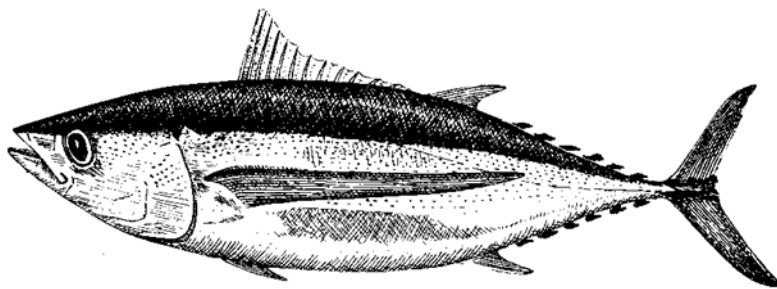


PACIFIC REGION

INTEGRATED FISHERIES MANAGEMENT PLAN

April 1, 2021 – March 31, 2022

PACIFIC TUNA



Albacore Tuna (*Thunnus alalunga*)

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INDEX OF WEB-BASED INFORMATION

FISHERIES AND OCEANS CANADA – GENERAL INFORMATION

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TWITTER: DFO Pacific: [@DFO_Pacific](https://twitter.com/DFO_Pacific) / En Français: [@MPO_Pacifique](https://twitter.com/MPO_Pacifique)

ACTS, ORDERS, AND REGULATIONS: <http://www.dfo-mpo.gc.ca/acts-loi-eng.htm>

Canada Shipping Act, Coastal Fisheries Protection Act, Department of Fisheries and Oceans Act, Financial Administration Act, Fish Inspection Act, Fisheries Act, Fisheries Development Act, Fishing and Recreational Harbours Act, Freshwater Fish Marketing Act, Navigation Protection Act, Oceans Act

REPORTS AND PUBLICATIONS: <http://www.dfo-mpo.gc.ca/reports-rapports-eng.htm>

Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act*, Audit and Evaluation Reports - Audit and Evaluation Directorate Canadian Code of Conduct for Responsible Fishing Operations, Departmental Performance Reports, Fisheries Research Documents, Standing Committee's Reports and Government responses, Sustainable Development Strategy.

LIBRARY CATALOGUE: <https://science-libraries.canada.ca/eng/fisheries-oceans/>

Fisheries and Oceans Canada online library catalogue

PACIFIC REGION – GENERAL

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General information, Area information, Latest news, Current topics

POLICIES, REPORTS AND PROGRAMS: <http://www.pac.dfo-mpo.gc.ca/fm-gp/species-especies/salmon-saumon/pol/index-eng.html>

Reports and Discussion Papers, New Directions Policy Series, Agreements

OCEANS PROGRAM: <http://www.pac.dfo-mpo.gc.ca/oceans/index-eng.html>

Integrated Coastal Management, Marine Protected Areas, Marine Environmental Quality; Oceans Outreach, Oceans Act

PACIFIC REGION – FISHERIES MANAGEMENT

MAIN PAGE: <http://www.dfo-mpo.gc.ca/fm-gp/index-eng.htm>

Commercial Fisheries, New and Emerging Fisheries, Recreational Fisheries, Maps, Notices and Plans

ABORIGINAL FISHERIES STRATEGY: <http://www.pac.dfo-mpo.gc.ca/abor-autoc/index-eng.html> or <http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/index-eng.htm>

Aboriginal Fisheries Strategy (AFS) principles and objectives, AFS agreements, Programs, Treaty Negotiations

AQUACULTURE MANAGEMENT: <http://www.pac.dfo-mpo.gc.ca/aquaculture/index-eng.html>

The new federal regulatory program for aquaculture in British Columbia, program overview and administration, public reporting, and aquaculture science

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

Fishery Regulations and Notices, Fishing Information, Recreational Fishery, Policy and Management, Contacts, Current BC Tidal Waters Sport Fishing Guide and Freshwater Supplement, Rockfish Conservation Areas, Shellfish Contamination Closures, On-line Licencing

COMMERCIAL FISHERIES: <https://www.pac.dfo-mpo.gc.ca/fm-gp/index-eng.html>

Links to Groundfish, Herring, Salmon, Shellfish and New and Emerging Fisheries homepages;

Selective Fishing, Test Fishing Information, Fishing Areas, Canadian Tide Tables, Summary Fishery Management Plans, Commercial Fishery Notices (openings and closures).

