, once a 5,000 block is caught	

*Fresh, dressed head-off weight

NB: 32,993 = 0.5% of Halibut TAC 65,986 = 1.0% of Halibut TAC

6.3.3. TAC Holdings Caps

The maximum quantity of Halibut IVQ that can be held by a vessel is 1.0 percent of the season's TAC (including both permanent and temporary transfers, but not including any carryover of IVQ underage from the previous year). However, vessels that fished greater than 1.0 percent of the TAC in any year from 1993 to 1998 are allowed to hold quota up to their individual maximum. With the 2010/2011 commercial TAC at 6,598,560 pounds, the maximum poundage that may be held in permanent and temporary quota by a vessel for 2010/2011 is 65,986 pounds (excluding overage and underages).

The minimum quantity of Halibut IVQ that must be held permanently by a vessel is 0.011494 percent of the total commercial TAC. With the 2010/2011 commercial TAC at 6,598,560 pounds, the minimum poundage that must be permanently held by a vessel for 2010/2011 is 758 pounds. The minimum can be temporarily reallocated during the year.

6.4. Trip Limits

For non-directed species of groundfish caught while fishing Halibut there will be trip limits:

Species	Trip Limit
Yelloweye rockfish	Landings (round weight) may not exceed 30% of Halibut (fresh, dressed head-off weight) landed per trip
Rougeye	Landings (round weight) may not exceed 100% of Halibut (fresh, dressed head-off weight) landed per trip
Sablefish	Landings (round weight) may not exceed 22% of Halibut (fresh, dressed head-off weight) landed per trip
Lingcod	Landings (round weight) may not exceed 75% of Halibut (fresh, dressed head-off weight) landed per trip
Lingcod by hook and line gear other than longline gear (i.e. troll & jig only)	No limit
Pacific cod	500 pounds (round weight)
Skate	6,000 pounds (round weight)
All other non-IVQ rockfish species	8,000 pounds (round weight)
Sole and flounder	No limit

6.5. Fishing Restriction for exceeding an IVQ

Licences that exceed their uncaught IVQ (as of the vessel's last trip) for directed species by more than 10%, or 400 pounds, whichever is greater, are defined as being in a state of excess overage. Licences in excess overage will be restricted from further fishing activity for the remainder of the fishing year, or until such time that sufficient IVQ is reallocated to the licence to cover any overages.

Licences that exceed their total IVQ for non-directed species by more than 30%, or 100 pounds, whichever is greater, are defined as being in a state of excess overage. Licences in excess overage will be restricted from further fishing activity for the remainder of the fishing year, or until such time that sufficient IVQ is reallocated to the licence to cover any overages.

Licenses that do not reconcile excess overages by February 20, 2011, will carry excess overages into the new season (see sections 6.5.3. and 6.5.4.). If a licence remains in excess overage following initial allocations of IVQ, the licence will be restricted from fishing until temporary reallocations for the 2011/2012 season are processed in mid-March.

6.6. Reallocation of Directed and Non-Directed Species IVQ

The following guidelines for the reallocation of directed and non-directed species IVQ will be in effect for the 2010 fishery.

- 6.6.1. Subject to annual IVQ caps and sector caps, upon application, licence eligibility holders will be permitted to make unlimited temporary reallocations of directed and non-directed species IVQs. A “Temporary Reallocation Request for Integrated Groundfish Fisheries” must be completed and submitted to the GMU and, if approved, a licence amendment will be issued to reflect new IVQ amounts. The most current licence amendment must be onboard when fishing.
- 6.6.2. For permanent Halibut IVQ reallocations, all vessel owners/licence eligibility holders of record must complete and sign a “Permanent Reallocation Request for Integrated Groundfish Fisheries.” For permanent reallocations, all signatures must be notarized.
- 6.6.3. If the vessel owner is a company or First Nations group, only an authorized signing authority may sign the application. A copy of either a “Confirmation of Signing Authorities” or an “Amendment to Confirmation of Signing Authorities” listing the signing authorities must be on file with the PFLU.
- 6.6.4. The 2010 Halibut licence must be issued prior to any IVQ being reallocated.
- 6.6.5. Temporary reallocations are only valid for the current fishing year.
- 6.6.6. Requests for permanent reallocation of Halibut IVQ must be received by 16:00 hours local time on February 2, 2011 in order to be processed.
- 6.6.7. Requests for temporary reallocation of directed and non-directed species IVQ must be received by 16:00 hours local time on February 20, 2011 in order to be processed. Temporary reallocations of directed and non-directed species IVQ are only valid for the current fishing year.
- 6.6.8. Reallocations for the 2010/2011 season will not be processed until 8:00 hours local time March 15, 2010.
- 6.6.9. IVQ that has already been caught or deemed “fished” cannot be reallocated.
- 6.6.10. Permanent reallocations of directed species IVQ will be expressed as a percentage of the TAC, and will be added to the receiving vessel’s percentage of the TAC. (For example, the poundage held by any licence is dependent on the total TAC for the year and the percent of the allocation that vessel holds at any given time).
- 6.6.11. The minimum quantity of IVQ that may be reallocated is one pound.

6.7. Rules for Carryover of Quota Overage and Underage

6.7.1. Carryover of Directed Species IVQ Underage

Vessels will be permitted to carryover uncaught IVQ up to 10% of their total directed species IVQ at the end of the fishing season (this amount includes any reallocations made during the year). This equivalent poundage will be added to the vessel's license IVQ in 2011. Any amount above the 10% will be forgone.

6.7.2. Carryover of Non-Directed Species IVQ Underage

For all other non-directed species IVQ (except Sablefish and dogfish), vessels will be permitted to carryover uncaught IVQ up to 30% of their total non-directed species IVQ by area at the end of the fishing year (this amount includes any reallocations made during the year). This equivalent poundage will be added to the vessel's license IVQ in 2011/2012. Any amount above the 30% will be forgone.

For Sablefish, vessels will be permitted to carryover uncaught IVQ up to 15% of their Sablefish IVQ, on February 20, 2011 (this amount includes any reallocations made during the year). This equivalent poundage will be added to the vessel's license IVQ in 2011/2012. Any amount above the 10% will be forgone.

For dogfish, vessels will be permitted to carryover uncaught IVQ up to 10% of their dogfish IVQ (by area), on February 20, 2011 (this amount includes any reallocations made during the year). This equivalent poundage will be added to the vessel's license IVQ in 2011/2012. Any amount above the 10% will be forgone.

6.7.3. Carryover of Directed Species IVQ Overages

Vessels with catch in excess of the total directed species IVQ (this amount includes reallocations made during the year) will have the overage deducted from the vessel's IVQ in 2011/2012 and the overage will count against the annual vessel cap for the following season.

6.7.4. Carryover of Non-Directed Species IVQ Overage

Vessels with catch in excess of the total non-directed species IVQ (this amount includes reallocations made during the year) will have the overage deducted from the vessel's IVQ in 2010/2011 and the overage will count against the annual vessel cap for the following season.

7. **BAIT**

Commercial fishers wishing to use licensed catch as bait may do so (with the exception of rockfish). All such catch must be accurately recorded in the Integrated Groundfish Fishing Log. Rockfish may not be used as bait but must be retained and landed.

Octopus caught incidentally may be retained and used for bait under authority of a Halibut licence but cannot be landed and sold.

If a quota species is used as bait, the vessel will be charged the agreed upon average weight for that species.

8. COMBINED HALIBUT AND SABLEFISH FISHING

Vessels conducting combined Halibut and Sablefish trips will be required to identify their intentions at the time of hail-out and will receive two hail-out numbers.

Those vessels conducting combination halibut and Sablefish trips may assign directed and non-directed quota species catch to either their L tab or their K tab as long as they are within the sector caps for that fishery. This includes splitting catch for the same species between the two licence types if so desired. It is the responsibility of the vessel master at the time of offload to communicate this to the dockside observer. However, trip limit allowances (including those for non-quota species) will follow the Sablefish rules only.

If fishing on a combination trip the vessel may a vessel master can only fish in areas open to directed Sablefish fishing (i.e. Hecate Strait is closed to Sablefish fishing).

9. RECREATIONAL FISHING

Fish harvesters are reminded that under Section 14 of *the British Columbia Sport Fishing Regulations, 1996*, it is unlawful to have Halibut on board taken by sport fishing if there are any other fish on board the vessel destined for commercial sale.

10. CLOSURES

10.1. Rockfish Conservation Areas

Currently there are 164 Rockfish Conservation Areas (RCAs) in effect and are outlined in the Protecting British Columbia's Rockfish booklet. These booklets are available at any PFLU or can be downloaded from the Department's internet site at:
<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especies/conservation-eng.htm>

10.2. General

10.2.1. Queen Charlottes

Subareas 2-1, 2-31 to 2-37, 2-63 to 2-68; and that portion of Subarea 2-69 from Hunter Point to Fame Point shoreward of the 50 fathom contour line as shown on Chart No. 3869 as published by the Canadian Hydrographic Service of the Department. These areas are closed year round for all commercial groundfish fisheries. The intent of the closure is to reduce harvesting pressure on localized stocks of fish and to provide improved access for First Nations food, social and ceremonial purposes.

10.2.2. Swiftsure

Those portions of Subareas 121-1 and 121-2 inside a line:
that begins at 48°34.0' N 125°06.0' W
then true east to 48°34.0' N 124°54.2' W
then to 48°29.62' N 124°43.4' W
then following the International Boundary 48°29.3' N 124°58.0' W
between Canada and the United States of
America to
then to the beginning point.

Appendix 7: Sablefish Commercial Harvest Plan

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1. MANAGEMENT CHANGES FOR 2010/2011

1.1. In-Season Changes/Updates

In-season updates are available on the Fishery Notice website at: http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=commercial.

In-season Sector Catch and Sector Cap summaries are updated daily and can be found at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/index-eng.htm>

1.2. Seamount Fishery

Please review section 12 for important updates regarding trip limit allowances for the offshore seamount fishery.

2. SPECIES

The following species are permitted to be retained under Part 1 and Schedule II, Part 2 of a valid Sablefish licence condition with the appropriate amendment.

Sablefish (*Anoplopoma fimbria*)

Rockfish (*Sebastes spp. and Sebastolobus spp.*)

Lingcod (*Ophiodon elongates*)

Spiny Dogfish (*Squalus acanthius*)

Halibut (*Hippoglossus stenolepis*)

Skate (*Rajidae*)

Sole and Flounder (*Pleuronectiformes other than Hippoglossus stenolepis*)

Pacific cod (*Gadus macrocephalus*)

3. GEAR

Longline and Trap gear

By regulation, no person shall fish for Sablefish with a trap, unless the trap has in a side wall a section that has been laced, sewn or otherwise secured by a single length of untreated natural fibre not larger than two mm in diameter and that, on deterioration or parting, produces in the side wall an opening with four sides, each of which is at least 20 cm in length.

No person shall fish for Sablefish with a trap unless the trap has in the side walls at least two escape openings each having an inside diameter of not less than 8.89 cm (3.5 inches) which creates an unrestricted exit out of the trap.

No person shall set a trap and leave the trap in the water for more than four consecutive days without lifting the trap from the water and removing all of the catch. Vessels leaving unattended

trap gear in the water for more than four consecutive days will be required to take an observer at the vessel's expense for the remainder of the season.

4. QUOTAS AND OPEN TIMES

4.1. Open Times

The 2010/2011 Sablefish fishery will commence 00:01 hours local time, February 21, 2010 and close at 23:59 hours local time, February 20, 2011. Following the closure of the fishery, all fish caught under the authority of a Sablefish licence must be landed and validated by a Fisheries and Oceans Canada designated groundfish dockside observer no later than 23:59 hours local time, February 27, 2011.

4.2. Fishing Areas

Subject to closures described in section 10 and variation orders, the waters in which commercial Sablefish fishing is permitted to be carried out are:

Areas: 1, 2, 101, 108 to 111, 121, 123 to 127, 130, 142, Sub-area 102-3 and that portion of Subarea 102-2 that lies southerly of a line from 52°10.00' north latitude and 130°57.395' west longitude to 52°27.020' north latitude and 130°16.621' west longitude (portions of Groundfish Management Areas 3C, 3D, 5A, 5B, 5C, 5D, and 5E).

When hailed out on a combination Halibut and Sablefish trip, a vessel can only fish in areas open to directed Sablefish fishing. While fishing under authority of a Halibut, Rockfish or a Schedule II species licence only, non-directed legal-sized Sablefish caught as bycatch may be retained from any area or subarea open to fishing under the authority of a Halibut, Rockfish or a Schedule II species commercial licence, except Groundfish Management Area 4B (subject to closures described in section 10 and variation orders).

4.3. Annual Total Allowable Catch

The 2010/2011 fishery Sablefish coastwide TAC is 2300 tonnes (fresh round weight) a 6% reduction from the 2009/2010 season.

From the TAC 45.36 tonnes is allocated for First Nation Food, Social and Ceremonial (FSC) purposes and a further 38 tonnes is allocated for the research purposes as follows:

- Tagged fish sampling 8 tonnes
- Fall Sablefish survey 20 tonnes
- Trawl surveys 3 tonnes
- Sablefish catch sampling program 7 tonnes

The remainder of the TAC of 2,216.64 is allocated for commercial harvest with 91.25% or 2,022.68 tonnes (fresh, round weight).allocated to the directed commercial Sablefish fleet and 8.75% or 193.96 tonnes (fresh, round weight) allocated to directed commercial Trawl fleet.

5. LICENSING

5.1. Licence Category

A commercial Sablefish category K or a communal commercial Sablefish category FK licence is required to commercially harvest Sablefish. Category K Sablefish licence eligibilities are limited entry and vessel-based. Category FK eligibilities are party-based; an Aboriginal group is the licence eligibility holder and the eligibility must be designated to a registered commercially registered fishing vessel that meets established length restrictions.

Vessels authorized to fish under the authority of a Sablefish licence are also permitted to catch and retain other groundfish species by hook and line gear and trap gear as outlined in conditions of licence. These vessels are also permitted to catch and retain species described in Schedule II, Part 2 of the *Pacific Fishery Regulations*, 1993, catch and retain other groundfish species; transport non-groundfish species caught by other vessels and be designated to fish under the authority of a category Z licence as outlined in Conditions of Licence.

5.2. Licence Fees

The commercial Sablefish licence fee is based on the following formula: \$241 multiplied by the number of tonnes of Sablefish initially allocated to the licence, less 40 percent of that product, up to a maximum reduction of \$1000.

There is no licence fee for communal commercial licences.

5.3. Licence Application and Issuance

Category K applications must be completed and submitted with the required fee to a Pacific Fishery Licence Unit (PFLU) by February 20 of each year, in order to maintain the eligibility, regardless of whether fishing will take place or not.

The vessel owner(s)/licence eligibility holder may sign the application form. If the vessel owner(s)/licence eligibility holder is a company or First Nations group, only an authorized signing authority may sign the application. The PFLU must have on record a copy of either a Confirmation of Signing Authorities or an Amendment to Confirmation of Signing Authorities listing the signing authorities. Licence eligibility holders/vessel owners are required to list parties authorized to request amendments on the application form and meet any Ministerial conditions placed on the licence eligibility.

Prior to annual application, vessel owner(s)/licence eligibility holders are required to:

- 1) indicate on the application if you do not intend to harvest under the authority of the Sablefish licence in 2010/2011,
- 2) list on the application all parties authorized to request licence amendments, licence status reports and/or reallocation history detail reports, and
- 3) meet any Ministerial conditions placed on the licence eligibility.

5.4. Licence Amendment

The Sablefish licence must be issued prior to the processing of a request for licence amendment or reallocation of Individual Vessel Quota (IVQ). The vessel owner/master must have on board a valid Sablefish licence amendment prior to fishing. This amendment outlines the total amount of fish by species that the vessel can land for the fishing season. Without this amendment the vessel is not permitted to catch, retain or land any fish.

A 'Request for Licence Amendment' must be completed by the vessel owner/licence eligibility holder or the designated agent and faxed to the Groundfish Management Unit at (604) 666-8525. Request forms are available on the internet at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/form-eng.htm>

5.5. Licence Documents

Sablefish licence documents are valid from the date of issue to February 20, 2011. Replacement for lost or destroyed licence documents may be obtained by completing a Declaration Concerning Licence Documents form. Please contact a PFLU for further details.

5.6. Vessel Replacement

The owner(s) of a category L licensed Sablefish vessel may make an application to replace the commercial fishing vessel. Both the replacement vessel and the vessel being replaced must have a survey on file with the PFLU or submitted with the vessel replacement application. Vessels must be surveyed according to the Department guidelines.

Communal commercial licenses are not eligible for vessel replacement as the licence eligibility is party-based and is not held by the vessel but designated to a vessel annually.

A single category K Sablefish licence eligibility may be placed on a vessel that does not hold another vessel based licence eligibility as long as the replacing vessel does not exceed the overall length of the existing vessel.

A Sablefish licence eligibility may be separated from any combination of married licence eligibilities as long as it is placed on another commercially licensed fishing vessel of any length, that holds a salmon, geoduck, halibut, crab, shrimp trawl, groundfish trawl or prawn and shrimp by trap licence eligibility. Sablefish licence eligibilities may not be stacked.

Where a Sablefish licence eligibility is permanently placed on a vessel which holds Schedule II species (category C) licence eligibility, then the Schedule II licence privilege must be permanently retired.

Where the Sablefish licence eligibility is temporarily placed on a vessel which holds Schedule II species licence eligibility, then the Schedule II licence must be returned to a

PFLU. The Schedule II licence will be held for the duration of the time the Sablefish licence is temporarily placed.

Vessel owners wishing to make permanent or temporary vessel replacements for commercial Sablefish licence eligibilities must apply to a PFLU.

5.7. Temporary Vessel Replacement

The temporary placement of Sablefish licence eligibilities is only allowed when the vessel to be replaced becomes a total loss. Temporary replacement vessels may not have harvested Sablefish in the current fishing year and may not exceed the MVL of the Sablefish licence eligibility. If a Sablefish licence eligibility is temporarily split from other vessel licence eligibilities, the remaining eligibilities may not be placed on a third vessel.

6. SECTOR RULES

6.1. Annual IVQ Caps

All Sablefish licences are subject to annual IVQ caps for non-directed species caught while fishing Sablefish. Temporary reallocations of IVQ, up to the species caps listed below, will be permitted. No vessel may hold quota holdings in excess of the annual quota caps.

6.1.1. Licence Species Caps

Species	Species Cap in Lbs
Halibut	65,466
Lingcod	33,772
Canary rockfish	14,542
Silvergray rockfish	9,836
Yelloweye rockfish	9,000
Quillback, Copper, China & Tiger rockfish (total)	1,945
Rougheye rockfish	60,000
Shortraker rockfish	32,000
Shortspine thornyhead	20,000

6.2. Trip Limits

For non-directed species of groundfish caught while fishing Sablefish there will be trip limits:

Species	Trip Limit
Halibut	Landings (fresh, dressed head-off weight) may not exceed 15% of Sablefish (round weight) landed per trip
Lingcod	Landings (round weight) may not exceed 75% of Sablefish (round weight) landed per trip
Canary rockfish	Landings (round weight) may not exceed 30% of Sablefish (round weight) landed per trip
Silvergray rockfish	Landings (round weight) may not exceed 30% of Sablefish (round weight) landed per trip
Yelloweye rockfish	Landings (round weight) may not exceed 30% of Sablefish (round weight) landed per trip
Quillback, Copper, China and Tiger rockfish (combined)	Landings (round weight) may not exceed 30% of Sablefish (round weight) landed per trip
Rougeye rockfish	Landings (round weight) may not exceed 100% of Sablefish (round weight) landed per trip
Shorthead rockfish	Landings (round weight) may not exceed 100% of Sablefish (round weight) landed per trip
Shortspine thornyhead	Landings (round weight) may not exceed 30% of Sablefish (round weight) landed per trip
All other non-IVQ rockfish species	12,000 pounds (round weight)
Pacific cod	500 pounds (round weight)
Skate	6,000 pounds (round weight)
Sole and Flounder	No limit

6.3. Fishing Restrictions for Exceeding IVQ Species Caps

Licences that exceed their total directed species IVQ by more than 10%, or 1000 pounds, whichever is greater, are defined as being in a state of excess overage. Licences in excess overage will be restricted from further fishing activity for the remainder of the fishing year, or until such time that sufficient IVQ is reallocated to the licence to cover any overages.

Licences that exceed their total IVQ for non-directed species by more than 30%, or 100 pounds, whichever is greater, defined as being in a state of excess overage. Licences in excess overage will be restricted from further fishing activity for the remainder of the fishing year, or until such time that sufficient IVQ is reallocated to the licence to cover any overages.

Licences that do not reconcile excess overages by February 20, 2011, will carry excess overages into the new season (see sections 6.5.3. and 6.5.4.). If a licence remains in excess overage following initial allocations of IVQ, the licence will be restricted from fishing until temporary reallocations for the 2011/2012 season are processed in mid-March.

6.4. Reallocation of Directed and Non-Directed Species IVQ

The following guidelines for the reallocation of directed and non-directed species IVQ will be in effect for the 2010/2011 fishery.