FISHERIES NOTICES: <http://www-ops2.pac.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?>

Want to receive fishery notices by e-mail? If you are a recreational sport fisher, processor, multiple boat owner or re-distribute fishery notices, register your name and/or company at the web-site address above. Openings and closures, updates, and other relevant information regarding your chosen fishery are sent directly to your registered email. It's quick, it's easy and it's free.

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

Contact information; Recreational Licencing Information, Commercial Licence Types, Commercial Licence Areas, Licence Listings, Vessel Information, Vessel Directory, Licence Statistics and Application Forms.

PACIFIC REGION – POLICY AND COMMUNICATIONS

MAIN PAGE: <http://www.dfo-mpo.gc.ca/media/index-eng.htm>

Media Releases; Salmon Updates, Backgrounders, Ministers Statements, Publications; Contacts

CONSULTATION SECRETARIAT: <http://www.pac.dfo-mpo.gc.ca/consultation/index-eng.html>

Consultation Calendar, Policies, National, Partnerships, Fisheries Management, Oceans, Science and Habitat and Enhancement Consultations, Current and Concluded Consultations

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SARA species, SARA permits, Public Registry, Enforcement, Stewardship Projects, Consultation, Past Consultation, Indigenous people, Related Sites, For Kids, News Releases

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Science Divisions, Research Facilities, PSARC, International Research Initiatives

GLOSSARY AND LIST OF ACRONYMS

Abundance	Number of individuals in a stock or a population.
Age Composition	Proportion of individuals of different ages in a stock or in the catches.
ALBWG	The Albacore Working Group of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean.
Area and Subarea	Defined in Section 2 of the Pacific Fishery Management Area Regulations. A map of Pacific Fishery Management Areas is available at: http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/areas-secteurs/index-eng.htm
Biomass	Total weight of all individuals in a stock or a population.
Bycatch	The unintentional catch of one species when the target is another.
Canadian Science Advice – Pacific (CSAP)	The Pacific Regional body responsible for review and evaluation of scientific information on the status of living aquatic resources, their ecosystems, and on biological aspects of stock management.
Canadian Science Advisory Secretariat (CSAS)	A body that coordinates the peer review of scientific issues for DFO.
Committee on the Status of Endangered Wildlife in Canada (COSEWIC)	Committee of experts that assess and designate which wild species are in some danger of disappearing from Canada.
CPUE	Catch Per Unit Effort.
Designated service provider	A private sector company authorized by the Department to collect and collate information for the purpose of assisting vessel masters in meeting their conditions of licence with regards to reporting of information.
DFO	Department of Fisheries and Oceans (Canada).

Ecologically and Biologically Significant Area (EBSA)	An EBSA is an area that has particularly high Ecological or Biological Significance, and should receive a greater-than-usual degree of risk aversion in management of activities in order to protect overall ecosystem structure and function within the LOMA.
Encounter	An interaction between a marine mammal or sea bird and fishing gear.
Entanglement	An entanglement occurs when a marine mammal or sea bird is caught, ensnared in fishing gear or the infrastructure (nets) of an enclosure.
Exclusive Economic Zone (EEZ)	The sea area extending 200 nautical miles from the baseline of the territorial sea, within which the coastal state has the right to explore and exploit, and the responsibility to conserve and manage, both living and non-living resources.
Fishing Effort (Effort)	Quantity of effort using a given fishing gear over a given period of time.
Food, Social and Ceremonial (FSC)	A fishery conducted by Indigenous groups for food, social and ceremonial purposes.
High Seas	All parts of the seas that are not included in the EEZ, the territorial sea, or the internal waters of any state.
Inter-American Tropical Tuna Commission (IATTC)	The regional fisheries management organization which seeks to ensure the long-term conservation and sustainable use of tuna and tuna-like species and other species of fish taken by vessels fishing for tunas and tuna like species in the Eastern Pacific Ocean.
Indigenous Traditional Knowledge (ITK)	Knowledge that is held by, and unique to Indigenous peoples. It is a living body of knowledge that is cumulative and dynamic and adapted over time to reflect changes in the social, economic, environmental, spiritual, and political spheres of the Indigenous knowledge holders.
Interaction	Incidental mortality and serious injury (usually refers to marine mammals). This includes entanglements and collisions.

ISC	The International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean.
Landed Value	Value of the product when landed by the licensed vessel.
Landing	The part of the catch that is put ashore. Harvested animals transferred from a vessel to land.
lb	Imperial pound(s), which is equal to 0.45359237 kg.
Management Procedure	Repeatable processes for providing fisheries management advice. Comprised of assessment data, a particular assessment model, and harvest control rule
Management Strategy Evaluation (MSE)	The systematic determination of the expected performance of a fishery management system against a set of specified objectives. Allows for longer term decision making with management procedures and objectives that can be tested through simulations.
Maximum Sustainable Yield (MSY)	Largest average catch that can continuously be taken from a stock.
National Online Licensing System (NOLS)	The online licensing system that allows harvesters to complete licensing transactions with the Department over the Internet. This includes renewal of licences, payment of fees and printing of licence and licence conditions.
Pacific Fishery Licensing Unit (PFLU)	DFO unit that processes and issues fishery licence applications through the NOLS. For more information on the PFLU, please visit: http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/index-eng.htm
Population	Group of individuals of the same species, forming a breeding unit, and sharing a habitat.
Precautionary Approach	In Fisheries Management, the principle of being cautious when scientific knowledge is uncertain, and not using the absence of adequate scientific information as a reason to postpone action or failure to take action to avoid serious harm to fish stocks or their ecosystem.

Recruitment	Amount of individuals becoming part of the exploitable stock e.g. that can be caught in a fishery. The process whereby young animals are added to a fishable stock or population.
Research Survey	Survey at sea, on a research vessel, allowing scientists to obtain information on the abundance and distribution of various species and/or collect oceanographic data. E.g. bottom trawl survey, plankton survey, hydroacoustic survey, etc.
RFMO	Regional Fisheries Management Organization (international).
Sampling Program	A program in which representative samples of animals are collected for the calculation of parameter estimates that describe such things as weight, length or age within the general population.
Spawner	Sexually mature individual.
Spawning Stock	Sexually mature individuals in a stock.
Species at Risk Act (SARA)	The Act is a federal government commitment to prevent wildlife species from becoming extinct and secure the necessary actions for their recovery.
Stakeholders	Individuals or groups with an interest in a particular fishery or activity.
Stock	Describes a population of individuals of one species found in a particular area, and is used as a unit for fisheries management.
Stock Assessment	Scientific evaluation of the status of a species belonging to a same stock within a particular area in a given time period. Results of analyses of fisheries and research data used to evaluate the effects of fishing on a stock or population and to predict the reactions of populations to alternative management choices.
Stock Assessment Area	Stock assessment groupings used since 1993 by the PSARC to monitor, assess, forecast and harvest herring.
Tonne	Metric tonne, which is 1000kg or 2204.6 lb.

Total Allowable Catch (TAC)	The amount of catch that may be taken from a stock, determined by analytical procedures, to achieve management objectives.
Traditional Ecological Knowledge (TEK)	A cumulative body of knowledge and beliefs handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.
Western and Central Pacific Fisheries Commission (WCPFC)	The regional fisheries management organization which seeks to ensure the long-term conservation and sustainable use of highly migratory fish stocks in the western and central Pacific Ocean in accordance with the 1982 United Nations Convention on the Law of the Sea and the 1995 UN Fish Stocks Agreement.
Year-class	Individuals of a same stock born in a particular year. Also called "cohort".

FOREWORD

The purpose of this Integrated Fisheries Management Plan (IFMP) is to identify the main objectives and requirements for the Albacore Tuna 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, the Department) 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.

I OVERVIEW

I.1 Introduction

This Integrated Fisheries Management Plan (IFMP) for Pacific Tuna covers the period from April 1, 2021 to March 31, 2022.

This IFMP provides a broad context to the management of the Pacific Albacore Tuna fishery and the interrelationships of all fishing sectors involved in this fishery. Section 2 considers stock assessment, science and traditional knowledge, while Sections 3 and 4 consider the social, cultural, and economic values and performance of the fishery, as well as broader management issues. Section 5 describes oceans and ecological considerations relevant to the fishery. Section 6 outlines objectives for the management of the fishery. Section 7 describes allocation and management procedures. Finally, Section 8 outlines how the performance of the fishery will be evaluated with regards to the objectives described in Section 6.

The appendices provided with the IFMP include the sector-specific fishing plans and additional information that may be updated annually.

I.2 Changes from the Previous IFMP

The present document contains updates to information presented in the previous IFMP. Specific selected changes are highlighted briefly here.