- 6.4.1. Subject to annual IVQ caps and sector caps, upon application, licence eligibility holders will be permitted to make unlimited temporary reallocations of directed and non-directed species IVQs. A “Temporary Reallocation Request for Integrated Groundfish Fisheries” must be faxed to the GMU and, if approved, a licence amendment will be issued to reflect new IVQ amounts. The most current licence amendment must be onboard when fishing.
- 6.4.2. For permanent Sablefish IVQ reallocations, all vessel owners/licence eligibility holders of record must complete and sign a “Permanent Reallocation Request for Integrated Groundfish Fisheries;” all signatures must be notarized. For temporary re-allocations of Sablefish IVQ only one owner or the licence eligibility holder is required to sign the above mentioned form.
- 6.4.3. If the vessel owner is a company or First Nations group, only an authorized signing authority may sign the application. A copy of either a “Confirmation of Signing Authorities” or an “Amendment to Confirmation of Signing Authorities” listing the signing authorities must be on file with the PFLU.
- 6.4.4. The 2010/2011 Sablefish licence must be issued prior to any IVQ being reallocated.
- 6.4.5. Temporary reallocations are only valid for the current fishing year.
- 6.4.6. Requests for permanent reallocation of Sablefish IVQ must be received by 16:00 hours local time on February 2, 2011 in order to be processed.
- 6.4.7. Requests for temporary reallocation of directed and non-directed species IVQ must be received by 16:00 hours local time on February 20, 2011 in order to be processed. Temporary reallocations of directed and non-directed species IVQ are only valid for the current fishing year.

- 6.4.8. Reallocations for the 2010/2011 season will not be processed until 8:00 hours local time March 15, 2010.
- 6.4.9. IVQ that has already been caught or deemed “fished” cannot be reallocated.
- 6.4.10. Permanent reallocations of directed species IVQ will be expressed as a percentage of the TAC, and will be added to the receiving vessel’s percentage of the TAC. (For example, the poundage held by any licence is dependent on the TAC for the year, and the percent of the allocation that vessel holds at any given time).
- 6.4.11. IVQ that has already been caught or deemed “fished” cannot be reallocated.
- 6.4.12. The minimum quantity of IVQ that may be reallocated is one pound.
- 6.4.13. Temporary reallocations are only valid for the current fishing year.

6.5. Rules for Carryover of Quota Overage and Underage

6.5.1. Carryover of Directed Species IVQ Underage

Vessels will be permitted to carryover uncaught IVQ up to 15% of their total directed species IVQ at the end of the fishing season (this amount includes any reallocations made during the year). This equivalent poundage will be added to the vessel's license IVQ in 2011. Any amount above the 15% will be forgone.

6.5.2. Carryover of Non-directed IVQ Underage

For all non-directed species IVQ (except dogfish), vessels will be permitted to carryover uncaught IVQ up to 30% of their total non-directed species IVQ by area on February 20, 2011. This equivalent poundage will be added to the vessel’s licence IVQ in 2011/2012. Any amount above the 30% will be forgone.

For dogfish, vessels will be permitted to carryover uncaught IVQ up to 10% of their dogfish IVQ (by area), on February 20, 2011. This equivalent poundage will be added to the vessel’s licence IVQ in 2011/2012. Any amount above the 10% will be forgone.

6.5.3. Carryover of Directed Species IVQ Overages

Vessels with catch in excess of the total directed species IVQ (this amount includes reallocations made during the year) will have the overage deducted from the vessel's IVQ in 2011/2012 and the overage will count against the annual vessel cap for the following season.

6.5.4. Carryover of Non-Directed IVQ Overages

Vessels with catch in excess of the total non-directed species IVQ (this amount includes reallocations made during the year) will have the overage deducted from the vessel's IVQ in 2011/2012 and the overage will count against the annual vessel cap for the following season.

7. BAIT

Commercial fishers wishing to use licensed catch as bait may do so (with the exception of rockfish). All such catch must be accurately recorded in the Integrated Groundfish Fishing Log. Rockfish may not be used as bait but must be retained and landed.

Octopus caught incidentally may be retained and used for bait under authority of a Sablefish licence but cannot be landed and sold.

If a quota species is used as bait, the vessel will be charged the agreed upon average weight for that species.

8. COMBINED HALIBUT AND SABLEFISH FISHING

Vessels conducting combined Halibut and Sablefish trips will be required to identify their intentions at the time of hail-out and will receive two hail-out numbers.

Those vessels conducting combination halibut and Sablefish trips may assign directed and non-directed quota species catch to either their L tab or their K tab as long as they are within the sector caps for that fishery. This includes splitting catch for the same species between the two licence types if so desired. It is the responsibility of the vessel master at the time of offload to communicate this to the dockside observer. However, trip limit allowances (including those for non-quota species) will follow the Sablefish rules only.

If fishing on a combination trip the vessel may a vessel master can only fish in areas open to directed Sablefish fishing (i.e. Hecate Strait is closed to Sablefish fishing).

9. RECREATIONAL FISHING

Fishers are reminded that under Section 14 of *the British Columbia Sport Fishing Regulations, 1996*, it is unlawful to have halibut on board taken by sport fishing if there are any other fish on board the vessel destined for commercial sale.

10. CLOSURES

10.1. Rockfish Conservation Areas

Currently there are 164 Rockfish Conservation Areas (RCAs) in effect and are outlined in the Protecting British Columbia's Rockfish booklet. These booklets are available at any PFLU or can be downloaded from the Department's internet site at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especies/conservation-eng.htm>

10.2. General

10.2.1. Queen Charlottes

Subareas 2-1, 2-31 to 2-37, 2-63 to 2-68; and that portion of Subarea 2-69 from Hunter Point to Fame Point shoreward of the 50 fathom contour line as shown on Chart No. 3869 as published by the Canadian Hydrographic Service of the Department. These areas are closed year round for all commercial groundfish fisheries. The intent of the closure is to reduce harvesting pressure on localized stocks of fish and to provide improved access for First Nations food, social and ceremonial purposes.

10.2.2. Swiftsure

Those portions of Subareas 121-1 and 121-2 inside a line:

that begins at	48°34.0' N	125°06.0' W
then true east to	48°34.0' N	124°54.2' W
then to	48°29.62' N	124°43.4' W
then following the International Boundary between Canada and the United States of America to then to the beginning point.	48°29.3' N	124°58.0' W

11. FINANCIAL RESPONSIBILITIES

Through the Joint Project Agreement (JPA), Fisheries and Oceans Canada and Wild Canadian Sablefish Ltd. (WCS) have established roles and responsibilities and planned expenditures for both parties. The current JPA runs from February 21, 2010 to February 20, 2011. Each year a work plan is developed jointly to develop guidelines for spending and programs. Currently, the WCS Ltd and individual harvesters contribute either through the JPA or directly \$1.5 million for these activities:

- a) Dockside Monitoring Program
- b) Sablefish Advisory Committee (consultative process)
- c) At-Sea Monitoring Program
- d) Biological Sampling Program
- e) Biological Data Collection Program
- f) Stock Assessment Program
- g) Seamount Program
- h) Fishing Log Program
- i) Cost Recovery Funding
- j) Fishery Management Program

In-kind costs borne by the Department include such items as administration, salaries for fishery managers, scientists, biologists, support staff and enforcement staff and research, patrol vessels and aircraft.

12. OFFSHORE SEAMOUNT FISHERY

12.1. Open Times

The 2010 seamount fishery will open April 1, 2010 and will remain open until September 30, 2010. The seamount fishery is divided between 'North' and 'South' management areas; one vessel per month from April 1 to September 30 is permitted to participate in each area of the seamount fishery.

Seamount application forms will be mailed to licence eligibility holders early in the 2010 calendar year. A lottery draw of applicant licence eligibility holders will determine those vessels permitted to participate in the seamount fishery.

12.2. Gear and Monitoring Requirements

Trap gear is permitted in both 'North' and 'South' management areas, longline gear is prohibited in the 'North' management area.

Vessels participating the in the Seamount fishery must adhere to all monitoring requirements as outlined in Appendix 1: Groundfish Hook and Line/Trap Monitoring Requirements (At-Sea and Dockside), Mortality Rates, and Size Limits and the conditions of licence.

During the months of April and September, vessels in the 'North' must carry an at-sea observer in place of the electronic monitoring.

12.3. Monthly Vessel Limits

For vessels participating in the Sablefish seamount fishery there will be monthly vessel limits:

Species	Monthly Vessel Limit (round weight pounds)
Sablefish	75,000
Rougeye rockfish	5,000
Other rockfish, sole and flounder	1,000

12.4. Bowie Seamount Fishery

For more information on the Bowie Seamount Marine Protected Area, refer to section 4.5 the 2010/2011 Groundfish IFMP. Commercial fishing activities within the MPA will be managed through the Integrated Fisheries Management process. Annual fishing plans will be developed in consultation with stakeholders and specific actions (openings and closures) for the Bowie Seamount Marine Protected Area will be taken under the authority of the *Fisheries Act* and its regulations.

The Sablefish seamount fishery within the MPA is restricted to Zone 2 of the MPA (see figure 1), with the use of trap gear only.

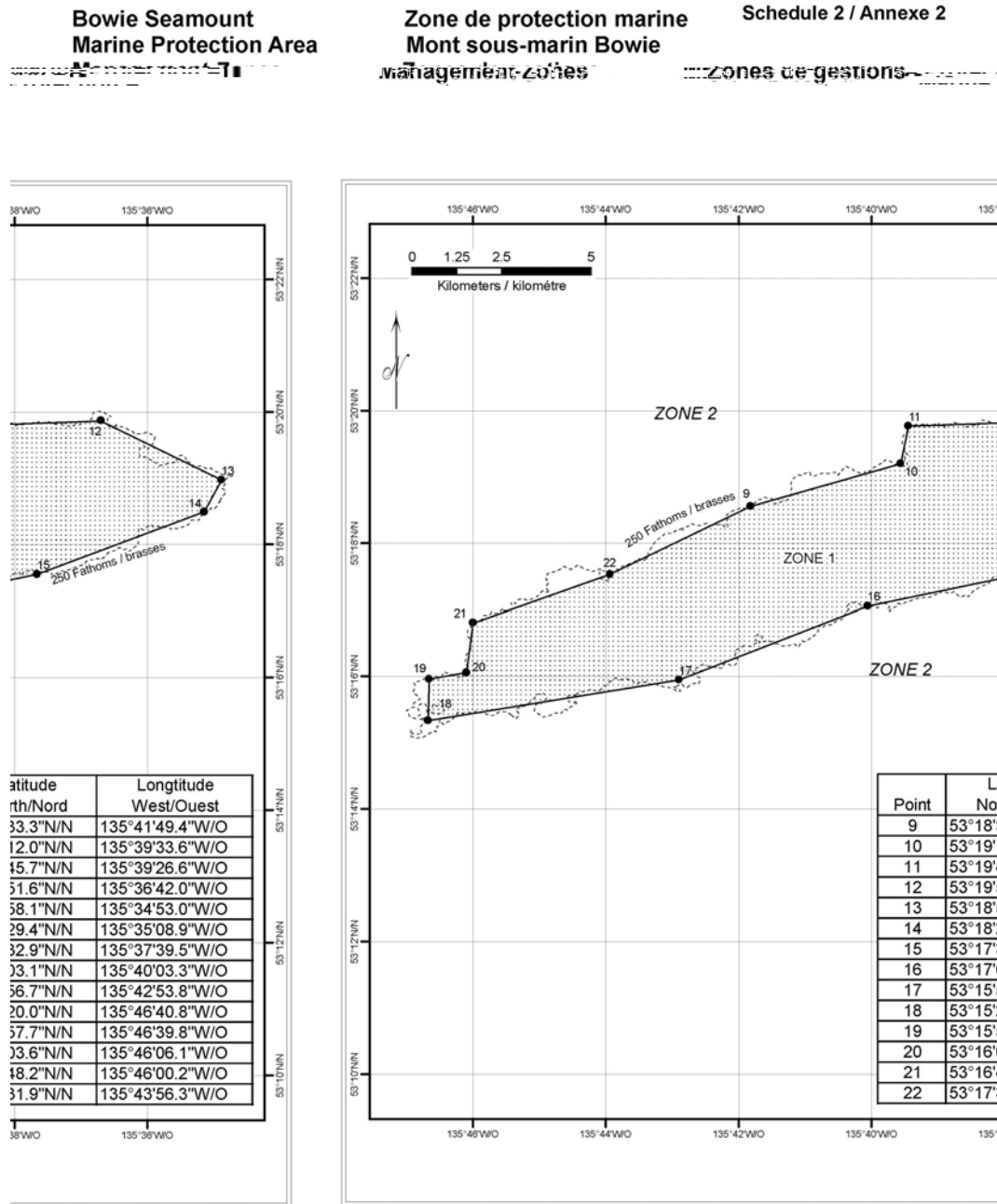


Figure 1. Bowie Seamount Marine Protected Area Management Zones

Appendix 8: 2010/2011 Groundfish Trawl Commercial Harvest Plan

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1. MANAGEMENT CHANGES AND REMINDERS FOR 2010/2011

Following is a summary of changes adopted for the Groundfish trawl fishery for the 2010/2011 season following consultation with the Groundfish Trawl Advisory Committee (GTAC). Refer to the specific section within the plan for details of these changes.

1.1. In-season Changes

Management actions to address inshore rockfish conservation, *Species at Risk Act* (SARA) and other proposed protected areas continue to be developed. In-season changes to the 2010/2011 IFMP may be required with respect to area openings, closures and other in-season restrictions.

Offshore Pacific hake management measures, including the Total allowable catch (TAC) for the 2010 season are not included in the IFMP and will be released inseason.

1.2. Sponge Reef Closures

Since July 19, 2002, groundfish trawl fishing has been prohibited in the vicinity of four unique glass sponge reef areas found within Hecate Strait and Eastern Queen Charlotte Sound. In 2007 more recent side scan surveys of the sponge areas and industry input lead to expansion of the closed areas. These closures remain in effect and are described in this plan. Closure of newly identified glass sponges reefs found with the Strait of Georgia are under consideration with possible inseason implementation.

1.3. Revised Total Allowable Catch Quotas

On the basis of current scientific advice, revised total allowable catch levels (TACs) for the trawl sector have been established for Canary Rockfish, Sablefish and Pacific hake (Gulf) and are set out in this plan. All other TACs remain unchanged from the previous year.

1.4. Reallocation Rules - Cancellation of Planned "Lock-On"

In January of 2010, a consensus agreement was reached between the groundfish trawl industry and the Department to cancel the implementation of "Locked-On" reallocation rules due to come into effect for the 2010/2011 season.

This agreement was reached by the Groundfish Special Industry Subcommittee (GSIC) of the Groundfish Trawl Advisory Committee (GTAC) following assessment of implications of current and future reallocation rules on the trawl industry. GSIC has been tasked with the design and review of the groundfish trawl IVQ program since its inception in 1996.

GSIC concluded that current reallocation rules were meeting the objectives and vision for proper control and management of the fishery and that further restriction of quota movement would be counter to these objectives and to the over all principles of the Commercial Groundfish Integration Program.

DFO has agreed that IVQ reallocations guidelines governing the 2009/2010 season will continue to be in effect into the future.

In addition, it was agreed that GSIC and GTAC will continue to provide oversight of the groundfish trawl IVQ program and when necessary, and where consensus agreement can be

reached, modifications affecting the management of the groundfish trawl fishery will be advanced to the Department for consideration.

1.5. Marketable and Non marketable Fish in Accounting for Catch

DFO and the groundfish trawl industry have agreed to a two step approach to instil full responsibility for catch by eliminating the designation of catch as marketable and non-marketable for fish released at-sea. Beginning in the 2010/2011 season, vessels will be responsible for fifty (50) percent of the mortality associated with non-marketable catch for quota applicable species. This will increase to one hundred (100) percent responsibility in the 2011/2012 season. The objective is to ensure full accountability and responsibility for catch of all quota species while continuing to provide incentive for better utilization of catch, reduce at-sea releases and development of improved fishing practices.

2. APPLICATION

The management strategies and harvest levels contained in this plan apply to vessels operating under the authority of a 2010/2011 groundfish trawl licence off the west coast of Canada.

3. OPEN TIMES

With the exception of those seasonal and permanent closures noted in this plan, or closures announced in-season the groundfish trawl fishery will be open from February 21, 2010 to February 20, 2011. Information on in-season changes can be found by accessing the Department's Groundfish Internet site at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/index-eng.htm>

4. FISHING AREAS

Fishing is permitted coastwide with the exception of closures described in sections 5, 6 and 7 below and those areas set out within inseason variation orders issued by Fisheries and Oceans Canada.

5. SPECIES CLOSURES

The following species closures (non-retention) are in effect.

5.1. Lingcod

Closed year-round in Areas 12 to 20 and 29, (includes all of Johnstone Strait, Strait of Georgia and Juan de Fuca Strait).

5.2. Rockfish

Closed year-round in Areas 12 to 20 and 29, (includes all of Johnstone Strait, Strait of Georgia and Juan de Fuca Strait).

6. IN-SEASON GROUND FISH TRAWL CLOSURES - OUTSIDE WATERS

The following area closures are in effect for all trawl vessels during the 2010/2011 season. The closures described may change in-season and fishers are reminded to refer to current Fisheries Public Notices prior to conducting any fishing activity. A full description of Areas and Subareas referenced on these figures can be found in *the Pacific Fishery Management Area Regulations*. The illustrations set out below are for information purposes only.

6.1. Rockfish Conservation Areas

Currently there are 164 Rockfish Conservation Areas (RCAs) in effect and are outlined in the Protecting British Columbia's Rockfish booklet. These booklets are available at any PFLU or can be downloaded from the Department's internet site at:
<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especies/conservation-eng.htm>

6.2. Glass Sponge Reef Closures

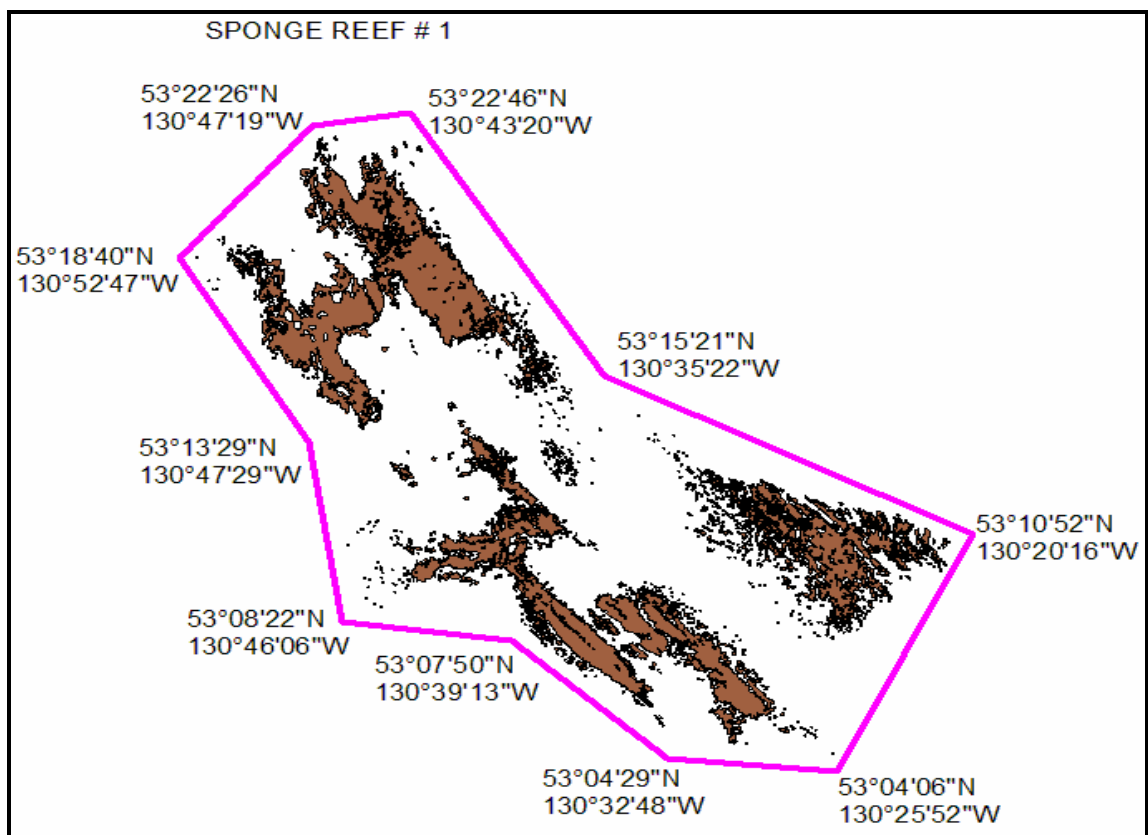
Closed year round to all bottom trawling, are three glass sponge reef areas located in waters of the Eastern Queen Charlotte Sound and Hecate Strait. The following graphic illustrations of each closed area are for information purposes only.

The intent of these closures is to provide protection for the four unique glass sponge reef ecosystems. These closures were last amended and came into effect for the 2007/2008 season. Fisheries and Oceans Canada continues to monitor fishing activity in adjacent areas and should current measures not be providing needed protection further modifications to the closed areas or additional management measures may be considered.