Change of Title from “Pacific Albacore Tuna” to “Pacific Tuna” and Inclusion of a Commercial Harvest Plan for Non-Albacore Tuna Species in the High Seas

Previous versions of this IFMP have specified Pacific Albacore Tuna in the title and have provided fisheries management information on this species only. While the current document remains primarily focused on Canada’s Pacific Albacore Fishery, the title of the present document has been changed to “Pacific Tuna” and some information non-Albacore species has been added. The information on non-Albacore species included in the present IFMP is very limited; the intention is for this to be expanded in future years to reflect Canada’s evolving participation in fisheries for these species.

Updated Stock Assessment for North Pacific Albacore Tuna

An updated stock assessment for North Pacific Albacore Tuna (*Thunnus alalunga*) was completed by the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean in July, 2020. The assessment found that the stock is likely not overfished

relative to the limit reference point adopted by the international body responsible for the stock¹ and the fishing intensity during the period evaluated was likely at or below all seven potential reference points examined. More information is available in Appendix 3.

1.3 Background

The Pacific Canadian tuna fishery is focused on highly migratory Albacore Tuna. Canadian harvesters have been fishing Albacore Tuna (*Thunnus alalunga*) since the late 1930's in the North Pacific and since the 1980's in the South Pacific (Ware and Yamanaka 1991, Shaw and Argue 2000). Harvest of Pacific Albacore Tuna is conducted with hook and line (jig) gear. Net gear is not permitted. Harvesters typically troll for tuna with artificial lures towed on or just below the surface of the water behind vessels travelling at approximately 6 knots. Recent practice in the fishery has not included the use of longline gear and, since 2019, longline gear has been expressly prohibited for harvest of Albacore Tuna in the Canadian EEZ or in the high seas under category CT licences.

Canadian harvesters have traditionally not participated in fisheries for tuna species other than Albacore Tuna in the Pacific Ocean. Nonetheless, (see section 1.7 below), Canada benefits from access to these resources, through the two international organizations responsible for conservation and management of Pacific tuna stocks. In particular, there are opportunities for Canadian harvesters to engage in fisheries for Bigeye Tuna, Yellowfin Tuna, and Skipjack Tuna. These stocks are actively fished by harvesters from various other states.

1.4 Type of Fishery and Participants

Indigenous People of British Columbia

In the 1990 Sparrow decision, the Supreme Court of Canada found that where an Aboriginal group has an Aboriginal right to fish for food, social and ceremonial (FSC) purposes, it takes priority, after conservation, over other uses of the resource. Fisheries are authorized via a Communal Licence issued by the Department under the *Aboriginal Communal Fishing Licences Regulations*.

In addition to fishing opportunities for FSC purposes and domestic purposes for treaty rights for the Maa-nulth First Nation (as of April 1, 2011) and the Tla'amin First Nation (as of April 5,

¹ The Northern Committee of the Western and Central Pacific Fisheries Commission manages the stock together with the Inter American Tropical Tuna Commission. The Northern Committee adopted a biomass-based limit reference point in 2014 of 20% of the current spawning stock biomass (<https://www.wcpfc.int/harveststrategy>)

2016), DFO acknowledges that in *Ahousaht Indian Band et al. v. Canada and British Columbia*, the courts have found that five Nuu-chah-nulth First Nations located on the West Coast of Vancouver Island – Ahousaht, Ehattesaht, Hesquiaht, Mowachaht/Muchalaht, and Tla-o-qui-aht—have aboriginal rights to fish for any species of fish within their Fishing Territories and to sell that fish, with the exception of geoduck.

Recreational

Recreational tuna fishing is permitted coast wide, subject to specific area closures. Access to the tuna fishery is limited by vessel size, equipment and capacity to carry sufficient ice to properly handle catch.

A British Columbia Tidal Waters Sport Fishing Licence is required for the recreational harvest of all species of fish in tidal waters. Tidal Waters Sport Fishing Licences are available online at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/index-eng.htm>.

Information on the recreational tuna harvest is limited and the Department is working to improve catch data collection for this sector.

Commercial

Canadian vessels may fish for tuna species on the high seas under the authority of either a CT or a Section 68 (high seas only) licence. Commercial tuna fishing in Canadian EEZ occurs either under the authority of a vessel-based Category CT licence for Canadian vessels or under the authority of an EEZ Pacific Albacore Tuna Fishing Licence for U.S. Vessels. Since 2013, 45 Canadian vessels each year have been eligible for a USA68 licence permitting fishing for Albacore Tuna in the USA EEZ. Approximately 110-160 Canadian vessels harvest Pacific Albacore Tuna annually.