6.2.1. Glass Sponge Reef Number 1

Those waters of Subareas 105-2 and 106-1 that lie inside a line that:

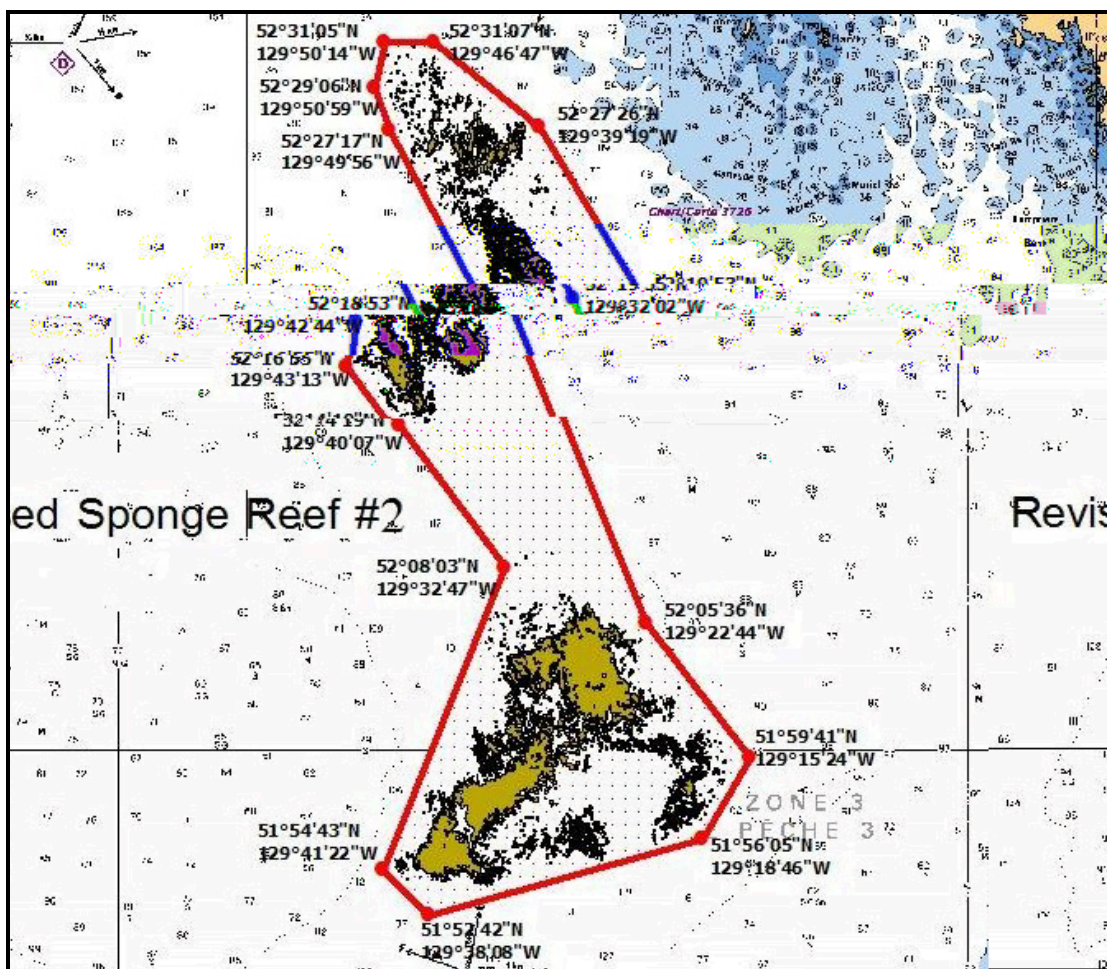
Begins at	53°18'40"N latitude	130°52'47"W longitude
Then southerly to	53°13'29"N latitude	130°47'29"W longitude
Then to	53°08'22"N latitude	130°46'06"W longitude
Then to	53°07'50"N latitude	130°39'13"W longitude
Then to	53°04'29"N latitude	130°32'48"W longitude
Then to	53°04'06"N latitude	130°25'52"W longitude
Then to	53°10'52"N latitude	130°20'16"W longitude
Then to	53°15'21"N latitude	130°35'22"W longitude
Then to	53°22'46"N latitude	130°43'20"W longitude
Then to	53°22'26"N latitude	130°47'19"W longitude
Then to the beginning point		



6.2.2. Glass Sponge Reef Number 2

Those waters of Subareas 106-2, 107-1 and 107-2 that lie inside a line that:

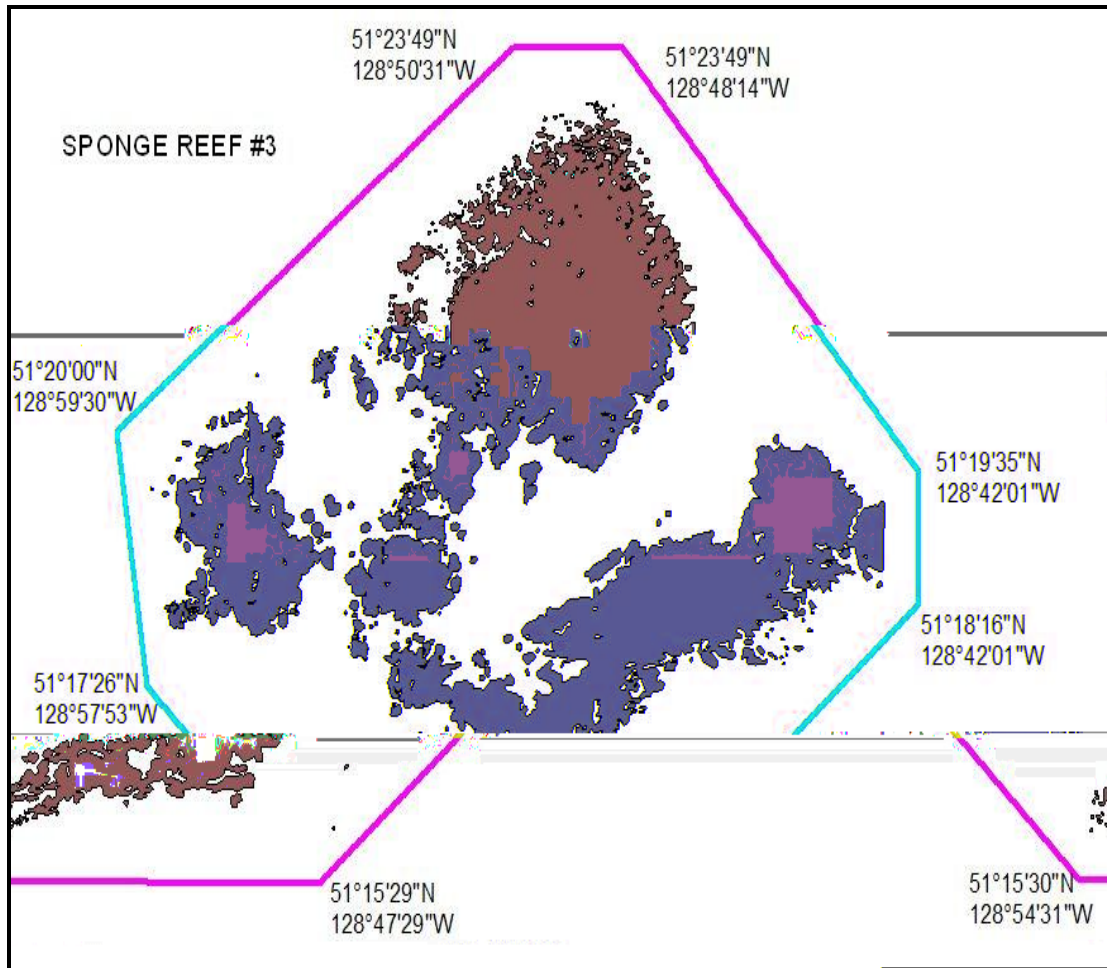
Begins at	52°31'05"N latitude	129°50'14"W longitude
Then southerly to	52°29'06"N latitude	129°50'59"W longitude
Then to	52°27'17"N latitude	129°49'56"W longitude
Then to	52°18'53"N latitude	129°42'44"W longitude
Then to	52°16'55"N latitude	129°43'13"W longitude
Then to	52°14'19"N latitude	129°40'07"W longitude
Then to	52°08'03"N latitude	129°32'47"W longitude
Then to	51°54'43"N latitude	129°41'22"W longitude
Then to	51°52'42"N latitude	129°38'08"W longitude
Then to	51°56'05"N latitude	129°18'46"W longitude
Then to	51°59'41"N latitude	129°15'24"W longitude
Then to	52°05'36"N latitude	129°22'44"W longitude
Then to	52°19'53"N latitude	129°32'02"W longitude
Then to	52°27'26"N latitude	129°39'19"W longitude
Then to	52°31'07"N latitude	129°46'47"W longitude



6.2.3. Glass Sponge Reef Number 3

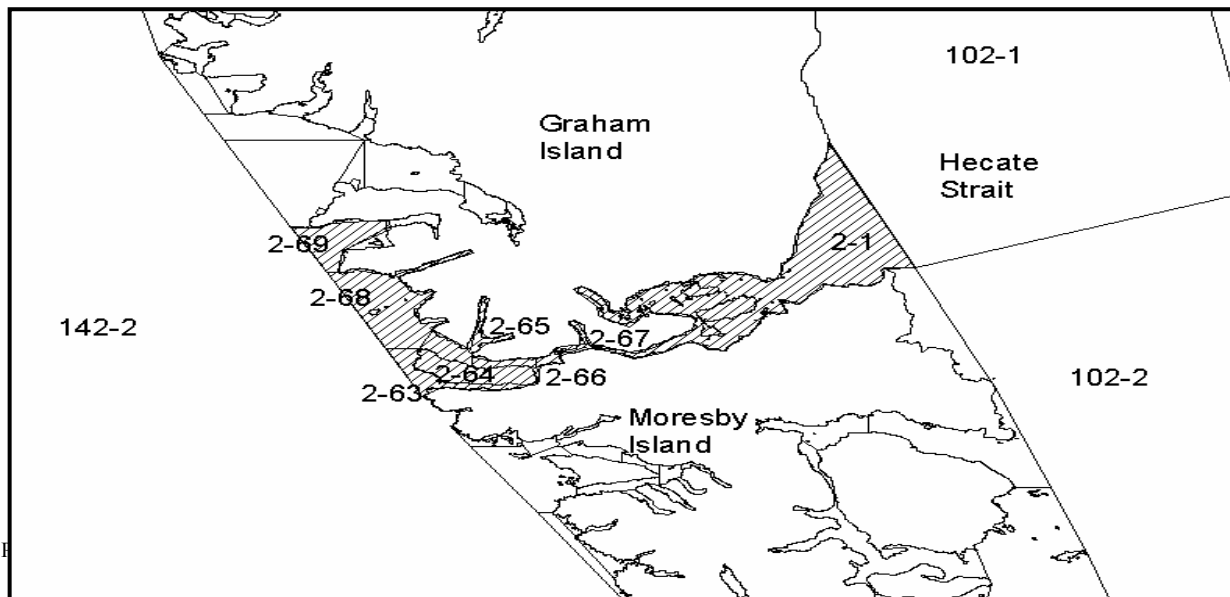
The waters of Area 110 that lie inside a line that:

Begins at	51°23'49"N latitude	128°50'31"W longitude
Then southerly to	51°20'00"N latitude	128°59'30"W longitude
Then to	51°17'26"N latitude	128°57'53"W longitude
Then to	51°15'30"N latitude	128°54'31"W longitude
Then to	51°15'29"N latitude	128°47'29"W longitude
Then to	51°18'16"N latitude	128°42'01"W longitude
Then to	51°19'35"N latitude	128°42'01"W longitude
Then to	51°23'49"N latitude	128°48'14"W longitude
Then to the beginning point		



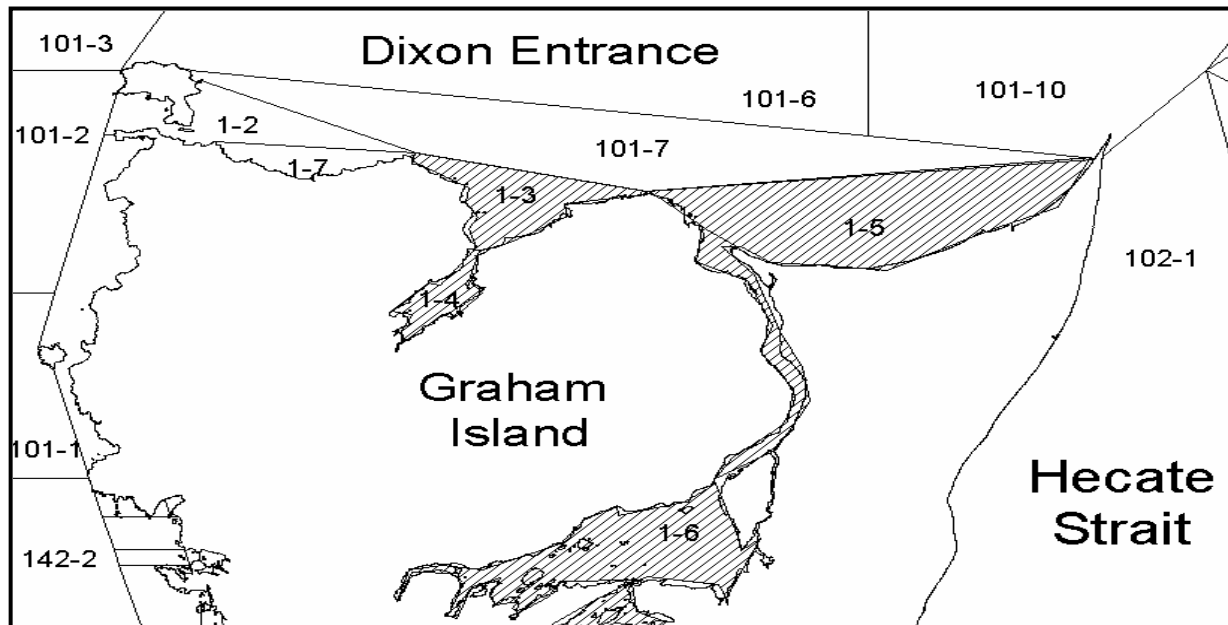
6.3. Queen Charlottes

Closed year-round in Subareas 2-1, 2-63 to 2-68 and those portions of Subarea 2-69 Hunter Point to Fame Point shoreward of the 50-fathom contour line as shown on CHS Chart No. 3869. The intent of the closure is to reduce harvesting pressure on localized stocks of fish and to provide improved access to food, social and ceremonial fish for the Haida First Nations.



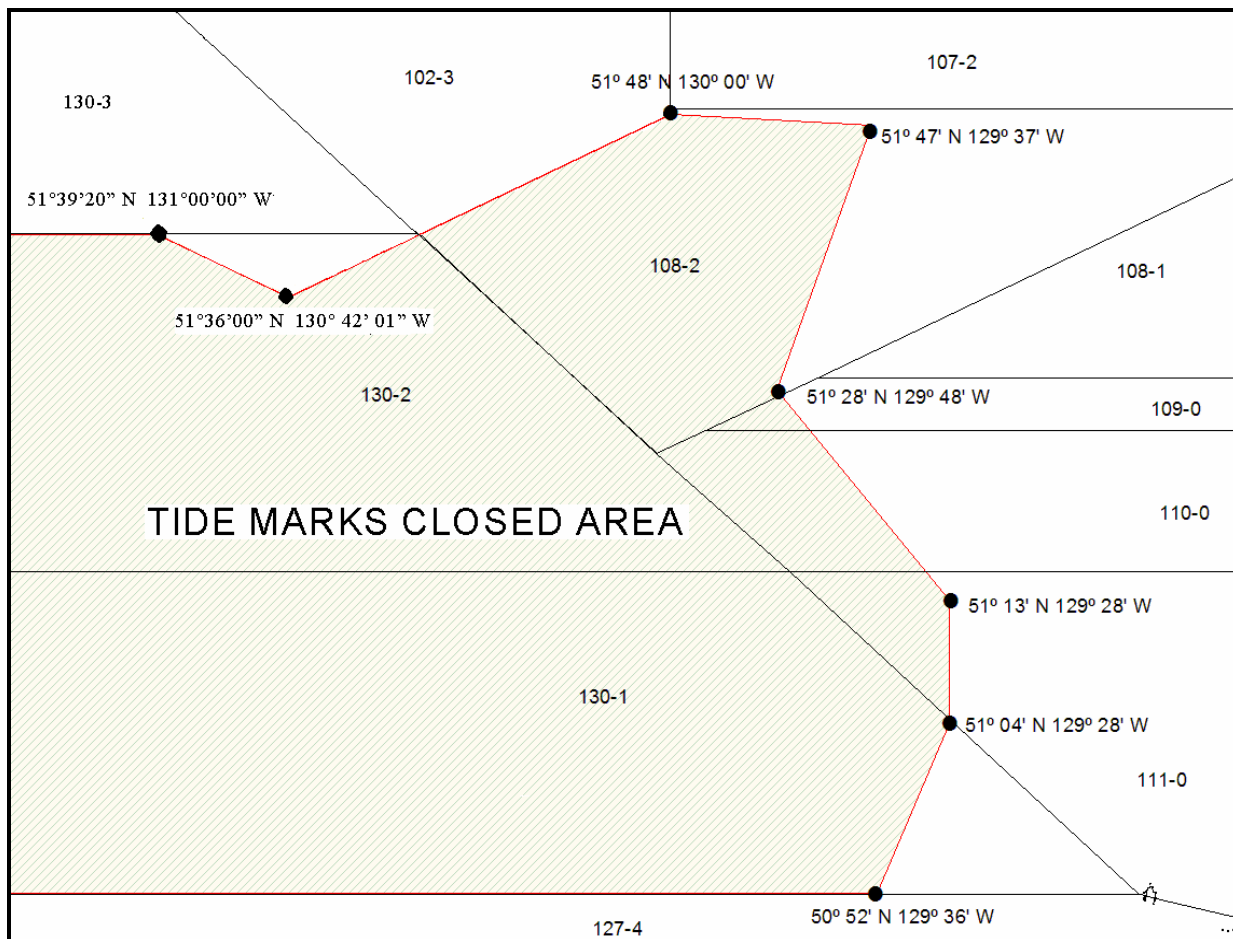
6.4. McIntyre Bay/Masset

Closed to all trawling year-round in Subareas 1-3, 1-4, 1-5 and 1-6. The intent of this closure is to reduce harvesting pressure on localized stocks of fish, minimize the catch of juvenile halibut and to provide improved access to food fish for the local First Nations.



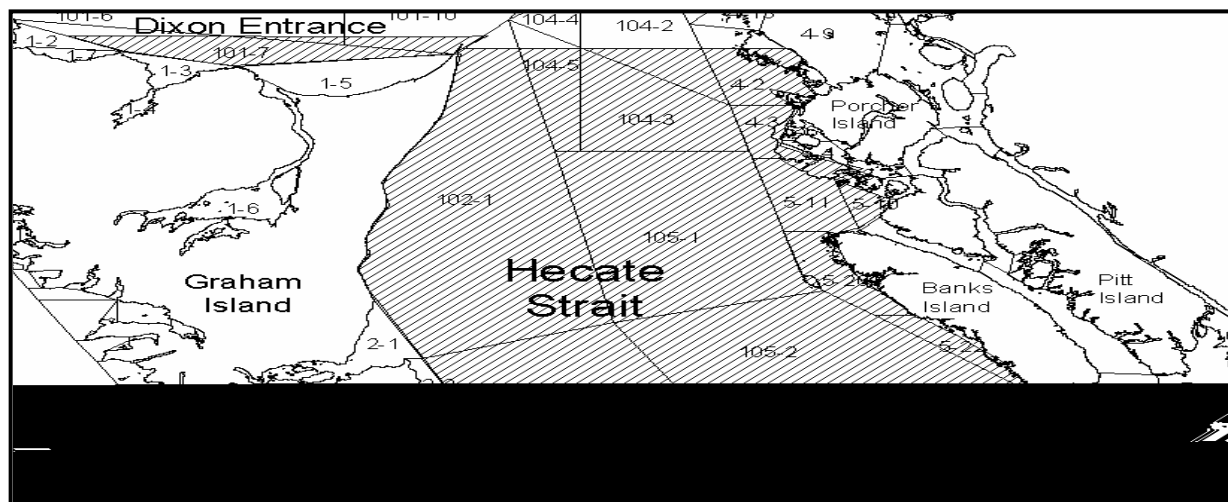
6.5. Tide Marks

Closed to all trawling from February 21, 2010 to May 31, 2010 and from October 1, 2010 to March 31, 2011 in those portions of Areas 109 to 111 and Subareas 130-2, 108-2 and 130-1 found within a line that begins at the intersection of the outer perimeter of Fishing Zone 5 and 51 deg 39.33 min N. lat. then following the northern boundary of Subarea 130-2 to 51 deg 39.33 min N. lat. 131 deg 00 min W. long. then to 51 deg 36.00 min N. lat. 130 deg 42.02 min W. long. then to 51 deg 48 min N. lat. 130 deg 00 min W. long. then to 51 deg 47 min N. lat. 129 deg 37 min W. long. then to 51 deg 28 min N. lat. 129 deg 48 min W. long. then to 51 deg 13 min N. lat. 129 deg 28 min W. long. then true south to 51 deg 04 min N. lat. 129 deg 28 min W. long. then to 50 deg 52 min N. lat. 129 deg 36 min W. then southern boundary of 130-1 to the outer perimeter of Fishing Zone 5 and back to the point of commencement. The intent of this closure is to reduce harvesting pressure on Pacific Ocean perch stocks during the spawning period.



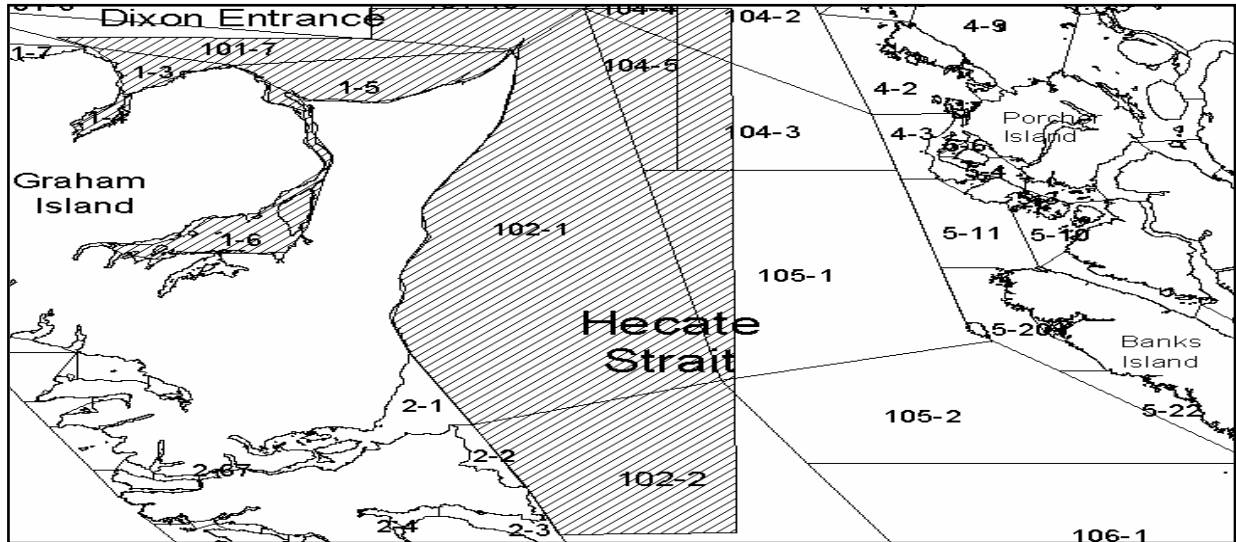
6.6. Hecate Strait/Dixon Entrance - Protection of Pacific Cod

Closed to all trawling from January 1, 2010 to April 30, 2010 and from January 1, 2011 through April 30, 2011 in area 105, and those portions of area 101, south of 54°12'N latitude and those portions of 102, 104, and Area 4 south of 54°10'N latitude, and Subareas 4-3, 5-10, 5-11, 5-20 to 5-22, 106-1 and that portion of 102-2 north of 52°51'N. This action is to protect the spawning biomass of pacific cod found in Hecate Strait and Dixon Entrance



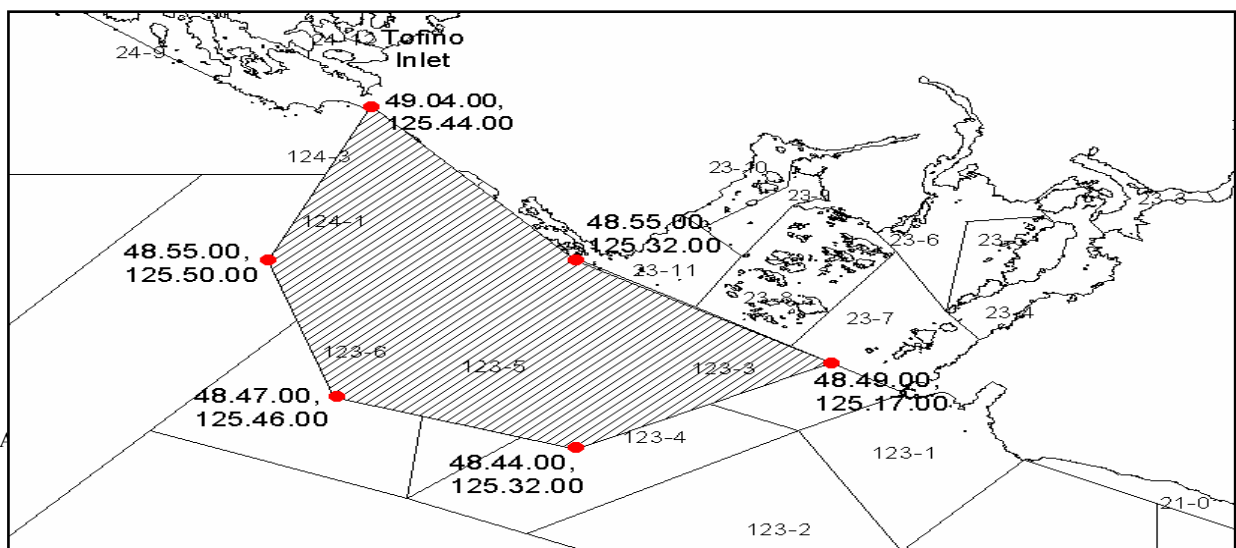
6.7. Hecate Strait/Dixon Entrance - Protection of Soft Shell Crabs

Closed from June 1, 2010 through July 15, 2010 to bottom trawling in Subareas 2-1, 2-2, 2-3, 102-1 and 104-5; that portion of Subarea 101-7, south of 54°11'N, and east of 132°43'W; those portions of Subareas 101-10 and 104-4, south of 54°15'N; that portion of Subarea 102-2, that is both north of 53°00'N, and west of 131°10'W; that portion of Subarea 104-2, that is both south of 54°15'N, and west of 131°10'W; that portion of Subarea 104-3, that is west of 131°10'W; that portion of Subarea 105-1, that is west of 131°10'W; that portion of Subarea 105-2, west of 131°10'W. The intent of this closure is to protect crabs during the soft-shell period.



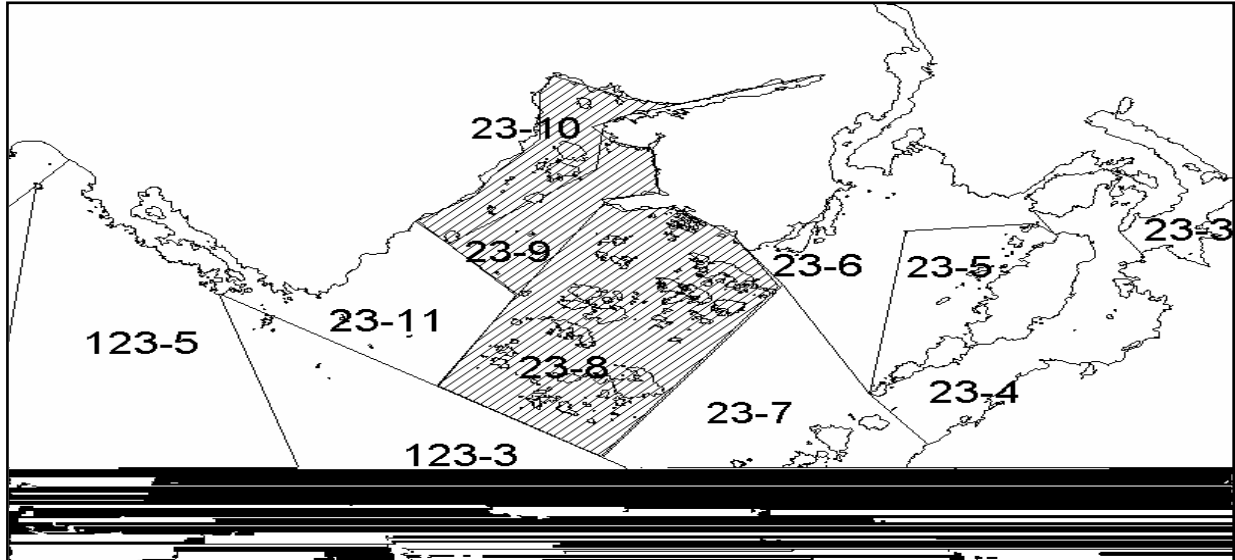
6.8. Lower West Coast Vancouver Island - Protection of Pacific Cod

Closed from January 1, 2010 through to March 31, 2010 and from January 1, 2011 to March 31, 2011 to both bottom and mid-water trawling in those portions of Subareas 123-3, 123-4, 123-5, 123-6, 124-1 and 124-3 that are found within the area bounded by a line that begins on the Vancouver Island shore near Amphitrite Point lighthouse at 48°55'N latitude 125°32'W longitude; then westerly to 49°04'N latitude 125°44'W longitude; then southerly to 48°55'N latitude 125°50'W longitude; then southerly to 48°47'N latitude 125°46'W longitude; then easterly to 48°44'N latitude 125°32'W longitude; then easterly to 48°49'N latitude 125°17'W longitude; then northerly along the surf line to the point of commencement. The intent of this closure is to reduce the harvesting of pacific cod during the spawning period.



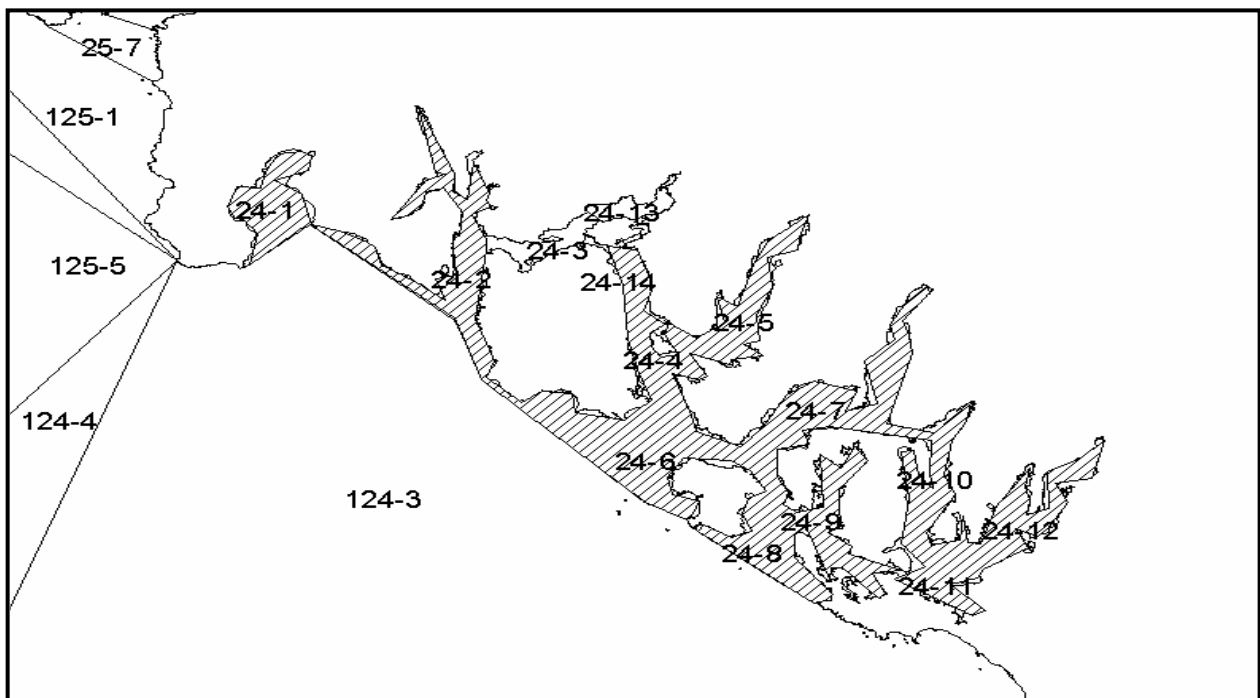
6.9. Area 23 (Barkley Sound)

Closed from February 25, 2010 through March 25, 2010 to all trawling in Subareas 23-8 to 23-10. The intent of this closure is to reduce gear conflicts during the roe herring season.



6.10. Area 24 (Clayoquot Sound)

Closed year-round to all trawling in Subareas 24-1, 24-2, 24-4 to 24-12 and 24-14. The intent of this closure is to address shellfish interception and shallow water habitat concerns.



7. IN-SEASON GROUND FISH TRAWL CLOSURES - INSIDE WATERS

There are a number of Subareas within the Johnstone, Georgia and Juan de Fuca Straits that are closed to both bottom and mid-water trawling. The closures have been implemented for reasons that include: herring spawn areas, salmon/herring holding areas, conflicts with crab gear, harbour congestion and reduction of harvesting pressure on localized groundfish stocks. A full description of Areas and Subareas referenced on these figures can be found in *the Pacific Fishery Management Area Regulations*.

The closures described on the following pages may change in-season. Current Fisheries Public Notices should be referred to prior to fishing.

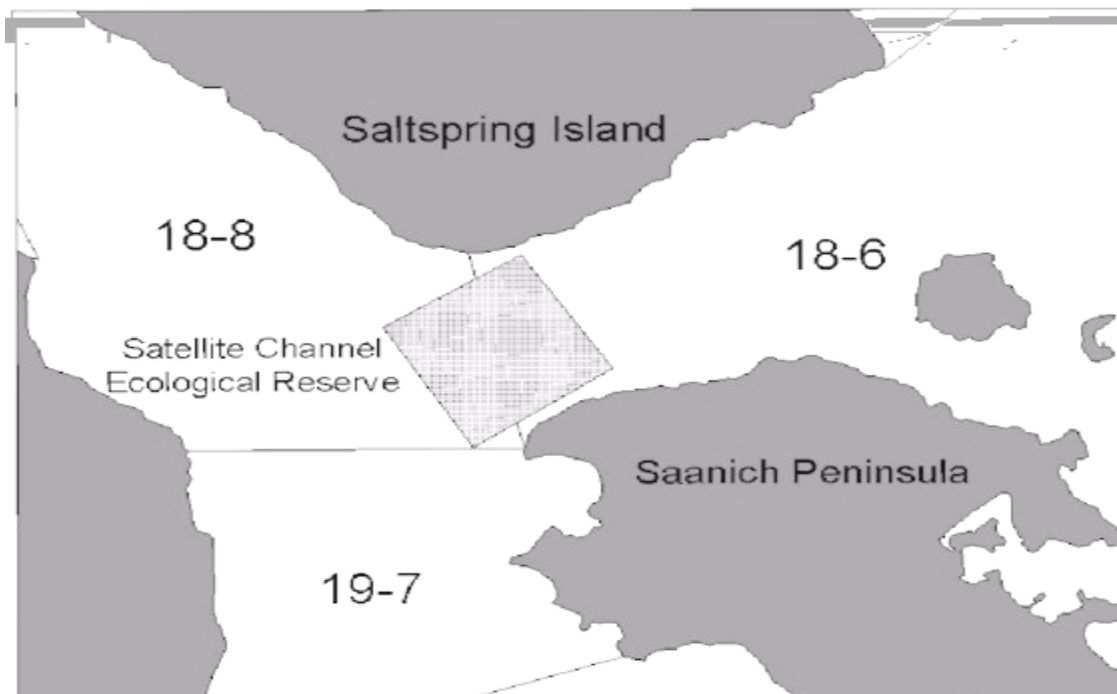
7.1. Rockfish Conservation Areas

Currently there are 164 Rockfish Conservation Areas (RCAs) in effect and are outlined in the Protecting British Columbia's Rockfish booklet. These booklets are available at any PFLU or can be downloaded from the Department's internet site at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especies/conservation-eng.htm>

7.2. Satellite Channel

Closed year round in that portion of Subarea 18-6 inside a line: that begins at 48 deg 41.46 min N. lat. 123 deg 29.48 min W. long. then to 48 deg 41.96 min N. lat. 123 deg 28.178 min W. long. then to 48 deg 42.82 min N. lat. 123 deg 28.92 min W. long. then to 48 deg 42.32 min N. lat. 123 deg 30.23 min W. long. then to the beginning point. (B.C. Provincial Ecological Reserve Number 67.)



7.3. Gulf - Bottom Trawl Closures by Subarea

Subarea(s)	Closure Description	Period Closed
12-6	Those portions of Subarea 12-6 inside a line commencing at Red Point on the north-western shore of Harbledown Island, thence north-westerly to 50°38'N and 126°45'W, thence true east to 50°38' N and 126°35'W, thence true south to Dead Point on the northern shore of Harbledown Island, thence westerly along the north shore of Harbledown Island to the point of commencement at Red Point on Harbledown Island.	All year
12-20	Entire Subarea	All year
12-29, 12-34	Entire Subareas	February 16 to April 30
12-39	Those portions of Subarea 12-39 inside a line commencing at Slope Point on the southern shore of Gilford Island, thence north-westerly in a straight line to the navigational light on Duff Islet in lower Fife Sound, thence north-easterly in a straight line to Powell Point on Gilford Island, thence southerly along the western shore of Gilford Island to the point of commencement at Slope Point.	All year
12-42	Entire Subarea	All year
12-46	Entire Subarea	February 16 to April 30
13-1 to 13-17	Entire Subareas	All year
13-33,13-34	Entire Subareas	All year
14-1,14-8	Entire Subareas	All year
14-11,14-14,14-15	Entire Subareas	All year
14-2 to 14-7	Entire Subareas	April 1 to September30
14-9,14-10,14-12	Entire Subareas	April 1 to September30
16-3,16-4	Entire Subareas	All year
17-1,17-3,17-7	Entire Subareas	All year
17-9,17-14,17-17	Entire Subareas	All year
17-20,17-21	Entire Subareas	All year
18-2	Entire Subareas	All year
18-7, 18-8, 18-9	Entire Subareas	All year
19-1,19-2	Entire Subareas	All year
19-6 to 19-12	Entire Subareas	All year

Subarea(s)	Closure Description	Period Closed
20-6,20-7	Entire Subareas	All year
28-1 to 28-14	Entire Subareas	All year
29-3,29-4,29-6	Shoreward of 100 m contour line as shown on CHS charts # 3463 and # 3512.	All year
29-7 to 29-17	Entire Subareas	All year

7.4. Gulf - Mid-water Trawl Closures by Subarea

Subarea(s)	Closure Description	Period Closed
12-20	Entire Subarea	All year
12-29,12-34,12-46	Entire Subareas	February 16 to April 30
13-1 to 13-17	Entire Subareas	All year
13-33,13-34	Entire Subareas	All year
14-1,14-8	Entire Subareas	All year
14-11,14-14,14-15	Entire Subareas	All year
16-3,16-4	Entire Subareas	All year
17-1,17-7,17-9	Entire Subareas	All year
17-14,17-20,17-21	Entire Subareas	All year
18-7, 18-8	Entire Subareas	All year
18-10	Entire Subareas	All year
19-1,19-2	Entire Subareas	All year
19-6 to 19-12	Entire Subareas	All year
20-6,20-7	Entire Subareas	All year
28-1 to 28-14	Entire Subareas	All year
29-7 to 29-17	Entire Subareas	All year

8. GEAR

Subject to the licence option selected, species closures, area closures and IVQ holdings, a vessel holding a valid groundfish trawl licence may fish with either bottom and/or mid-water trawl gear.

8.1. Mesh Size

“Mesh size” means the total length of twine measured along two contiguous sides of a single mesh, including the distance across the knot joining those sides but not including any other knots. Where a minimum mesh size is prescribed, no person shall use any device by means of which openings that are smaller in size than the original mesh are created. Mesh size shall be measured when the net is wet.

8.2. Mesh Measuring Procedure

The average measurement, in millimetres, of any 20 consecutive meshes running parallel to the long axis of the codend, beginning at the after end of the codend, and at least 10

meshes from the lacings; made by inserting into the meshes a flat wedge shaped gauge having a taper of 2 cm in 8 cm and a thickness of 2.3 mm with a weight of 5 kg attached. The gauge shall be inserted into the mesh opening using a weight until the mesh gauge is stopped by the resistance of the mesh at the tapering edges. In any other part of the trawl 20 consecutive meshes at least 10 meshes from the lacings.

The meshes to be measured need not be consecutive if this is prevented by the application ropes and codlines. Any mesh that has been mended or torn or to which attachments to the net are fixed shall not be measured.

8.3. Gear Restrictions

8.3.1. Trawl Net Size

Subject to Sections 7.3.1.1 and 7.3.1.2, the coast-wide mesh size in any part of a bottom trawl or mid-water trawl net, including the cod-end, shall not be less than 76 mm (approximately three inches).

8.3.1.1. In Areas 13 to 19 and 29: the mesh size in a bottom trawl net shall not be less than 108 mm (approximately 4.25 inches) in the final 50 meshes, including the cod-end. In all other parts of a bottom trawl net, the mesh size shall not be less than 76 mm (approximately three inches).

8.3.1.2. In Hecate Strait and Eastern Dixon Entrance: the mesh size in a bottom trawl net shall not be less than 140 mm (approximately 5.5 inches) in the last 100 meshes of the net, including the cod-end. In all other parts of a bottom trawl net, the mesh size shall not be less than 76 mm (approximately three inches). This restriction applies to that area bounded on the south by 52°51'N in Hecate Strait, bounded on the north by the Canada/United States International boundary, bounded on the west by 132°00'W in Dixon Entrance, and bounded on the east by the mainland of British Columbia.

8.3.1.3. The groundfish trawl industry has renewed its recommendation that all vessels fishing in Queen Charlotte Sound abide by a voluntary 140 mm (approximately 5.5 inches) mesh size restriction in the last 100 meshes of the net, including the cod-end. For all other parts of a bottom trawl net, the mesh size shall not be less than 76 mm (approximately three inches). This voluntary restriction applies to vessels fishing in waters shallower than 60 fathoms in the area bounded by the southern boundary of 130-1 and the 52°51'N (Hecate Strait) in the north. The intent of this action is to reduce bycatch of small fish and allow industry transition to the mandatory larger mesh size in the 2012 season.