1.5 Location and timing of Fishery

Harvest of Pacific Albacore Tuna occurs in open waters, generally a significant distance from shore. The majority of the reported Canadian commercial catch since 2007 has occurred along the North American coast and adjacent waters outside the EEZs. Some larger vessels in the Canadian fleet harvest further into the high seas and occasionally into the Western Pacific Ocean. Between 1996 and 2007 a small number of Canadian vessels fished in the South Pacific Ocean and reported catches ranging from 38 to 313 tonnes of South Pacific Albacore; however; there has been no reported Canadian activity or catch in the South Pacific Ocean since 2007. In general, Canadian effort in far offshore areas gradually dwindled in the late 1990s and early 2000s; since 2007 Canadian vessels have rarely fished west of 150°W latitude.

The commercial fishery for North Pacific Albacore Tuna in Canadian waters and the high seas takes place primarily from July to September, but can start earlier and run later depending on the migration the species and the oceanic conditions that support this. Harvest of Albacore tuna by Canadian vessels in US waters is permitted from June 15 to September 15 each year, in accordance with the fishing regime under the Canada-US Tuna Treaty.

Harvest of Pacific Albacore on the high seas of the South Pacific primarily occurs from December through March. Harvest of other Pacific tuna species in the high seas may occur throughout the year, depending on species and location.

Recreational harvest of North Pacific Albacore Tuna is possible between June and October, but is typically limited to August and September. This fishery occurs most commonly along the west coast of Vancouver Island and Haida Gwaii, along the edge of the near shore shelf.

1.6 Fishery Characteristics

Indigenous People of British Columbia

Tuna fishing for Food, Social, and Ceremonial (FSC) purposes is may be authorized on request. Tuna fishing may also be permitted through the Maa-nulth Harvest Document, or through other treaty-related mechanisms.

Recreational

Sport fishing for Albacore Tuna occurs off the west coast of Vancouver Island and Haida Gwaii in late summer. Surface and near surface troll gear by rod and reel or hand line are used by recreational harvesters in a similar fashion to that employed in the commercial fishery. Some anglers utilize live bait and jigs when sufficient numbers of tuna are present.

Commercial

Canadian vessels harvesting tuna commercially in the Canadian and USA EEZs are generally between 10m and 19m in length; USA-flagged vessels harvesting in the Canadian EEZ, and Canadian vessels harvesting in the high seas are somewhat larger on average.

The Canadian high seas fleet typically have crews of two to four people, can remain at sea for several weeks or months and are equipped with larger freezers than smaller, coastal vessels.

Fishing activity is dependent on price, ocean and weather conditions, fuel prices, and availability of Albacore Tuna. Fishing effort is influenced by the dynamics of other commercial fisheries, particularly the salmon fishery. Effort in the Canadian coastal fishery normally peaks in August and September, after the salmon troll season.

Catch from Canadian vessels is primarily sold into the high-quality frozen tuna market. Harvesters bring fish aboard live, after which it is quickly bled and then frozen at sea in blast freezers. Catch is landed frozen and purchased for distribution to domestic and international consumption as sashimi and other premium-grade products.

Specific information for commercial fisheries is provided in Appendices 6-9.

I.7 Governance

Canada has obligations to manage its fisheries sustainably through domestic acts and regulations as well as through international instruments and organizations. As Albacore Tuna is a highly migratory species, policies and conservation measures are primarily developed at an international level and then implemented by DFO within the framework of Canada's domestic legislation and regulations.

Additionally, Albacore Tuna harvest and landing by Canadian vessels in the USA EEZ and by USA vessels in the Canadian EEZ is governed by the *Treaty between the Government of the United States of America and the Government of Canada on Pacific Coast Albacore Tuna Vessels and Port Privileges* (the Canada-USA Tuna Treaty).

National

Management of Pacific Albacore Tuna is directed by the *Fisheries Act* and other acts and regulations including:

- The *Pacific Fishery Management Area Regulations*,
- The *Fishery (General) Regulations* and the *Pacific Fishery Regulations, 1993*,
- The *Aboriginal Communal Fishing Licence Regulations*,
- The *Maa-nulth First Nations Final Agreement Act*,
- The *Tla'amin Final Agreement Act*,
- The *British Columbia Sport Fishing Regulations*,
- The *Oceans Act*, and,
- The *Species at Risk Act*.

These documents are available on the Internet at: <http://www.dfo-mpo.gc.ca/acts-loi-eng.htm>.