8.3.2. Trawl Net Escape Panel

8.3.2.1. All bottom trawl nets and mid-water trawl nets, when used in fishing for pacific hake destined for delivery to a foreign fishing vessel licensed under the *Coastal Fisheries Protection Regulations*, shall have an escape panel fitted to permit the release of unwanted fish. This panel shall be located in the intermediate portion of the trawl net commencing at a point six feet from where the intermediate

is attached to the cod-end. The panel shall be composed of not less than one row of meshes running parallel to the long axis of the intermediate for a distance of not less than six feet. The row(s) of mesh shall be cut and sewn with a length of twine or similar material having a breaking strength not exceeding 70 pounds.

8.4. Cod-end Protection Device

For the purpose of preventing wear and tear to a trawl net, there may be attached to the underside of the cod-end any hides, canvas, netting or similar material. For the purpose of preventing wear and tear to a trawl net, there may be attached to the topside of the cod-end, one of the following topside chafers.

8.4.1. Regular Topside Chafer

A rectangular piece of netting that: is at least one and half times the width of the area of the cod-end that is covered, where the width is measured at right angles to the long axis of the cod-end; has a mesh size that is not less than the mesh size of the cod-end and; is fastened to the cod-end only along the forward and lateral edges of the netting in a manner that will permit it to extend where a splitting strap is used, over not more of the cod-end than that part between the fourth mesh forward of the cod line mesh and the fourth mesh forward of the splitting strap, and where a splitting strap is not used, over not more than one third of the cod-end, measured from not less than the fourth mesh forward of the cod line mesh.

8.4.2. Modified Polish Topside Chafer

A rectangular piece of netting that: is made of twine of the same material and size as that of the cod-end, or of any single, thick, knotless twine material; has a mesh size that is twice as large as the mesh size of the cod-end; is attached to the rear portion of the topside of the cod-end; and is fastened to the cod-end along the forward, lateral and rear edges of the netting in a manner that will cause each mesh to exactly overlie four meshes of the cod-end over which it extends.

8.4.3. Multiple Flap-Type Topside Chafer

A series of pieces of netting where the aggregate length extends less than two-thirds of the length of the cod-end; and each piece of netting is attached to the topside of the cod-end so that it overlaps the piece of netting immediately to its rear, if any, has a mesh size that is not less than the mesh size of the cod-end, is at least as wide as the cod-end, where the width is measured at right angles to the cod-end, is not more than 10 meshes long, and is fastened by its forward edge only across the cod-end at right angles to its long axis.

The above description of mesh size and gear restrictions are provided for reference purposes only. Groundfish trawl vessel owners, captains and crews must carefully read their 2010/2011 groundfish trawl licence and the attached conditions of licence and, regulations (*Fishery [General] Regulations* and *Pacific Fishery Regulations, 1993*) to ensure a full understanding of all gear restrictions in effect.

9. LICENSING

9.1. Licence Category

A groundfish trawl licence is required to commercially harvest groundfish trawl species using trawl gear. Groundfish trawl licence eligibilities are limited entry and vessel based. Vessels authorised to fish under the authority of a groundfish trawl licence are also permitted to fish using hook and line gear for species described in Schedule II Part 2 of the *Pacific Fishery Regulations 1993*, transport fish caught by other vessels and be designated to fish under the authority of a category Z licence except as set out in section 8.5 below.

Groundfish trawl vessel owners and fishers are reminded to carefully review and familiarize themselves with the groundfish trawl licence and attached conditions.

9.2. Application Fees

Application fees are based on the combination of a base licence fee of \$500.00 and the Permanent IVQ holdings of the licence on February 20th, 2010 measured in pounds.

IVQ Species	Fee Per Tonne of IVQ	Fee Per Pound of IVQ
All Rockfish Species	\$15.00	\$.0068
All Sole Species	\$16.00	\$.0073
Lingcod	\$16.00	\$.0073
Pollock	\$7.50	\$.0034
Hake	\$4.00	\$.0018

9.3. Licence Application and Issuance

Applications must be completed and submitted with the required fees to a Pacific Fishery Licence Unit (PFLU) by February 20th, of the next calendar year, in order to maintain the licence eligibility whether fishing will take place or not.

The vessel owner must sign the application form. If the vessel owner is a company, the PFLU must have on record a copy of either a Confirmation of Signing Authorities or an amendment to Confirmation of Signing Authorities form listing the signing authorities.

Parties authorized to request amendments must be identified on the application.

9.3.1. Groundfish Trawl Licence Option Selection

Prior to Licence issue, each groundfish trawl vessel owner(s) is required to choose a fishing option for the current fishing year. The options are:

9.3.1.1. Option A

- i) Permitted to fish by bottom trawl in all areas, except management Area 4B (Areas 12 to 20 and 29).
- ii) Permitted to fish by mid-water trawl coast-wide.
- iii) Subject to one hundred (100) percent dockside monitoring for all landings.
- iv) Subject to one hundred (100) percent at sea observer coverage when fishing with bottom or mid-water gear except when mid-water trawling for hake in Area 4B, 3C and that portion of 3D south and easterly of 49°00'N.
- v) Subject to one hundred (100) percent at sea monitoring coverage when fishing when mid-water trawling for hake in that portion of 3D north and westerly of 49°00'N in all of Areas 5A, 5B, 5C, 5D and 5E.
- vi) Subject to ten (10) percent observer coverage when the vessel is engaged in mid-water trawling for pacific hake within areas of 4B, Area 3C and that portion of 3D south and easterly of 49°00'N
- vii) Permitted to fish throughout the year for groundfish species subject to TAC up to the amount of the IVQ specified on the licence.
- viii) Permitted to reallocate IVQ holdings subject to the rules governing such reallocations.
- ix) Limited to 15,000 pound per trip for all combined rockfish species not subject to TAC.
- x) Permitted to retain incidentally caught mackerel equal to six (6) percent of the offshore pacific hake IVQ portion of quota holdings.
- xi) No trip limit for groundfish species (excluding rockfish) not subject to a TAC.
- xii) Not permitted to fish for and retain wolf-eels, any salmon species, Pacific Herring, or Green and White Sturgeon.
- xiii) Halibut is not permitted to be retained. By-catch mortality caps for halibut will be issued and monitored on an individual vessel basis (exceeding by-catch limit results in restrictions against individual vessels, not the fleet).

9.3.1.2. Option B

- i) Required to request monthly amendments to groundfish trawl licence prior to fishing.
- ii) Permitted to fish by bottom trawl in Area 4B (Areas 12 to 20 and 29) only.
- iii) Not permitted to fish by mid-water trawl in any Area.
- iv) Limited to a maximum of 15 landings per calendar month.
- v) Subject to one hundred (100) percent dockside monitoring for all landings.
- vi) Subject to mandatory at-sea monitoring of all fishing activities.
- vii) A 15,000 pound calendar month limit for all groundfish species combined other than dogfish, lingcod and rockfish; of which no more than 200 pounds shall be sablefish, and of which no more than 200 pounds shall be Petrale sole, and of which no more than 500 pounds shall be pacific cod.
- viii) Not permitted to fish for and retain halibut, lingcod, rockfish, squid, octopus, wolf-eels any salmon species, Pacific Herring, and either Green and White Sturgeon.
- ix) No limit on the quantity of dogfish.

9.3.2. In Season Change of Groundfish Trawl Licence Option

Owners of a groundfish trawl licensed vessel choosing Option B are permitted to make a once a year change from Option B to Option A.

Owners of a groundfish trawl licensed vessel choosing Option A may not change their selection for the remainder of the fishing year.

9.3.3. Requirement and Issuance of Valid Licence Amendments

Prior to commencing to harvest under the authority of a groundfish trawl licence, a Request for a 2010/2011 Groundfish Trawl Licence Amendment form must be completed and submitted to the groundfish management unit. The owner of a groundfish trawl licensed vessel or the party authorised to request amendments must complete the amendment request form.

Option B vessels will be issued monthly amendments. The owner of an Option B vessel must submit a 2010/2011 Groundfish Trawl Licence Amendment form for each month and be in possession of a valid amendment prior to fishing.

Option A vessels must be in possession of a valid amendment to the vessels 2010/2011 groundfish trawl licence prior to fishing.

Contact the Groundfish Quota officer at (604) 666-0010 for further information.

9.4. Licence Documents

2010/2011 Groundfish Trawl licence documents are valid from the date of issue until February 20, 2011.

Replacement for lost or destroyed licence documents may be obtained by completing a Declaration Concerning Licence Documents form. Please contact a PFLU for further details.

9.5. Vessel Replacement Rules for Groundfish Trawl

A groundfish trawl licence eligibility may be placed either permanently or temporarily on any Canadian commercially registered fishing vessel which does not exceed the maximum vessel length (MVL) i.e. the overall length of the vessel that held the licence eligibility as of December 1, 1998 plus 50%. This is subject to departmental policies governing the placement of other vessel based licence eligibilities also held on the vessel being replaced.

An application for a temporary replacement may be made where a vessel has been declared a loss, or the vessel is out of service due to an accident or unforeseen damage. Written confirmation from an insurance company, shipyard or marine engineer explaining why the vessel is inoperative is required. Vessels that are in disrepair at the time of purchase, vessels with engine problems, delays in annual maintenance or rebuilds do not qualify for a temporary transfer.

Where single groundfish trawl licence eligibility is being placed on a shorter vessel, there remains a future opportunity to place the licence eligibility on a commercially registered

vessel which does not exceed the MVL i.e. the overall length of the vessel that held the licence eligibility as of December 1, 1998 plus 50%.

A groundfish trawl licence eligibility may be separated from other licence eligibilities and placed on a Canadian commercially registered fishing vessel that does not exceed the MVL. Where the receiving vessel does not already hold a vessel based licence eligibility, the Schedule II privileges associated with the groundfish trawl eligibility must be relinquished.

Groundfish trawl licensed vessel owners are allowed to swap groundfish trawl eligibilities within the groundfish trawl fleet subject to the length guidelines described within this section. Where swapping occurs, the IVQ and holdings caps follow each licence eligibility.

Once a vessel has commenced fishing under the authority of a groundfish trawl licence, that vessel may not fish under the authority of another groundfish trawl licence in the same fishing year.

For further information on vessel replacement policies, please contact a PFLU or any of the groundfish trawl management contacts listed in section 1 of the IFMP.

10. GROUND FISH SPECIES AND ALLOWABLE CATCHES

10.1. Prohibited Species

The following species of vertebrate fish are not allowed to be fished for or retained when fishing under the authority of a groundfish trawl licence.

Common Name	Scientific Name
Pacific Halibut	<i>Hippoglossus stenolepis</i>
Salmon Species	<i>Onchorhynchus sp.</i>
Pacific Herring	<i>Clupea harengus pallasii</i>
Green Sturgeon	<i>Acipenser medirostris</i>
White Sturgeon	<i>Acipenser transmontanus</i>
Wolf-Eel	<i>Anarrhichthys ocellatus</i>

10.2. Species Permitted to be Fished

Common Name	Scientific Name
Aurora rockfish	<i>Sebastes aurora</i>
Black rockfish	<i>Sebastes melanops</i>
Blue rockfish	<i>Sebastes mystinus</i>
Bocaccio	<i>Sebastes paucispinis</i>
Brown rockfish	<i>Sebastes auriculatus</i>
Canary rockfish	<i>Sebastes pinniger</i>
Chilipepper rockfish	<i>Sebastes goodie</i>
China rockfish	<i>Sebastes nebulosus</i>
Copper rockfish	<i>Sebastes caurinus</i>

Darkblotched rockfish	Sebastes crameri
Dusky rockfish	Sebastes ciliatus
Greenstriped rockfish	Sebastes elongates
Harlequin rockfish	Sebastes variegates
Longspine thornyhead	Sebastolobus altivelis
Northern rockfish	Sebastes polypsinis
Pacific Ocean Perch	Sebastes alutus
Puget Sound rockfish	Sebastes emphaeus
Pygmy rockfish	Sebastes wilsoni
Quillback rockfish	Sebastes maliger
Redbanded rockfish	Sebastes babcocki
Redstripe rockfish	Sebastes proriger
Rosethorn rockfish	Sebastes helvomaculatus
Rougheye rockfish	Sebastes aleutianus
Sharpchin rockfish	Sebastes zacentrus
Shortbelly rockfish	Sebastes jordani
Shortraker rockfish	Sebastes borealis
Shortspine thornyhead	Sebastolobus alascanus
Silvergray rockfish	Sebastes brevispinis
Splitnose rockfish	Sebastes diploproa
Stripetail rockfish	Sebastes saxicola
Tiger rockfish	Sebastes nigrocinctus
Vermilion rockfish	Sebastes miniatus
Widow rockfish	Sebastes entomelas
Yelloweye rockfish	Sebastes ruberrimus
Yellowmouth rockfish	Sebastes reedi
Yellowtail rockfish	Sebastes flavidus
Skate	
Big skate	Raja binoculata
Longnose skate	Raja rhina
Black skate	Raja kincaidi
Starry skate	Raja stellulata
Deepsea skate	Raja abyssicola
Flatfish	
Arrowtooth flounder	Atheresthes stomias
Butter sole	Isopsetta isolepis
C-O sole	Pleuronichthys coenosus
Curlfin sole	Pleuronichthys decurrens
Dover sole	Microstomus pacificus
Lemon/English sole	Parophrys vetulus
Flathead sole	Hippoglossoides elassodon
Pacific sanddab	Citarichthys sordidus
Petrale sole	Eopsetta jordani

Rex sole	Glyptocephalus zachirus
Rock sole	Lepidopsetta bilineata
Sand sole	Psettichthys melanostictus
Slender sole	Lyopsetta exilis
Speckled sanddab	Citharichtys stigmaeus
Starry flounder	Platichthys stellatus
Yellowfin sole	Limanda aspera
Tuna	
Albacore	Thunnus alalunga
Bluefin	Thunnus thynnus
Pacific bonito	Sarda chiliensis lineolata
Skipjack	Euthynnus pelamis
Yellowfin	Thunnys albacares
Smelt	
Surf smelt	Hypomesus pretiosus pretiosus
Rainbow smelt	Osmerus mordax dentex
Night smelt	Spirinchus starski
Mackerel	
Chub Mackerel	Scomber japonicus
Pacific Mackerel	Trachurus symmetricus
Roundfish	
Greenlings	Hexagrammos sp.
Lingcod	Ophiodon elongates
Pacific cod	Gadus macrocephalus
Sablefish	Anoplopoma fimbria
Sculpins	Family Cottidea
Walleye Pollock	Thragra chalcogramma
Pacific hake	Merluccius productus
Any Other Vertebrate Fish Except those listed in 9.1 above	

10.3. Annual Trawl Total Allowable Catches

TACs listed below have been set for the commercial groundfish trawl fishery for the 2010/2011 fishing season. In some cases, the coast-wide total differs slightly from the amount obtained by summing the Species Management Areas values. This difference is due to the TAC being expressed in whole numbers within the table. For the exact TAC values, please contact the Groundfish Management Unit (see Section 1). Groundfish Trawl TAC's used for IVQ allocation are:

Species	Management Area	TAC ¹ (tonnes)
Yellowtail Rockfish	3C ⁵	995
	3D, 5A/B, 5C/D/E ⁵	3,427
	Coast-wide total	4,422
Widow Rockfish	Coast-wide total	2,316
Canary Rockfish	3C/D	569
	5A/B	155
	5C/D	55
	5E	10
	Coast-wide total	789
Silvergrey Rockfish	3C/D	216
	5A/B	421
	5C/D	382
	5E	248
	Coast-wide total	1,267
Pacific Ocean Perch	3C	300
	3D	230
	5A/B	2,070
	5C/D ²	2,118
	5E ²	730
	Coast-wide total	5,448
Yellowmouth Rockfish	3C	219
	3D, 5A/B	1,135
	5C/D ²	685
	5E ²	325
	Coast-wide total	2,365
Rougheye Rockfish	Coast-wide	636
Shortraker Rockfish	Coast-wide	126
Redstripe Rockfish	3C	173
	3D, 5A/B	772
	5C/D	330
	5E	246
	Coast-wide total	1,521
Shortspine Thornyheads	Coast-wide	736
Longspine Thornyheads	Coast-wide	405
Yelloweye Rockfish	Coast-wide ⁴	7
Quillback, Copper, China And Tiger Rockfish	Coast-wide ⁴	6

Species	Management Area	TAC¹(tonnes)
Pacific Cod	3C/D	500
	5A/B	390
	5C/D/E	800
	Coast-wide total	1690
Dover Sole	3C/D	1,375
	5C/D/E	1,100
	5A/B	598
	Coast-wide total	3,073
Rock Sole	3C/D	102
	5A/B	450
	5C/D	673
	Coast-wide total	1,225
Lemon Sole	3C/D, 5A/B	186
	5C/D/E	636
	Coast-wide total	822
Petrale Sole	Coast-wide	700
Lingcod	3C	800
	3D	220
	5A/B	862
	5C/D/E	580
	Coast-wide total	2,462
Dogfish	4B	960
	Rest of Coast	3,840
	Coast-wide total	4,800
Sablefish	Coast-wide	195
Pollock	Gulf ³	1,115
	5A/B (includes Area 11, 12)	1,790
	5C/D/E	1,320
	Coast-wide total	4,225
Hake	Gulf ³	7,000
	Offshore	TBA
Big Skate	5C/D	567
Longnose Skate	5C/D	47
Arrowtooth Flounder	Coast-wide	15,000
¹ All quotas are in round weight and metric tonnes.		
² Pacific ocean perch and yellow mouth rockfish caught within Subarea 102-3 and those portions of Subareas 142-1, 130-3 and 130-2 found southerly and easterly of a straight line commencing at 52°20'00"N 131°36'00"W thence to 52°20'00"N 132°00'00"W thence to 51°30'00"N 131°00'00"W and easterly and northerly of a straight line commencing at 51°30'00"N 131°00'00"W thence to 51°39'20"N 130°30'30"W will be deducted from the vessel's 5C/D IVQ for those two species.		
³ TAC for the Gulf applies to hake and Pollock catches occurring in Areas 13 to 19 and 29. All other hake catches are applied against a vessel's Offshore Hake quota holdings. All other Pollock catch are applied to the area of catch holdings.		
⁴ Yelloweye, quillback, copper, china and tiger rockfish will not be allocated as IVQ. All landing of these rockfish species will be relinquished and the fishing restrictions for IVQ shall not apply.		
⁵ Yellowtail rockfish caught in the offshore pacific hake fishery can be deducted from IVQ coast-wide. The vessel master is responsible for designating the area at the time of the offload.		

10.4. Bocaccio Rockfish Measures

To address a concern for bocaccio rockfish identified through a Pacific Scientific Advice Review Committee (PSARC) review a voluntary program for the trawl fleet was developed and implemented in 2004 in which groundfish trawl vessels directed the proceeds of all landed bocaccio rockfish for research and management purposes. These actions have resulted in reduced bocaccio catches and remain in effect.

10.5. Groundfish Size Limits

Fishers are reminded of the following groundfish size limits:

10.5.1. Lingcod

Head-on: not less than 65 cm in length, measured from the tip of the nose to the tip of the tail.

Head-off: not less than 50 cm in length, measured along the shortest length of the body to the tip of the tail.

10.5.2. Sablefish

Head-on: not less than 55 cm in length, measured from the tip of the nose to the fork of the tail.

Head-off: not less than 39 cm in length, measured from the origin of the first dorsal fin to the fork of the tail.

11. TRAWL INDIVIDUAL VESSEL QUOTA ALLOCATIONS

For the 2010/2011 fishing year, the commercial groundfish trawl TACs are allocated as IVQ accordingly:

- i) 80 percent of each TAC will be allocated directly to groundfish trawl licensed vessels as IVQ based on the percentage of IVQ holdings for each species by species/area group held by each licence holder as of 8:00 am February 2nd, 2010.
- ii) 20 percent of each TAC will be allocated to groundfish trawl licensed vessels in-season by the Minister of Fisheries and Oceans Canada, taking into consideration advice from the Groundfish Development Authority (GDA).

12. INDIVIDUAL VESSEL ALLOCATION FORMULA

12.1. Initial 1997 Allocation Formula

In 1997, the initial formula used to allocate all groundfish species subject to TAC, with the exception of hake, was based 30 percent on vessel length and 70 percent on average catch of groundfish (excluding hake) during the five year term 1988 to 1992. For this purpose, the length of vessel used in the calculation is the length that was recorded on the

Pacific Licensing System on March 31, 1997. The groundfish species included in the catch history calculations are all rockfish, all soles, pacific cod, lingcod, dogfish, sablefish and pollock. For initial allocation purposes, quota catch history attributed to the licence is defined as the quantity of fish landed by the vessel holding that groundfish trawl licence at the time of landing.

The hake IVQ allocation formula was based 30 percent on vessel length, based on the total length of hake vessels only, and 70 percent on average hake catch history for the five year term 1987 to 1991. If a vessel had no history of hake previous 1992, but did participate in the fishery after this date, then they received an allocation based solely on the 30 percent vessel length. However, no vessel qualified for participation in the 30 percent vessel length allocation unless its average landings for the 1987 to 1991 period exceeded 2,000 pounds of hake, or its average landings for the 1992 to 1996 period exceeded that sum.

Based on the above two formulae, each fish harvester with a groundfish trawl licence received two initial IVQ allocations expressed as percentages; one for groundfish other than hake, and one for hake (which may be zero if they do not meet the qualifying criteria). These percentages were then applied to each area and species specific TAC to generate the area and species specific IVQ allocations.

12.2. Annual Allocation of Individual Vessel Quota

At the commencement of each fishing year, the percentage of each vessel's IVQ permanent holdings for each species and species/area group as of midnight February 2nd of the previous fishing year, are applied against the new year's groundfish trawl TAC's to determine the initial actual poundage of fish that a vessel may fish during that fishing season.

13. INDIVIDUAL VESSEL QUOTA REALLOCATION RULES

13.1. Reallocation Rules for Inter-Sector Non-T IVQ

The 2010/2011 IFMP provides for the temporary reallocation of IVQ between different groundfish licence sectors. Each sector has established reallocation rules that govern the temporary movement of IVQ between vessels into and within each sector. For the purposes of the groundfish trawl fishery, all IVQ originating from outside the trawl sector reallocated to the trawl sector will be referred to as Non-T IVQ. Specific rules governing the reallocation of Non-T IVQ are included below.

13.2. Groundfish Trawl 2010/2011 Reallocation Sector Rules

13.2.1. Reallocation Rules Effective February 21st, 2010

- i) Upon application, groundfish trawl vessel owners will be permitted, subject to other requirements outlined below, to make unlimited permanent and temporary reallocations of groundfish IVQ or Non-T IVQ, subject to each individual groundfish trawl licence holdings cap and the fleet wide species caps set out in this plan.

- ii) Groundfish trawl IVQ and Non-T groundfish IVQ can be reallocated between groundfish trawl vessels holding a valid 2010/2011 groundfish trawl licence and vessels holding valid appropriate groundfish licences.
- iii) The IVQ percentage held on a groundfish trawl licence as of midnight February 2nd, 2010 will be determined as the permanent IVQ holdings for that groundfish trawl licence for the 2010/2011 season.
- iv) Requests for reallocation of groundfish IVQ must be received by DFO by 16:00 hours on February 2nd, 2011 in order to be processed and determine the permanent IVQ holdings for that groundfish trawl licence used for initial licence issuance for the 2011/2012 season.
- v) Only uncaught IVQ is eligible for reallocation.
- vi) Permanent reallocation requests can submitted either as a percentage of IVQ of the TAC for that species/species area group (SAG) or in pounds. Any permanent reallocation request submitted in pounds will be interpreted as to include both the IVQ and Code of Conduct Quota (CCQ).
- vii) Permanent reallocations will be expressed as a percentage of the TAC and will be added to the receiving vessel's percentage of the TAC. (For example, the poundage on a groundfish trawl licence is dependent on the total TAC for the year multiplied by the percent of the allocation that vessel holds).
- viii) Temporary reallocations will be expressed in IVQ pounds and will remain valid for the current fishing year.
- ix) The minimum quantity of IVQ that may be temporarily reallocated is one pound.
- x) The maximum quantity of IVQ on a groundfish trawl licence is subject to the individual vessel holdings cap and coast-wide species caps.

13.3. Individual Vessel Quota Species Cap

The following species caps are set on a coast-wide basis for all IVQ species, except hake. The hake species caps are individually applied to Gulf hake and offshore hake allocated for onshore delivery and offshore hake for joint venture delivery. Only temporary quota reallocations are permitted to exceed the individual species holding cap to the temporary species cap level. Temporary vessel caps may be subject to adjustment in season.

Species	Permanent Species Cap	Temporary Species Cap	Non-T Temporary Species Cap
	(% of coast-wide TAC)	(% of coast-wide TAC)	(% of coast-wide TAC)

Species	Permanent Species Cap	Temporary Species Cap	Non-T Temporary Species Cap
	(% of coast-wide TAC)	(% of coast-wide TAC)	(% of coast-wide TAC)
Yellowtail Rockfish	5%	7%	0%
Widow Rockfish	5%	7%	0%
Canary Rockfish	4%	6%	10%
Silvergrey Rockfish	4%	6%	10%
Pacific Ocean Perch	5%	5%	0%
Yellowmouth Rockfish	5%	5%	0%
Rougheye Rockfish	7%	10%	10%
Shortraker Rockfish	7%	10%	10%
Redstripe Rockfish	5%	7%	0%
Shortspine Thornyheads	10%	10%	10%
Longspine Thornyheads	10%	10%	10%
Yelloweye Rockfish	4%	4%	0%
Quillback, Copper, China and Tiger Rockfish Combined	4%	4%	0%
Pacific Cod	4%	6%	0%
Dover Sole	5%	5%	0%
Rock Sole	5%	7%	0%
Lemon (English) Sole	6%	8%	0%
Petrals Sole	4%	6%	0%
Lingcod	5%	7%	10%
Dogfish	10%	10%	10%
Sablefish	5%	7%	10%
Pollock	10%	15%	0%
Hake (Gulf of Georgia)	15%	15%	0%
Hake (Offshore)	10%	10%	0%
Big Skate	7.5%	7.5%	0%
Longnose Skate	7.5%	7.5%	0%
Arrowtooth Flounder	8.0%	15%	0%

13.4. Individual Vessel Quota Holdings Cap

Each groundfish trawl licence is subject to a total holdings cap, set at a level which allows vessel owner(s) to adjust their IVQ holdings to a viable level while ensuring that operators cannot accumulate an unreasonably large amount of IVQ. Non-T IVQ will not be included in the calculation of holdings against the vessels individual holdings cap.

A reallocation request which results in one of the groundfish trawl licences involved holding more than its total IVQ holdings cap, measured in groundfish equivalents, will not be approved by Fisheries and Oceans Canada.

IVQ holdings caps were calculated for each groundfish trawl licence, during the first year of the IVQ program. The total IVQ holdings cap for each groundfish trawl licence was

measured in groundfish equivalents (described below) as a percentage of total groundfish equivalents. These holdings caps, determined in 1997, continue to remain in effect.

13.5. Groundfish Equivalents

For the purposes of calculating the total IVQ holdings cap for each groundfish trawl licence, for measuring IVQ holdings of a groundfish trawl licence against its cap, and for quota swapping purposes, Fisheries and Oceans Canada has set the following groundfish equivalents (GFE). GFE will be based on price relative to pacific ocean perch (pacific ocean perch = 1.00). These GFE values may be updated at the start of each fishing year.

Species	GFE
Yellowtail Rockfish	1.26
Widow Rockfish	0.96
Canary Rockfish	1.19
Silvergrey Rockfish	1.20
Pacific Ocean Perch	1.00
Yellowmouth Rockfish	1.19
Rougeye Rockfish	1.15
Shorthead Rockfish	1.24
Redstripe Rockfish	0.73
Shortspine Thornyheads	3.38
Longspine Thornyheads	3.38
Yelloweye Rockfish	1.23
Quillback, Copper, China and Tiger Rockfish	1.21
Pacific Cod	1.69
Dover Sole	1.33
Rock Sole	1.65
Lemon Sole	1.37
Petrals Sole	3.22
Lingcod	1.75
Dogfish	0.49
Sablefish	6.30
Pollock	0.66
Hake (Gulf of Georgia)	0.14
Hake (Offshore)	0.22
Big Skate	0.37
Longnose Skate	0.26
Arrowtooth Flounder	0.37
For example:	10,000 lb. of pacific ocean perch + 10,000 lb. of lingcod
	= 10,000 lb. GFE + 17,500 lb. GFE
	= 27,500 lb. GFE

13.6. Quota Overage/Underage Rules

In addition to any of the rules set out in this plan, vessels that exceed by thirty (30) percent (%) the area specific IVQ holdings for a species (excluding halibut and Pacific Hake), shall be restricted to mid-water trawl fishing for the area in which the species IVQ has been exceeded for the remainder of the fishing year, or until such time as sufficient IVQ is transferred onto the groundfish trawl licence to cover overages in excess of the thirty (30) percent permitted.

Fisheries and Oceans Canada will amend the licence conditions to restrict the vessel to mid-water trawling operations and deliver this amendment to the vessel owner by hand or by registered mail. The amendment will take effect from the date the licence amendment is provided to the vessel owner.

13.6.1. Quota Overage/Underage and Quota Carryover

To accommodate fishers where difficulties have arisen and catches do not meet the exact IVQ holdings in a given area for a given species, a carryover/underage policy has been implemented which allows fish harvesters to carry uncaught quota forward, or apply catch against its next year's IVQ allocation. For all species of groundfish subject to IVQ, other than offshore Pacific hake, halibut by-catch and Non-T sablefish IVQ the carryover/underage limit is thirty (30) percent of the vessels IVQ holdings for that particular species and species area group. Add IVQ holdings are the sum of the Permanent IVQ, Temporary IVQ and CCQ held on the groundfish trawl licence.

For onshore hake and joint venture hake (if applicable), the carryover/underage limit is fifteen (15) percent of the vessel's onshore hake IVQ holdings.

For halibut by-catch mortality, the underage limit is fifteen (15) percent of the vessel halibut by-catch IVQ holdings. There is no allowable overage for halibut by-catch.

For Non-T Sablefish IVQ the carryover/underage limit is fifteen (15) percent of the vessels Non-T sablefish coastwide holdings.

13.6.2. Rules for All Other Carryovers

Groundfish trawl licensed vessels landing up to thirty (30) percent over the species and area specific IVQ holdings, except for Non-T temporary Sablefish which is at the fifteen (15) percent level, for that licence may keep the proceeds from the overage but will have the equivalent poundage of the overage subtracted from the IVQ holdings of the licence in the following year.

All groundfish trawl licensed vessel landings more than thirty (30) percent over the species and area specific IVQ holdings, except for Non-T temporary Sablefish which is at the fifteen (15) percent level, for that groundfish trawl licence must be relinquished.

Vessels transferring additional IVQ onto the groundfish trawl licence following a quota overage and/or relinquishment will have the total overage (entire percent

plus the relinquished amount) subtracted from the IVQ that is added to the groundfish trawl licence. The adjustment will be reflected in the groundfish trawl licence amendment. Relinquishments for prior overages will not be reimbursed.

If no further reallocations are done, the total poundage of the all overages will be subtracted from the IVQ holdings of the licence in the following year.

Any groundfish trawl licensed vessel may carry forward uncaught species and area specific IVQ holdings of up to 30 percent of their IVQ holdings at the end of the year. The equivalent poundage of the carry forward will be added to the IVQ holdings of the licence in the following year.

IVQ overage/underage adjustments in the following year will be attributed to the groundfish trawl licensed vessel which did or did not fish the IVQ in the previous season.

IVQ overage/underage adjustments can be reallocated to any other licensed groundfish trawl vessel.

All weights are fresh round weights as determined by information collected from the dockside observers and at-sea observers.

Vessels in an overage situation can avoid a relinquishment by reallocating applicable IVQ prior to hauling out for the vessel's next trip or within 30 days, whichever comes first.

14. GROUND FISH DEVELOPMENT AUTHORITY

The Groundfish Development Authority (GDA) was established in 1997 as a result of an agreement reached between Fisheries and Oceans Canada and the British Columbia Ministry of Agriculture, Fisheries and Food (MAFF), to include the Coastal Communities Network (CCN) and fishing industry participants in a process that would continue to provide advice on the evolving west coast groundfish fishery.

The GDA provides advice on groundfish allocations to the Ministers of Fisheries for that portion of the TAC not allocated directly to fishers under the allocation formula. The intent of the recommendations was to allocate TAC in a manner that considers fair crew treatment, assists in regional development, promotes and attains a stable market, employment conditions and encourages sustainable fishing practices.

The GDA consists of seven members (Board of Directors) and a Standing Committee of nine advisors (formerly called non-voting members of GDA), whose role it is to provide background information and expertise to the Board of Directors.

Details of the operation of the GDA, its members and terms of reference, objectives and criteria are set out in a separate GDA Operational Plan. The 2010/2011 GDA Operational Plan is

available by contacting Charlie Mimms, GDA Executive Director at (604) 943-3320 Fax (604) 943-1166, Cell phone (604) 880-1425 or email: cminns@dccnet.com.

14.1. Groundfish Development Quota

For 2010/2011, ten (10) percent of each groundfish trawl TAC will be allocated as Groundfish Development Quota (GDQ). The GDA, on the basis of joint proposals submitted by a processor and one or more groundfish trawl licensed vessel owners, provides advice to the Minister of Fisheries and Oceans Canada on how best to allocate to vessels involved in the joint proposals for GDQ. The GDA rates each proposal on the merits of the commitments made in the submitted operation plan in addressing the objectives of the GDA for the upcoming fishing year.

14.2. Code of Conduct Quota

Fisheries and Oceans Canada allocates ten (10) percent of each groundfish trawl TAC as Code of Conduct Quota (CCQ). It is intended to promote fair treatment of crew and safe vessel operation under the IVQ program.

CCQ is initially allocated according to each licence's CCQ rating and in proportion to the IVQ holdings for each species by species/area group on the groundfish trawl licence as of midnight, February 2nd of the previous fishing year.

Although each groundfish trawl licence has an initial one hundred (100) percent CCQ rating, the Minister may alter this rating as a result of advice from the GDA regarding the vessel compliance with the general principles set for the CCQ. The general principles, guidelines, and complaints procedure for CCQ are set out in the GDA 2010/2011 Operations Plan.

15. CATCH MONITORING AND VALIDATION

15.1. Catch Reporting

All groundfish trawl licensed vessels are required to accurately record and keep a record of all fishing activities in a Fisheries and Oceans Canada supplied fishing logbook, (see the example found on last page).

The fishing master must ensure that the fishing logbook is available for use, prior to fishing, and that sufficient pages are available to cover any fishing trip. Information must be recorded for each tow, immediately after completion of the tow.

Completed original logbook pages must be submitted to the Department at the time of landing fish at the end of each trip.

15.2. Port Monitoring

A comprehensive industry funded one hundred (100) percent port monitoring program shall continue in the 2010/2011 fishing year.

All groundfish trawl licensed vessels, regardless of the area or species fished, must have all of their groundfish catches validated, whether landed in Canada or in the United States, to ensure that proper sorting, weight and enumeration by species occurs.

A service provider, under contract to the Canadian Groundfish Research and Conservation Society (CGRCS), will be designated for this program and will supply certified observers to provide the port monitoring services.

Monitoring requirements in effect for the groundfish trawl IVQ fishery include the mandatory requirement to hail-out and hail-in for each trip and landing. Detailed catch verification, hail-out and hail-in requirements are found in the 2010/2011 Groundfish Trawl Conditions of Licence issued with each groundfish trawl licence.

Following completion of the trip, the service provider will finalize the catch record by assigning catch to management areas fished. This information will be forwarded to the vessel owner within 48 hours of the completion of the offload in the form of the Groundfish Quota Status Report. It is the responsibility of the vessel owner to ensure that the Groundfish Quota Status Report is on board the vessel prior to the commencement of the next fishing trip, and is made available, upon request, to a Fisheries and Oceans Canada certified observer.

For the 2010/2011 season there continues the opportunity for Option A vessels to land a portion the fish on board the vessel (either fresh, frozen or live) provided that the vessel master ensures that same groundfish at sea observer that was present on board the vessel during the fishing trip remains onboard for the next fishing trip. All fish caught during one fishing trip and not landed at the conclusion of that trip, must be landed at the conclusion of the next fishing trip.

This measure is to assist fishers and provide greater flexibility in managing their catch and reduce at-sea releases. Specific rules governing split and partial landings are set out in the terms and conditions of the Option A groundfish trawl licence. This privilege will be monitored by the Department in-season to ensure compliance, proper accounting, and control and management of the fishery, and may be subject to change.

Individual vessels may request modified offloading pr

Vessels choosing Fishing Option A shall be required to carry a DFO certified groundfish at sea observer on each trip with the exception when directed mid-water hake fishing in Areas 3C or that portion of 3D south and easterly of 49° 00'N.

An Option A vessel when directed mid-water trawling for pacific Hake in the Gulf of Georgia (4B), Areas 3C or that portion of 3D south and easterly of 49° 00'N, is subject to ten (10) percent onboard observer coverage. An Option A vessel when directed mid-water trawling for pacific Hake in that portion of 3D north and easterly of 49° 00'N, is subject to one hundred (100) percent at-sea monitoring program for all fishing activities. Vessels mid water trawling for Pacific hake who have opted to employ an electronic monitoring systems are subject to full retention of all fish caught.

At sea monitoring requirements for vessels directed midwater fishing for hake will be discussed prior to the start of the 2010 fishery and thus may be subject to inseason modification.

A vessel, which is on a dedicated offshore hake trip without at-sea observer on board is permitted a ten (10) percent by-catch allowance of other groundfish, excluding sablefish, halibut and walleye pollock subject to available IVQ holdings. The by-catch allowance for walleye pollock is restricted to thirty (30) percent of the offshore hake landing. Any catch of groundfish (other than hake) in excess of the set allowance must be relinquished. All by-catch will be deducted from the vessel's IVQ holdings. Fishers who may wish to retain more than the by-catch allowance while on a dedicated hake trip must carry an at-sea observer for that trip.

If a vessel has discontinued fishing and is transiting directly to an offloading port, the observer may disembark in Port Hardy, Victoria, Ucluelet or Prince Rupert. The following requirements shall apply:

- i) A hail-in as described in the Conditions of the 20010/2011 Groundfish Trawl Licence shall be made to the designated service provider.
- ii) The use of Port Hardy shall only be considered when the vessel is transiting southbound between Vancouver Island and the ma

conservation and long-term sustainability of fish resources. It is the responsibility of the vessel master to ensure arrangements for at-sea monitoring services are in place prior to commencement of any fishing operations.

15.4. Conversion Factors

To facilitate the conversion of product weight to round weight for the purposes of monitoring catches against TAC and IVQ holdings, the Department shall use set conversion factors and ice/slime and glaze allowances.

The factors and allowances that shall be used at the commencement of the 2010/2011 fishery will be conditions of each groundfish trawl licence issued. As changes may be made in-season, the conditions of the groundfish trawl licence should be referenced to determine what factors and allowances are in effect at any time.

Individual vessels may request in writing to use different conversion factors and/or ice/glaze allowances, which are more applicable to their operation. Testing will be conducted to verify the applicability of different conversion factors/ice/glaze allowance. To facilitate this request verification of these different factors will be conducted at the owner's expense that includes product samples and approved contract personal. Where at-sea testing is required, such testing by DFO approved protocols by approved contract personnel. Test results may result in DFO amending licence conditions/dockside monitoring protocols to reflect agreed upon new factors. Further testing may be required in-season to verify the continued appropriateness of the amended factors.

16. HALIBUT BY-CATCH MANAGEMENT PLAN

16.1. Halibut Prohibition

Halibut caught while fishing under the authority of a groundfish trawl licence cannot be retained and must be returned to the water as quickly as possible.

16.2. Halibut Mortality Fleet Cap

For the 2010/2011 fishing year, the halibut by-catch mortality cap for the trawl fleet is set at 1,000,000 pounds (~454 tonnes). All estimated halibut by-catch mortality will be deducted from a vessel's individual cap.

16.3. Halibut Species Mortality Cap

No groundfish trawl licence can hold permanently more than four (4) percent of the total halibut by-catch mortality cap for the trawl fleet. No groundfish trawl licence can hold temporarily more than eight (8) percent of the total halibut by-catch mortality cap for the trawl fleet.

16.4. Halibut By-catch Reallocation

Uncaught halibut by-catch mortality IVQ can be reallocated, subject to the halibut species mortality cap rules set out above. Halibut by-catch IVQ is not to be considered as

part of the groundfish trawl vessel's groundfish IVQ holdings for holdings cap calculations/limits.

16.5. Halibut By-catch Quota Overage

Halibut catch in excess of a vessel's individual halibut by-catch cap will result in the vessel being restricted to mid-water species coast-wide for the remainder of the fishing year, or until sufficient additional halibut by-catch cap is reallocated onto the groundfish trawl licence to cover the overage. For the proper conservation and management of the resource, halibut overages in the current year will be deducted from the groundfish trawl licence's halibut by-catch mortality cap allocation in the following year.

16.6. Halibut By-catch Underage

A groundfish trawl licensed vessel may carry forward up to fifteen (15) percent of their halibut by-catch mortality holdings that are uncaught into the following fishing season.

17. FISH RELEASED AT SEA

All species of groundfish (including Non-T IVQ) that are released at-sea shall be deducted from IVQ holdings or annual TAC subject to marketable size limits and mortality rates below.

Beginning in the 2010/2011 season, 50% of all fish released at-sea that are determined to be below the marketable size limits set out in the table in section 17.1 below will be multiplied by the species specific mortality rate set out in section 17.2 to calculate the released mortality for that species for that tow. This species mortality will be deducted from the vessels appropriate area and species-specific IVQ or by-catch cap.

Beginning in the 2011/2012 season, 100% of all fish released at sea that are determined to be below the marketable size limits set out in the table above will be multiplied by the mortality rate set out below to calculate released mortality which will deducted from the vessels appropriate area and species-specific IVQ or by-catch cap.

17.1. Marketable Size Limits

Marketability shall be determined by size. Lingcod and sablefish marketability is determined by the legislated size limit for each species. A survey of major groundfish processors has provided the following definitions of marketability, which shall be used, for those species with no legislated size limits. Rules regarding the overages/underages will also apply.