In addition, the 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.
- Guidance for the Development of Rebuilding Plans under the Precautionary Approach Framework: Growing Stocks out of the Critical Zone
- Policy on Managing Bycatch
- Strategic Framework for Fishery Monitoring and Catch Reporting in the Pacific Fisheries
- Ecological Risk Assessment Framework (ERAF) for Coldwater Corals and Sponge Dominated Communities

For more information on the Sustainable Fisheries Framework, please visit: <http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/overview-cadre-eng.htm>

The national Fishery Monitoring Policy is available at: <http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/fishery-monitoring-surveillance-des-peches-eng.htm>.

International

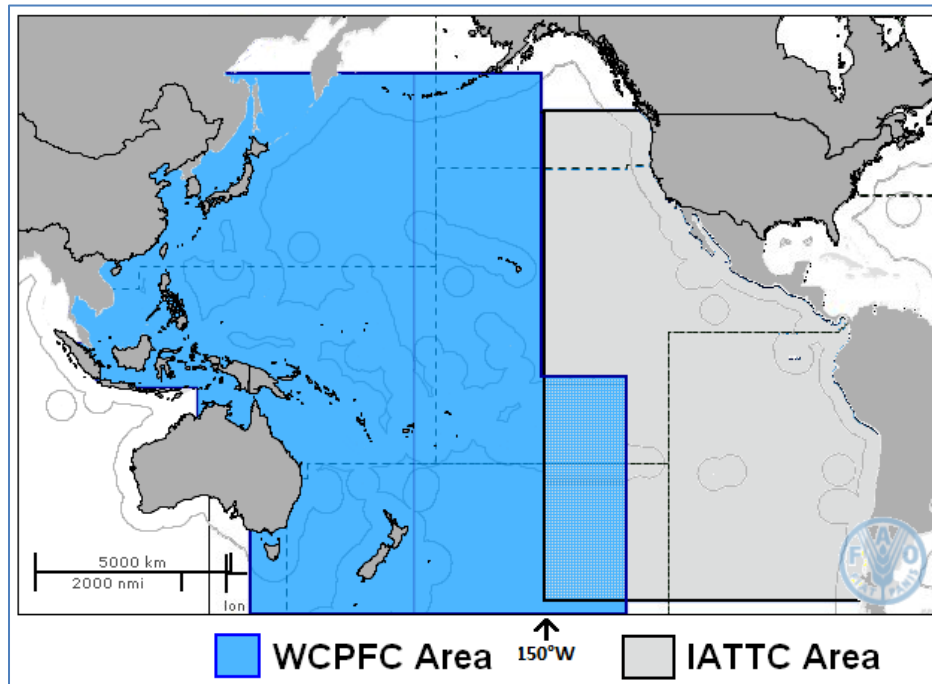
Widespread and growing concern over the state of the world's commercial fisheries, many of which suffer from resource over-exploitation and fleet over-capacity, has led to international agreements that affect the conduct and management of Albacore Tuna fisheries. Of particular importance is the United Nations (UN) Straddling and Highly Migratory Fish Stocks Agreement (UNFSA). The UNFSA, which Canada ratified in August 2001, entered into force on December 11, 2001. Under UNFSA, Canada has an obligation to take measures to ensure that vessels flying its flag that harvest on the high seas comply with the conservation and management measures of relevant Regional Fisheries Management Organizations (RFMOs), and that they do not undermine the effectiveness of such measures. The relevant RFMOs for Pacific Albacore Tuna are the Inter-American Tropical Tuna Commission (IATTC) and the Western and Central Pacific Fisheries Commission (WCPFC).

The IATTC Convention Area consists of waters of the Pacific Ocean east of 150°W that lie between 50°N and 50°S. Canada applies resolutions adopted by the IATTC throughout its territorial waters. More information is available on the IATTC website (<http://www.iattc.org/HomeENG.htm>).

The WCPFC Convention Area encompasses the Western and Central Pacific Ocean, generally west of 150°W. The WCPFC is a consensus based management organization. Conservation and

Management Measures adopted by the WCPFC apply to all Canadian vessels fishing for tuna in this area. More information is available on the WCPFC website (<http://www.wcpfc.int/>).

Figure 1: IATTC and WCPFC Convention Areas



Additionally, the International Scientific Committee (ISC) provides scientific advice regarding the status of tuna stocks and bycatch species in the North Pacific Ocean to both the IATTC and WCPFC. More information is available on the ISC website (<http://isc.fra.go.jp/>).