Species	Size
Rock, Lemon, Petrale and Dover sole.	13 inches (33 cm) and larger ¹
Pacific cod.	18 inches (46 cm) and larger ¹
Pollock	18 inches (46 cm) and larger ¹
Rockfish (not including longspine and shortspine thornyheads).	12 inches (30 cm) and larger ¹
Spiny dogfish.	28 inches (71 cm) and larger ¹
Longspine and shortspine thornyheads.	7.5 inches (19 cm) and larger ¹
Skate (Big and Longnose)	26 inches (66 cm) and larger ¹

All other species	1 inch (2.3 cm) and larger ¹
¹ Although these sizes are used to define marketability for the purpose of enumerating releases, the industry is advised that fish less than the indicated size may legally be retained, landed and processed. Sizes shall be measured from the tip of the nose to the fork of the tail, except for skate where the measurement is wingspread. Where there is no fork, length shall be measured from the tip of the nose to the tip of the tail.	

17.2. Mortality Rates

Fish determined to be marketable shall have set mortality rates for any fish released, as follows:

Species	Mortality Rates
Soles	10% mortality for the first two hours fished or portion thereof and, 10% for each additional hour ¹ .
Lingcod	10% mortality for the first two hours fished or portion thereof and, 10% for each additional hour ¹ .
Sablefish	10% mortality for the first two hours fished or portion thereof and, 10% for each additional hour ¹ .
Pacific Cod And Pollock	25% mortality for the first two hours fished or portion thereof and, 25% for each additional hour ¹ .
Spiny Dogfish	5% mortality for the first two hours fished or portion thereof and, 5% for each additional hour.
Big and Longnose Skate	5% mortality for the first two hours fished or portion thereof and, 5% for each additional hour.
Rockfish	100% mortality regardless of time fished.
Longspine/ Shortspine Thornyhead	100% mortality regardless of time fished.
Arrowtooth Flounder	100% mortality regardless of time fished
Pacific Hake	100% mortality regardless of time fished
¹ Fishing time is defined as the period following shooting of the gear during which the trawl winches are locked. For that portion of a tow time less than 60 minutes, mortality rate shall be determined by multiplying the number of full hours of the tow by the mortality rate and adding to that the ratio of the portion of an hour by the applicable mortality rate to determine the overall mortality of the species for that tow. For a 2 hr and 20 minute tow the formula used to determine sablefish mortality is: ((2hrs x 10%)* est. release weight) + (((20min/60min) x 10%)* released weight)	

The above mortality rates do not necessarily reflect true mortality rates of fish released at-sea, but are intended to provide incentives for vessel operators to reduce towing time and avoid by-catch wherever possible.

All fish landed, whether considered marketable or not, shall be deducted from the appropriate area and species-specific IVQ or by-catch cap.

For halibut, a DFO certified at-sea observer shall assess the condition of the fish before it is returned to the water, in order to apply the appropriate mortality factor.

18. HAKE FISHERY

The offshore pacific hake fishery will be managed under the general IVQ program in place for the groundfish trawl fishery.

The 2010/2011 offshore hake TAC and further details of the in-season management processes will be set out in a separate announcement/document when finalized.

19. FUTURE USE OF CATCH HISTORY

Commencing in 1991, DFO issued several notices to groundfish trawl industry participants regarding the use of catch history for determining future allocations of groundfish. Industry is advised that, following the outcome of the Halvorson arbitration process and the implementation of the 1997 IFMP and the trawl IVQ program in general, those notices now cease to have effect.

20. EXAMPLE OF GROUNDFISH TRAWL FISHING LOGBOOK

Fisheries and Oceans / Pêches et Océans Canada		GROUNDFISH TRAWL FISHING INFORMATION LOG										Page <u>2</u> of <u>2</u>	
Vessel Name <u>SEA WATER</u>		VRN# <u>29999</u>		Licence # <u>T0155</u>		Trip # <u>55</u>		Hall Out# <u>21810476</u>		Hall In# <u>21824596</u>			
Captain <u>JOHN DOE</u>		CAPT. FIN # <u>1234567</u>		Port of Landing <u>UCL</u>		Offload Location <u>BORNSTEIN</u>		Departure Date <u>20 / 05 / 04</u>		Landing Date <u>30 / 05 / 04</u>			
At Sea Observer <u>DON TRIP</u>		Code <u>18637</u>		Buyer/Processor <u>SEA DRIFT</u>									
Tow #	BT or MT	<u>003</u>		<u>B T 004</u>									
Date		<u>26 / 05 / 04</u>		<u>26 / 05 / 04</u>									
Name of Grounds		<u>C. SCOTT SPITT</u>		<u>C. SCOTT SPITT</u>									
Fishing Area		<u>127-04</u>		<u>127-04</u>									
Time (24hr clock)		set <u>0745</u> haul <u>0950</u>		set <u>1045</u> haul <u>1200</u>									
Set: Latitude		set <u>504351</u>		set <u>504351</u>									
Longitude		1 <u>283850</u>		1 <u>283850</u>									
Mid: Latitude		mid <u>504210</u>		mid <u>504210</u>									
Longitude		1 <u>282820</u>		1 <u>282723</u>									
Haul: Latitude		haul <u>504291</u>		haul <u>504291</u>									
Longitude		1 <u>282723</u>		1 <u>282723</u>									
Fishing Depth		start <u>41</u> mid <u>36</u>		start <u>41</u> mid <u>36</u>									
Meters		end <u>36</u> fish capture		end <u>36</u> fish capture									
Fathoms	<input checked="" type="checkbox"/>												
Tow Speed - Codend		<u>34</u> KN codend mesh		<u>34</u> KN codend mesh									
Gear Depth		<u>40</u> / <u>40</u> / <u>250</u>		<u>40</u> / <u>40</u> / <u>250</u>									
Spread		<u>45</u> / <u>24</u> / <u>8</u>		<u>37</u> / <u>19</u> / <u>6</u>									
TS - Target Species		retained (lb)		released (lb)		retained (lb)		released (lb)		retained (lb)		released (lb)	
418 Yellowtail RF													
417 Widow RF													
437 Canary RF													
406 Silvergrey RF													
396 Pacific Ocean Perch													
440 Yellowmouth RF													
394 Rougheye RF													
409 Shortfiner RF													
439 Redstripe RF													
401 Redbanded RF													
435 Bocaccio													
451 Shortspine TH		<u>3</u>		<u>0</u>		<u>3</u>		<u>110</u>					
453 Longspine TH													
626 Dover Sole		<u>1</u>	<u>14000</u>	<u>100</u>	<u>1</u>	<u>20000</u>	<u>100</u>						
621 Rock Sole													
628 Lemon Sole													
607 Petrale Sole													
610 Rex Sole													
631 Starry Flounder													
602 Turbot		<u>2</u>	<u>100</u>	<u>2</u>	<u>500</u>								
222 Pacific Cod													
467 Lingcod													
044 Dogfish													
455 Sablefish													
228 Pollock													
225 Hake													
056 Big Skate			<u>200</u>			<u>100</u>							
059 Longnose Skate													
540 Cabezon													
472 Sculpin													
614 Halibut		<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>	<u>x</u>
Tow Comments:		<u>WEATHER GETTING BAD</u>		<u>CUT TRIP SHORT BAD</u>									
		<u>GOING TO MAKE ONE</u>		<u>WEATHER!</u>									
		<u>MORE TOW.</u>											
Log removed by: _____													

Appendix 9: Fishing Vessel Safety

Vessel owners and masters have a duty to ensure the safety of their crew and vessel. Adherence to safety regulations and good practices by owners, masters and crew of fishing vessels will help save lives, prevent vessel damage and protect the environment. All fishing vessels must be in a seaworthy condition and maintained as required by Transport Canada (TC), WorkSafeBC, and other applicable agencies. Vessels subject to inspection should ensure that the certificate of inspection is valid for the area of intended operation.

In the federal government, responsibility for shipping, navigation, and vessel safety regulations and inspections lies with Transport Canada (TC); emergency response with the Canadian Coast Guard (CCG) and DFO has responsibility for management of the fisheries resources. In B.C., WorkSafeBC also regulates health and safety issues in commercial fishing. This includes requirements to ensure the health and safety of the crew and safe operation of the vessel. DFO (Fisheries and Aquaculture Management (FAM) and CCG) and TC through an MOU have formalized cooperation to establish, maintain and promote a safety culture within the fishing industry.

Before leaving on a voyage the owner, master or operator must ensure that the fishing vessel is capable of safely making the passage. Critical factors for a safe voyage include the seaworthiness of the vessel, vessel stability, having the required safety equipment in good working order, crew training, and knowledge of current and forecasted weather conditions. As safety requirements and guidelines may change, the vessel owner, crew, and other workers must be aware of the latest legislation, policies and guidelines prior to each trip.

There are many useful tools available for ensuring a safe voyage. These include:

- Education and Training Programs
- Marine Emergency Duties
- Fish Safe Stability Education
- First Aid
- Radio Operators Course
- Fishing Masters Certificates
- Small Vessel Operators Certificate
- Publications:

- Transport Canada Publication TP 10038 '*Small Fishing Vessel Safety Manual*' (can be obtained at Transport Canada Offices from their website at www.tc.gc.ca/MarineSafety/Tp/Tp10038/tp10038e.htm),
 - Gearing Up for Safety – WorkSafeBC
 - Safe At Sea DVD Series – Fish Safe
 - Stability Handbook – Fish Safe and Measuring Stability –DVD
- For further information see: <http://www.tc.gc.ca/marine/menu.htm>

Important Priorities for Vessel Safety

There are three areas of fishing vessel safety that should be considered a priority. These are: vessel stability, emergency drills, and cold water immersion.

1.1. Fishing Vessel Stability

Vessel stability is paramount for safety. Care must be given to the stowage and securing of all cargo, skiffs, equipment, fuel containers and supplies, and also to correct ballasting. Fish harvesters must be familiar with their vessel's centre of gravity, the effect of liquid free surfaces on stability, loose water or fish on deck, loading and unloading operations and the vessel's freeboard. Know the limitations of your vessel; if you are unsure contact a reputable naval architect, marine surveyor or the local Transport Canada Marine Safety Office.

Fishing vessel owners are required to develop detailed instructions addressing the limits of stability for each of their vessels. The instructions need to be based on a formal assessment of the vessel by a qualified naval architect and include detailed safe operation documentation kept on board the vessel. Examples of detailed documentation include engine room procedures, maintenance schedules to ensure watertight integrity, and instructions for regular practice of emergency drills.

1.2. Emergency Drill Requirements

The master must establish procedures and assign responsibilities to each crew member for emergencies such as crew member overboard, fire, flooding, abandoning ship and calling for help.

The Crewing Regulation under the Canada Shipping Act (CSA) states that as of July 30th 2002 all seafarers, including fish harvesters, must have a Basic Safety Certificate (MED A1 or A3 depending upon vessel and operating waters) within 6 months of becoming a crewmember, regardless of time at sea. The MED A1 is a three day course, and must be taken by all crew regardless of duty station.

MED provides a basic understanding of the hazards associated with the marine environment; the prevention of shipboard incidents; raising and reacting to alarms; fire and abandonment situations; and the skills necessary for survival and rescue.

1.3. Cold Water Immersion

Drowning is the number one cause of death in B.C.'s fishing industry. Cold water is defined as water below 25 degrees Celsius, but the greatest effects occur below 15 degrees. BC waters are usually below 15 degrees. The effects of cold water on the body occur in four stages: cold shock, swimming failure, hypothermia and post-rescue collapse. Know what to do to prevent you or your crew from falling into the water and what to do if that occurs. More information is available in the WorkSafe Bulletin *Cold Water Immersion* (available from the WorkSafe BC website).

1.4. Other Issues

1.4.1. Weather

Vessel owners and masters are reminded of the importance of paying close attention to current weather trends and forecasts during the voyage. Marine weather information and forecasts can be obtained on VHF channels 21B, Wx1, Wx2, Wx3, or Wx4. Weather information is also available from Environment Canada website at:

http://www.weatheroffice.gc.ca/marine/index_e.html

1.4.2. Emergency Radio Procedures

Vessel owners and masters should ensure that all crew are able to activate the Search and Rescue (SAR) system early rather than later by contacting the Canadian Coast Guard (CCG). It is strongly recommended that all fish harvesters carry a registered 406 MHz Emergency Position Indicating Radio Beacon (EPIRB). These beacons should be registered with the National Search and Rescue secretariat. When activated, an EPIRB transmits a distress call that is picked up or relayed by satellites and transmitted via land earth stations to the Joint Rescue Co-ordination Centre (JRCC), which will task and co-ordinate rescue resources.

Fish harvesters should monitor VHF channel 16 or MF 2182 Khz and make themselves and their crews familiar with other radio frequencies. All crew should know how to make a distress call and should obtain their restricted operator certificate from Industry Canada. However, whenever possible, masters should contact the nearest Canadian Coast Guard (CCG) Marine Communications and Traffic Services (MCTS) station (on VHF channel 16 or MF 2182 kHz) prior to a distress situation developing. Correct radio procedures are important for communications in an emergency. Incorrect or misunderstood communications may hinder a rescue response.

Since August 1, 2003 all commercial vessels greater than 20 metres in length are required to carry a Class D VHF Digital Selective Calling (DSC) radio. A registered DSC VHF radio has the capability to alert other DSC equipped vessels in your immediate area and MCTS that your vessel is in distress. Masters should be aware that they should register their DSC radios with Industry Canada to obtain a Marine Mobile Services Identity (MMSI) number or the automatic distress calling feature of the radio may not work. For further information see the Industry Canada site at: http://www.ic.gc.ca/eic/site/ic1.nsf/eng/h_00014.html

A DSC radio that is connected to a GPS unit will also automatically include your vessel's current position in the distress message. More detailed information on MCTS and DSC can be obtained by contacting a local Coast Guard MCTS centre (located in Vancouver, Victoria, Prince Rupert, Comox and Tofino) or from the Coast Guard website:

www.pacific.ccg-gcc.gc.ca

1.4.3. Collision Regulations

Fish harvesters must be knowledgeable of the *Collision Regulations* and the responsibilities between vessels where risk of collision exists. Navigation lights must be kept in good working order and must be displayed from sunset to sunrise and during all times of restricted visibility. To help reduce the potential for collision or close quarters situations which may also result in the loss of fishing gear, fish harvesters are encouraged to monitor the appropriate local Vessel Traffic Services (VTS) VHF channel, when travelling or fishing near shipping lanes or other areas frequented by large commercial vessels. Vessels required to participate in VTS include:

- a) every ship twenty metres or more in length,
- b) every ship engaged in towing or pushing any vessel or object, other than fishing gear,
- c) where the combined length of the ship and any vessel or object towed or pushed by the ship is forty five metres or more in length; or
- d) where the length of the vessel or object being towed or pushed by the ship is twenty metres or more in length.

Exceptions include:

- a) a ship towing or pushing inside a log booming ground,
- b) a pleasure yacht *less than* 30 metres in length, and
- c) a fishing vessel that is *less than* 24 metres in length and not *more than* 150 tons gross.

More detailed information on VTS can be obtained by calling (604) 775-8862 or from Coast Guard website:

<http://www.ccg-gcc.gc.ca/e0003901>

1.4.4. Buddy System

Fish harvesters are encouraged to use the buddy system when transiting, and fishing as this allows for the ability to provide mutual aid. An important trip consideration is the use of a sail plan which includes the particulars of the vessel, crew and voyage. The sail plan should be left with a responsible person on shore or filed with the local MCTS. After leaving port the fish harvester should contact the holder of the sail plan daily or as per another schedule. The sail plan should ensure notification to JRCC when communication is not maintained which might indicate your vessel is in distress. Be sure to cancel the sail plan upon completion of the voyage.

2. WORKSAFE BC

Commercial fishing is legislated by the requirements for diving, fishing and other marine operations found in Part 24 of the Occupational Health and Safety Regulation (OHSR). Many general hazard sections of the OHSR also apply. For example, Part 8: Personal Protective Clothing and Equipment addresses issues related to safety headgear, safety foot wear and personal floatation devices. Part 15 addresses issues on rigging, Part 5 addresses issues of exposure to chemical and biological substances, and Part 3 addresses training of young and new workers, first aid, and accident investigation issues. Part 3 of the Workers Compensation Act (WCA) defines the roles and responsibilities of owners, employers, supervisors and workers. The OHSR and the WCA are available from the Provincial Crown Printers or by visiting the WorkSafeBC website:

www.worksafebc.com

For further information, contact an Occupational Safety Officer (Shane Neifer, Terrace, (250) 615-6640), Bruce Logan (604)244-6477 (Lower Mainland), David Clarabut (250) 881-7563 (Victoria), Pat Olsen (250)334-8777 and Mark Lunny, (250) 334-8732 (Courtney) or the Focus Sector Manager for fishing Mark Peebles, (604) 279-7563.

For information on projects related to commercial fishing contact Ellen Hanson (604) 233-4008 or Toll Free 1-888 621-7233 ext. 4008 or by email: Ellen.Hanson@worksafebc.com.

3. FISH SAFE

Fish Safe is coordinated by Gina Johansen and directed by the Fish Safe Advisory Committee (membership is open to all interested in improving safety on board). The advisory committee meets quarterly to discuss safety issues and give direction to Fish Safe in the development of education and tools for fish harvesters.

Vessel masters and crew are encouraged to become more knowledgeable regarding vessel stability. FishSafe BC developed the Fish Safe Stability Education Course, which is available to all fish harvesters who want to improve their understanding of stability and find practical application to their vessel's operation.

Fish Safe also works closely with WorkSafeBC to improve the fishing claims process. For further information:

Gina Johansen, Safety Coordinator
Fish Safe
2-11771 Horseshoe Way
Richmond, BC V7A 4V4

Phone: 604-261-9700
Email : fishsafe@telus.net
Website: www.fishsafebc.com

Appendix 10: Commercial Groundfish Advisory Committee Contacts

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1. COMMERCIAL GROUND FISH ADVISORY COMMITTEE CONTACTS

Department consults on a regular basis with advisory committees that represent the different sectors (Halibut, Groundfish Trawl, Sablefish and the Hook and Line fisheries). Membership includes selected licence holders representative, plus appointed members of the groundfish industry representing the full cross section of stakeholders involved in the industry (i.e. fish harvesters, processors, crewmembers, shoreworkers, coastal communities, and others). These committees meet regularly during the year to provide wide ranging advice to the Department to assist in the overall planning, management and enforcement of the each of their respective fisheries. Vessel owners and stakeholders are urged to communicate any comments or concerns to their appropriate advisory committee representatives for discussion at these meetings. The current members of each of these committees are as follows.

1.1. Halibut Advisory Board (HAB)

Name	Address	Phone	Email Address
Terry Henshaw Annieville Halibut Association	9155 Hardy Road Delta, B.C. V4C 7V8	Phone (604) 581-9230 Cell (604) 341-3809 Fax (604) 581-1248	Angelinah02@hotmail.com
Alternate: John Danroth	23290 34A Ave Langley, BC V2Z 2H6	Phone (604) 533-7028 Cell (604) 290-3172	
Art Davidson BC Longline Fisherman's Association	1305 Readings Drive Sydney, BC V8L 5K7	Phone (250) 655-1446 Cell (250) 661-9619	artdavidson@telus.net
Alternate: Bud Schuler	5359 Sunhaven Place Nanaimo, BC	Phone (250) 756-2807 Cell (250) 716-6940	egsfishing@gmail.com
Gary Williamson Wild Canadian Sablefish	4629 River Road West Delta, B.C. V4K 1R9	Phone (604) 946-6507 Fax (604) 946-6564	rivercat@telus.net
Alternate: TBD			
Richard Beauvais Wild Canadian Sablefish	5720 Mason Road Seachelt, BC V0N 3A8	Phone (604) 885-7584 Fax (604) 885-4798	rbeauvais@dccnet.com
Alternate: TBD			
Lyle Pierce	472 Condor Comox, BC V9M 1J7	Phone (250) 339 9508 Cell (250) 897-5409 Fax (250) 339 9568	l_pierce@shaw.ca
Alternate: John Secord	307- 3680 West 7 th Ave Vancouver, B.C. V6R 1W4	Phone (604) 734-1019 Fax (604)734-6962	jsecord@telus.net
Mike Wartenberg BC Halibut Caucus			
Alternate: Cydrick Jager	945 Lillian Street Coquitlam, BC V3J 5C6	Phone (604) 936-2070	cydmar@telus.net
Henry Clifton BC Halibut Caucus	444 6 th Avenue East Prince Rupert, B.C. V8J 1W7	Phone (250) 627-8974 Fax (250) 624-9729	buddy_65@hotmail.com
Alternate : Lorne Iverson	7950 Hunter Street Burnaby, B.C.	Phone (604) 444-4461 Fax (604) 415-3999	lorneiverson@telus.net

Name	Address	Phone	Email Address
	V4C 7V8		
Gerry Dalum BC Halibut Caucus	805 13 th Street South Cranbrook, B.C. V1C 1X4	Phone (250) 426-2000 Fax (250) 426-3662	gpdalum@shaw.ca
Alternate: Barry Burnell	21976 86A Ave Langley, BC V1M 3S7	Phone (604) 888-2853	lburnell@shaw.ca
Alan Carl Northern Halibut Producers Association	212 5th Ave East Prince Rupert, B.C. V8J 1R7	Phone (250) 627-7942 Fax (250) 627-7592	porchers@citytel.net
Alternate: TBD			
Jake Vanderheide Pacific Coast Fishing Vessel Owners Guild	7395 Constitution Place Duncan, B.C. V9C 5W7	Phone (250) 709-2336 Fax (250) 709-2364	ridinglight@shaw.ca
Alternate: TBD			
David Boyes Pacific Coast Fishing Vessel Owners Guild	499 Powerhouse Road Courtenay, B.C. V9N 9L1	Phone (250) 338-2188 Fax (250) 338-2183	mcboyes@telus.net
Alternate: TBD			
Mike Wells Pacific Coast Fishing Vessel Owners Guild	1909 Beaufort Ave Comox, BC V9M 1S3	Phone (250) 339-3717	mcwells@shaw.ca
Alternate: TBD			
Herb Van Grootel	41 - 50 th Street Delta, BC V4M 2S5	Phone 604-948-2831 Fax 604-948-2741 Cell 604-328-5555	herb.vg@telus.net
Alternate: Jim Nightingale	4420 Maple Lane Ladner, B.C. V4K 2Z5	Phone (604) 946-0947 Fax (604) 946-0947	jnightingale@dcnet.com
Appointed Members			
Adam Keizer DFO Halibut Coordinator - Chair	#200-401 Burrard St. Vancouver, B.C. V6C 3S4	Phone (604) 666-0912 Fax (604) 666-8525	adam.keizer@dfo-mpo.gc.ca
Chuck McCarthy Nuu-Chah-Nulth Tribal Council	PO Box 340 Port Alberni, BC V9Y 7M2	Phone (250) 745-3333 Fax (250) 745-3332	cuagain964@hotmail.com
Blake Tipton SM Products (BC) Ltd.	3827 River Road West Delta, BC V4K 3N2	Phone (604) 946-7665 Fax (604) 946-0176 Cell (604) 290-2454	Blake@Halibut.ca
Russell Cameron UFAWU/CAW	RR1 S-6 C-9 Madeira Park, BC V0N 2H0	Phone (604) 740-6434	Russelljcameron@yahoo.ca
Doug Daugert Sport Fish Advisory Board			kumdisisland2@yahoo.ca
Gerry Kristanson Sport Fish Advisory Board			gerrykr@telus.net
Chuck Ashcroft Sport Fish Advisory Board	3580 Lake Trail Road Courtenay, B.C. V9N 9M9	Phone (250)338-9935 Fax (250) 338-9593	chuckashcroft@telus.net
Dennis Chalmers	PO Box 9309	Phone (250) 953-3401	dennis.chalmers@gov.bc.ca

Name	Address	Phone	Email Address
Ministry of Environment – Oceans and Marine Fisheries Branch	Stn. Prov. Govt. Victoria, BC V8W 9N1	Cell (250) 714-9887 Fax (250) 953-3401	ca
Heather Gilroy International Pacific Halibut Commission	PO Box 95009 Seattle, WA 98145-2009	Phone (206) 634-1838 Fax (206) 632-2983	heather@iphc.washington.edu
Dr. Bruce Leaman International Pacific Halibut Commission	PO Box 95009 Seattle, WA 98145-2009	Phone (206) 634-1838 Fax (206) 632-2983	bruce@iphc.washington.edu
Christopher Sporer Pacific Halibut Management Association	#16046 617 Velmont Street New Westminster, BC V3M 6W6	Phone (604) 523-1528 Fax (604) 648-8737	phma@telus.net

1.2. Groundfish Trawl Advisory Committee (GTAC)

Name	Address	Phone	Email Address
Kelly Andersen	929 Stevens Street. White Rock, B.C. V4B 4X5	Phone (604) 542-2610 Fax (604) 214-2615	kelly.andersen@telus.net
Mike Buston	Suite 320 - 522 7 th Street New Westminster, B.C. V3M 5T5	Phone (604) 726-1252 Cell (604)817-4131 Fax (604) 516-7712	mikeb@leaderfishing.com
Brian Dickens	1130 Robertson Blvd, Parksville, B.C. V9P 1Y2	Phone (250) 248-1018 Fax (250) 954-1310	bdickens@shaw.ca
David Fiddler	121 Anton Road Nanaimo BC, V9V 1G3	Phone (250) 726-2976 Cell (250) 726-7936 Fax (250) 726-2886	knight_dragon@shaw.ca
Ron Gorman	6648 Hersham Avenue, Burnaby, B.C.	Phone (604) 813-2693 Fax (604) 525 1943	lgorman@shaw.ca
Gary Krause	1631 11 Avenue E, Prince Rupert, B.C, V8J 2X5	Phone (250) 627-1957 Fax (250) 624-3886	phantom@citytel.net
Shannon Mann	2295 Commissioner Street Vancouver, B.C. V5L 1A4	Phone (604) 215-7909 Fax (604) 215-7878	shannonmann@marineseafoods.com
John Roach	1086 163A Street Surrey, B.C V4A 8B3	Phone (604) 536-2248 Cell (604) 880-2234 Fax (604) 535-4059	jrfishing@shaw.ca
Bob Morreau	1417 133A Street, Surrey, B.C. V4A 6M2	Phone (604) 534-1760 Fax (604) 534-2460	highline@telus.net
Shawn Murray	1935 Marten Avenue, Comox, B.C. V9M 2J9	Phone (250) 339-6135 Fax (250) 339-9735 phone first	Shawnjmurray@hotmail.com

Theresa Williams	Fisher Bay Seafoods 10230 Bowerbank Rd Sidney, B.C. V8L 3X4	Phone (250) 656-8157 Fax (250) 656-8159	obanventures@shaw.ca
Dave Dawson	Ocean Fisheries Ltd. 2305 Commissioner St. Vancouver, B.C. V5L 1A4	Phone (604) 254-5751 Fax (604) 254-0957	ddawson@oceanfish.com
Barry McMillan	J.S. McMillan Fisheries Ltd. 2199 Commissioner St. Vancouver, B.C. V5L 1A4	Phone (604) 216-3040 Fax (604) 255-4600	bmcm@jism.bc.ca
Jamie Robertson (Opt B Rep)	4593 River Road W Delta, B.C., V4K 1R9	Phone (604) 946-6710 Cell (778) 862-8488 Fax (604) 946-6702	madone@telus.net
Tony McDermid (Opt B Rep)	101-9650 First Street Sidney, B.C. V8L 3C9	Phone (250) 654-0392 Cell (250) 213-3403 Fax (250) 656-9396	
Charlie Minns	GDA 356 Centennial Parkway Delta, B.C. V4L 1K7	Phone (604) 943-3320 Cell (604) 880-1425 Fax (604) 943-1166	cmimms@dccnet.com
Brian Mose	Deep Sea Trawlers Association. (DSTA) 3516 Goodrich Rd Nanoose Bay, B.C. V9P 9K3	Phone (250) 752-2931 Fax (250) 752-1032	bmose@nanaimo.ark.com
E. Irvin Figg	UFAWU/CAW 1st Floor, 326 12th Street. New Westminster, B.C. V3M 4H6	Phone (604) 519-3630 Fax (604) 524-6944	irvin@ufawu.org
Bruce Turris	Canadian Groundfish and Research Conservation Society 333 Third St, New Westminster, B.C., V3L 2R8	Phone (604) 524-0005 Fax (604) 524-0150	bruce_turris@telus.net
Dennis Chalmers	Province of BC, Ministry of Environment (MoE) PO. Box 9120 Stn. Prov. Gov't, Victoria B.C. V8W 9B4	Phone (250) 714-9887	Dennis.Chalmers@gov.bc.ca
Sandy Argue (Alternate for Dennis Chalmers)	Province of BC, Ministry of Environment, (MoE) PO. Box 9120 Stn. Prov. Gov't, Victoria B.C. V8W 9B4	Phone (250) 472-0475 Fax (250)356-0358	sandy.argue@argusbioresources.ca
Barry Ackerman DFO - Chair	Pacific Region Trawl Co-ordinator, DFO - RHQ #200-401 Burrard St. Vancouver, B.C. V6C 3S4	Phone (604) 666-3991 Cell (604) 240-9173 Fax (604) 666-8525	barry.ackerman@dfo-mpo.gc.ca

1.3. Sablefish Advisory Committee (SAC)

Name	Address	Phone	Email Address
Ron MacDonald (Co-Chair)	406 – 535 Howe Street Vancouver, BC V6C 2Z4	Phone (604) 915-9117 Cell (604) 505-2237 Fax (604) 638-0116	rmacdonald@canadiansablefish.com
Adam Keizer (Co-Chair) – DFO	200 -401 Burrard Street Vancouver, BC V6C 3S4	Phone (604) 666-0192 Fax (604) 666-8525	adam.keizer@dfo-mpo.gc.ca
Chris Acheson	PO Box 663, Stn. Ganges Salt Spring Island, BC V8K 2W3	Phone (250) 537-9648 Cell (250) 537-0910 Fax (250) 537-9648	pacpro@telus.net
Bob Fraumeni	27 Erie Street Victoria, BC V8V 1P8	Phone (250) 383-7764 Cell (250) 361-6944 Fax (250) 384-5076	rghf@fasseafood.com
Alternate: Mike Derry	27 Erie Street Victoria BC V8V 1P8	Phone (250) 383-7764 Cell (250) 661-9616	mike@fasseafood.com
Erling Olsen	522 – 7 th Street, Unit 320 New Westminster, BC V3M 5T5	Phone (604) 516-7720 Cell (604) 329-4818 Fax (604) 516-7712	erling@leaderfishing.com
Alternate: John Lenic	3770 Bayridge Avenue West Vancouver, BC V7V 3S2	Phone (604) 904-9648 Fax (604) 905-7809	jalenic@telus.net
Bonnie Jones	Box 497 Sooke, BC V0S 1N0	Phone (250) 642-4842 Cell (250) 361-6268 Fax (250) 642-4852	Bonnie-jones@shaw.ca
Alternate: Tim Joys	#2 – 12211 1 st Avenue Richmond, BC V7E 3M3	Phone (604) 421-9939 Fax (604) 241-7805	kuulakai@telus.net
Gary Williamson	4629 River Road West Delta, BC V4K 1R9	Phone (604) 946-6507 Cell (604) 341-2977 Fax (604) 946-6507	rivercat@telus.net
Alternate: Henry Heggelund	Box 476 - 5879 Blythwood Rd Sooke, BC V9Z 1H4	Phone (250) 642-3316 Cell (250) 216-0395 Fax (604) 642-3076	hheggelund@shaw.ca
Blair Pearl	PO Box 200, 3147 Beach Ave Roberts Creek, BC V0V 1G0	Phone (604) 885-3189 Cell (604) 740-7451 Fax (604) 885-4881	bpearl@dccnet.com
Alternate: Tom Russell	PO Box 2382 Port Hardy, BC V0N 2P0	Phone (250) 949-8597 Fax (250) 885-4881	russellj@cablerocket.com
Brian Mose	641 Hollywood Road Qualicum Beach, BC V9K 1M3	Phone (250) 752-2931 Fax (250) 752-1032	bmose@nanaimo.ark.com
Chris Heras (Processor)	2115 Commissioner Street Vancouver, BC V5L 1A6	Phone (604) 738-5545 Cell (604) 216-0395 Fax (604) 738-5541	Chris_wws@telus.net
Alternate: Brad Mirau	1080 Skeena, Port Edward, BC V0V 1G0	Phone (250) 628-3227 Cell (250) 954-5807	aerobrad@citytel.net

Name	Address	Phone	Email Address
		Fax (250) 628-9311	
Special Advisors			
Rob Kronlund (DFO Biologist)	Pacific Biological Station 3190 Hammond Bay Road Nanaimo	Phone (250) 756-7108 Fax (250) 756-7053	Allen.kronlund@dfo-mpo.gc.ca
Sean Cox (SFU Biologist)	8888 University Drive Burnaby, BC V5A 1S6	Phone (778) 782-5778 Fax (604) 291-4968	spcox@sfu.ca
Frank Snelgrove (DFO Enforcement)	60 Front Street Nanaimo BC	Phone (250) 754-0202	Frank.snelgrove@dfo-mpo.gc.ca

1.4. Groundfish Hook and Line Advisory Committee (GHLAC)

Name	Address	Phone	Email Address
Greg Bolderson (Outside ZN)	939 McFeely Drive Qualicum Beach, B.C. V9K 2B7	Phone (250) 752-1314 Fax (250) 752-1344	greggb@shaw.ca
David Boyes (Outside ZN)	499 Powerhouse Road Courtenay, B.C. V9N 9L1	Phone (250) 338-2188 Fax (250) 338-2183	mcboyes@telus.net
Eric Carlson (Inside ZN)	P.O. Box 150 Onoway, Alberta T0E 1V0	Phone (780) 967-5266 Fax (780) 967-2774	sunridge@connect.ab.ca
Dan Edwards - Appointed (UFAWU and Aquatic Management Board)	Box 469 Ucluelet, B.C. V0R 3A0	Phone (250) 726-4316 Fax (250) 726-2379	danedwards@telus.net
Alvin Hui (Inside ZN)	1606 Hornby Street Vancouver, BC V6Z 2T4	Phone (604) 689-1608 Fax (604) 739-2821	tiarafisheries@hotmail.com
Ken Erikson (Outside ZN)	2378 Huband Road Courtenay, B.C. V9K 1S4	Phone (250) 338-6360 Fax (250) 338-2392	doreenerikson@shaw.ca
Michael Guns - Appointed (Lingcod)	390 Quayle Road Victoria B.C. V8X 3X1	Phone (250) 479-4159 Fax (250) 479-4186	a-mguns@shaw.ca
Mike Derry	4675 Kerryview Drive Victoria B.C. V9E 1J4	Phone (250) 598-8312 Fax (250) 384-5076	mike@fasseafood.com
Henry Heggelund (Outside ZN)	P.O. Box 476 Sooke, B.C. V9Z 1H4	Phone (250) 642-3316 Fax (250) 642-3076	hheggelund@shaw.ca
Terry Henshaw (Outside ZN)	9155 Hardy Road Delta B.C. V4C 7V8	Phone (604) 581-9230 Cell (604) 341-3809 Fax (604) 581-1248	Angelinah02@hotmail.com
John Koolman (Outside ZN)	2286 Henlym Drive Sooke, B.C. V0S 1N0	Phone (250) 642-4770 Fax (250) 642-4902	koolmanent@shaw.ca

Name	Address	Phone	Email Address
Walter Lancashire - Appointed (Lingcod)	1450 Nursery Road Campbell River, B.C. V9W 4V5	Phone (250) 287-9229 Fax (250) 287-9202	walterlancashire@hotmail.com
Dave Renwall - Appointed (Dogfish)	8465 Founders Road Port Hardy, B.C V0N 2P0	Phone (250) 902-2235	reefraider1@gmail.com
Jim Nightingale (Outside ZN)	4420 Maple Lane Ladner, B.C. V4K 2Z5	Phone (604) 946-0947 Fax (604) 946-0947	jnightingale@dccnet.com
Michael Renwick - Appointed (Dogfish)	7963 Webster Road Delta, B.C. V4G 1E4	Phone (604) 952-4333 Fax (604) 952-4234	mrenwick@telus.net
Jake Vanderheide (Outside ZN)	7395 Constitution Place Duncan, B.C. V9L 5W7	Phone (250) 709-2336 Fax (250) 709-2364	ridinglight@uniserve.com
Herb Van Grootel (Outside ZN)	41 - 50 th Street Delta, B.C. V4M 2S5	Phone (604) 948-2831 Fax (604) 948-2741	herb.vg@telus.net
Chuck McCarthy Nuu-Chah-Nulth Tribal Council	PO Box 340 Port Alberni, BC V9Y 7M2	Phone (250) 745-3333 Fax (250) 745-3332	cuagain964@hotmail.com
Dennis Chalmers Appointed (Ministry of Environment – Oceans and Marine Fisheries Branch)	PO Box 9309 Stn. Prov. Govt. Victoria, BC V8W 9N1	Phone (250) 953-3401 Cell (250) 714-9887 Fax (250) 953-3401	dennis.chalmers@gov.bc.ca
Rob Tadey DFO Chair	A/Hook and Line Co-ordinator DFO - RHQ #200-401 Burrard St Vancouver, B.C. V6C 3S4	Phone (604) 666-3279 Fax (604) 666-8525	robert.tadey@dfompo.gc.ca

2. COMMERCIAL INDUSTRY CAUCUS (CIC)

The Groundfish Industry in conjunction with Fisheries and Oceans Canada and the Province of British Columbia established an independent advisory committee called the “Commercial Industry Caucus (CIC)” to discuss and formulate advice on issues that cross all sectors in the development and implementation of the Groundfish Integration Fishery. Members of CIC are selected by each of the DFO Groundfish Advisory Committees and Fishing sectors to represent that sectors interests. The general mandate of CIC is provide a forum for open discussion 12 0 4 Tm(ndate of oopen discussion42f441(ulate)

Name	Address	Phone	Email Address
Michael Renwick Appointed (Dogfish)	7963 Webster Road Delta, B.C. V4G 1E4	Phone (604) 952-4333 Fax (604) 952-4234	mrenwick@telus.net
Dave Dawson Trawl Processor	2305 Commissioner Street, Vancouver, BC V5L 1A4	Phone (604) 254-5751	DDawson@oceanfish.com
Dave Renwall (Alternate)	P.O. Box 1572 Port Hardy B.C. V0N 2P0	Phone (250) 902-2235	reefraider1@gmail.com
Dan Edwards Appointed (UFAWU)	P.O. Box 469 Ucluelet, B.C. V0R 3A0	Phone (250) 726-4316 Fax (250) 726-2374	danedwards@telus.net
Eric Carlson (Inside ZN)	Box 150 Onoway, Alberta T0E 1V0	Phone (780) 967-5266 Fax (780) 967-2774	sunridge@connect.ab.ca
Herb Van Grootel (Outside ZN)	41 – 50 th Street Delta, B.C. V4M 2S5	Phone (604) 948-2831 Fax (604) 948-2741	herb.vg@telus.net
John Koolman (Outside ZN)	2286 Henlym Drive RR#3 Sooke, B.C. V0S 1N0	Phone (250) 642-4770 Fax (250) 642-4902	koolmanent@shaw.ca
Henry Heggelund (Alternate - Outside ZN)	P.O. Box 476 Sooke, B.C. V0S 1N0	Phone (250) 642-3316 Fax (250) 642-3076	hheggelund@shaw.ca
Jake Vanderheide (Halibut)	7395 Constitution Place Duncan, B.C. V9L 5W7	Phone (250) 709-2336 Fax (250) 709-2364	ridinglight@uniserve.com
David Boyes (Halibut)	499 Powerhouse Road Courtenay, B.C. V9N 9L1	Phone (250) 338-2188 Fax (250) 338-2183	mcboyes@telus.net
Lyle Pierce (Halibut)	472 Condor Comox B.C. V9M 1J7	Phone (250) 339 9508 Fax (250) 339 9568	l_pierce@shaw.ca
Walter Lancashire (Lingcod)	1450 Nursery Road Campbell River, B.C. V9W 4V5	Phone (250) 287-9229 Fax (250) 287-9202	walterlancashire@hotmail.com
Bob Burkosky (Lingcod)	1466 Memory Lane Qualicum Beach, BC V9K 2A9	Phone (250) 752-5247	rburkos@shaw.ca
Ron Macdonald (Sablefish)	406 – 535 Howe Street Vancouver, B.C. V6C 2Z4	Phone (604) 915-9117 Fax (604) 638-0116 Cell (604) 537-4375	rmacdonald@canadiansablefish.com
Chris Acheson (Sablefish)	P.O. Box 663 Ganges, B.C. V8K 2W3	Phone (250) 537-9649 Cell (250) 537-0910 Fax (250) 537-9648	pacpro@telus.net
Alvin Hui Inside ZN		Phone (604) 689-1608	tiarafisheries@hotmail.com
Aaron Laing CIC technician		Phone (604) 777-2002	aaron@laingmanagement.ca

Name	Address	Phone	Email Address
Mike Derry (Sablefish)	FAS Seafood 27 Erie Street , Victoria , BC V8V 1P8	Phone (250) 383-7764	mike@fasseafood.com
Brian Mose (Trawl GTAC)	Deep Sea Trawlers Association (DSTA) 641 Hollywood Road Qualicum Beach, B.C. V9K 1M3	Phone (250) 752-2931 Fax (250) 752-1032	bmose@nanaimo.ark.com
Bruce Turriss (Trawl GTAC)	Canadian Groundfish and Research Conservation Society 333 Third Street New Westminster, B.C. V3L 2R8	Phone (604) 524-0005 Fax (604) 524-0150	bruce_turriss@telus.net
Sandy Argue	Province of B.C., Ministry of Environment, (MoE) PO. Box 9120 Stn Prov Gov't Victoria B.C. V8W 9B4	Phone (250) 472-0475 Fax (250) 356-0358	sandy.argue@argusbioresources.ca
Alternate: Dennis Chalmers	Province of B.C., Ministry of Environment P.O. Box 9120 Stn, Provincial Government Victoria, B.C. V8W 9B4	Phone (250) 356-7642 Fax (250) 356-0358	Dennis.Chalmers@gov.bc.ca
Tamee Mawani Groundfish Resource Manager, DFO	Fisheries and Oceans Canada 200 – 401 Burrard Street Vancouver, BC V6C 3S4	Phone (604) 666-9033 Fax (604) 666-8525	Tameezan.mawani@dfo-mpo.gc.ca