Canada has numerous obligations related to the management of Pacific Albacore Tuna which are a result of IATTC and WCPFC resolutions. These obligations include specifying and enforcing certain requirements for Canadian tuna harvesting vessels, which is often done through conditions of licence.

Other international agreements that Canada is committed to include the:

- Food and Agriculture Organization (FAO) Code of Conduct for Responsible Fisheries;
- FAO Compliance Agreement;
- International Plan of Action (IPOA) for the Management of Fishing Capacity;
- FAO IPOA to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing;
- IPOA on Reducing Incidental Catch of Seabirds;
- IPOA for the Conservation and Management of Sharks;
- UN Compliance Agreement; and the,

-
- UN General Assembly resolutions.

As well as the *Treaty between the Government of Canada and the Government of the United States of America on Pacific Albacore Tuna Vessels and Port Privileges* (described below).

Canada-USA Pacific Albacore Tuna Treaty

Fishing for Albacore Tuna by Canadian fishing vessels in USA fisheries waters is governed by the *Treaty Between the Government of Canada and the Government of the United States of America on Pacific Albacore Tuna Vessels and Port Privileges* (the Canada-USA Tuna Treaty). Under this treaty, Canadian and USA harvesters may fish Pacific Albacore Tuna in the other country's EEZ and may land Albacore Tuna at designated ports in the other country. This treaty also provides for the exchange of catch, effort and scientific information in order to inform management decisions and better understand the Albacore Tuna stocks that migrate off the west coast of North America.

The Canada-USA Tuna Treaty was established in 1981 and was initiated by the USA to ensure that their fleet had access to Albacore Tuna in Canadian waters after the implementation of the EEZs in the late 1970s. Limitations on fishing effort were first introduced through an amendment to the treaty in 2002.

DFO introduced a separate licence for Canadian vessels fishing in USA waters (the USA68 licence) in 2003. In 2004, only vessels meeting specific criteria were issued this licence and effort was limited to 680 vessel fishing months. In 2005, a licence limitation regime was adopted which considered past participation before and after a control date of April 15, 2000. This limitation regime provided priority access to the Canadian vessels most consistently active in the USA EEZ.

Vessels on the 2005 eligibility list needed to have been commercially licensed as of December 31, 2004, have recorded Albacore Tuna catch in USA waters between 1995 and 1999, and have continued participation between 2000 and 2002. The Department then ranked the vessels based on participation and catch history, resulting in an eligibility list of 175 vessels. In 2005, an independent licence appeal process was initiated as the final stage in the licence limitation program. The Albacore Tuna Review Committee reviewed 58 appeals, approving 23 and denying 35; this resulted in a final eligibility list of 179 vessels.

In 2008, Canadian and USA officials signed amendments to the Treaty which included a defined fishing season of 4.5 months (June 15 to October 31) with in-season licence transfers (vessel replacements) prohibited except under extraordinary circumstances. As part of the revised 2008 Treaty, vessels ranked from 1-110 on the eligibility list of 179 vessels were permitted to harvest

tuna in the USA EEZ until the end of the 2011 season. By June 1 each year, the list of 110 authorized vessels was forwarded to USA officials. From 2009 to 2011, an average of 108 Canadian vessels entered the USA EEZ to harvest Albacore Tuna.

The revised 2008 Treaty expired on December 31, 2011 and discussions between Canada and the USA in late 2011 determined that further work was required before agreement could be reached on a new fishing regime. At those meetings, the USA government identified some concerns raised by their industry representatives, including the economic impact or benefit of the Treaty on USA coastal communities and harvesters, crowding on the fishing grounds in the USA EEZ, and the overall capacity of the Canadian tuna fleet. Canada tabled several proposals in order to address the concerns; however, the USA government advised that they would not be entering into an agreement for the 2012 season and reciprocal fishing and port access was suspended for that year.

Canada and the USA met again in February and April 2013 and were able to agree to a new fishing regime for the 2013 season. This regime included a shortened season for Canadian vessels fishing in the USA EEZ (from June 15 to September 15) and access to the USA EEZ being limited to the top 45 Canadian vessels on the USA68 eligibility list. The number of USA vessels permitted to access the Canadian EEZ was not limited beyond historical levels and USA vessels were allowed to fish in the Canadian EEZ from June 15 to October 31 and access Canadian ports from June 1 to December 31. Subsequent bilateral discussions have renewed this same regime through to December 31, 2022.

I.8 Consultation

DFO has a broad mandate, with the authority to regulate and enforce activities, develop policy, provide services and manage programs. To help ensure the Department's policies and programs are aligned with its vision and effectively address the interests and preferences of Canadians, DFO supports consultations that are transparent, accessible and accountable. DFO Pacific Region undertakes consultations in order to meet the duty to consult with First Nations, improve departmental decision-making processes, promote understanding of fisheries, oceans and marine transport issues, and strengthen relationships.

The Tuna Advisory Board (TAB) is the Department's primary consultative body which provides advice and recommendations on operational and policy issues related to the Pacific Albacore Tuna fishery. Stakeholders are encouraged to participate in the advisory process by expressing their interests and views through elected advisors or attending meetings as observers. Please refer to the list of TAB membership in Appendix 9.

I.9 Approval Process

This plan is approved by the Regional Director General for the Pacific Region.

2 STOCK ASSESSMENTS AND SCIENCE

2.1 Biological Synopsis

Albacore Tuna (*Thunnus alalunga*) are one of six abundant, widely distributed, and economically important tuna species in the Pacific Ocean. There are separate stocks of Albacore in the North and South Pacific Oceans; biological and tagging information provide evidence that little or no mixing of these stocks occurs across the equator. Mature Albacore from the North Pacific stock spawn in tropical and subtropical waters of the Central and Western Pacific Ocean from 10° to 25° N latitude, between Hawaii and Taiwan/Philippines. Immature Albacore disperse from the spawning area northward and then some fish move eastward across the Pacific in surface waters where they recruit into jig and pole and line fisheries at 2 years of age. Albacore in the jig and pole and line catches in the Eastern Pacific Ocean range in size from 4 kg to 15 kg and two to four years of age. About half of the North Pacific Albacore mature at five years and all albacore are mature by six years of age. Mature Albacore inhabit subtropical areas in the Central and Western Pacific Ocean and are not part of the stock component that annually migrates into the Eastern Pacific Ocean.

Biological synopses for non-Albacore species are not included here, but may be accessed through the stock assessment information provided in Appendix 3.

2.2 Ecosystem Interactions

North Pacific Albacore are found in the epipelagic zone of sub-tropical and temperate waters of the open ocean and are associated with transition zone chlorophyll fronts as this is an area of sharp temperature changes (fronts) and high primary production, which attracts prey species. Albacore maintain a fast, continuous swimming lifestyle and are opportunistic predators, feeding primarily on fish. Small schooling pelagic species such as sardine (*Sardina pilchardus*, *Sardinops sagax*), anchovy (*Engraulis spp.*), and mackerel (*Scomber spp.*, *Trachurus spp.*) are the most common fish encountered in the diet of Albacore in all oceans. Along the west coast of North America, Pacific Hake (*Merluccius productus*), Pacific Saury (*Cololabis saira*), Northern Anchovy (*Engraulis mordax*) and squids are important prey in the diet of juvenile Albacore while sardine (*S. sagax*) are not important. Adult Albacore have few predators, although they occasionally may be preyed on by large marine mammals, sharks, and billfishes.

Trolling operations are carried out at or close to the surface of the ocean and catches of non-target fish species, and incidentally caught turtles, marine mammals and seabirds are generally negligible in troll fisheries world-wide. Trolling gear does not make contact with the seabed and

contact with the epipelagic zone is minimal because of the nominal dimensions of the fishing gear. Incidental catch reported in the Canadian North Pacific Albacore fishery includes Skipjack Tuna (*Katsuwonus pelamis*), Pacific Bluefin Tuna (*Thunnus orientalis*), Dolphinfish or Mahi-Mahi (*Coryphaena hippurus*), Yellowtail (*Seriola lalandi*), Blue Shark (*Prionace glauca*) and Shortfin Mako Shark (*Isurus oxyrinchus*). Species which have no commercial value may be returned to the sea alive immediately after hooking, as fish are caught individually. Barbless hooks are commonly used, so stress and injuries can be kept to a minimum.

2.3 Precautionary Approach

The Department follows the Sustainable Fisheries Framework (SFF) – a toolbox of policies for DFO and other interests to sustainably manage Canadian fisheries in order to conserve fish stocks and support prosperous fisheries. The SFF includes a decision-making framework incorporating a precautionary approach to commercial, recreational, and food-social-ceremonial fishing (<http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/precaution-eng.htm>).

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 action or failure to take action to avoid serious harm to fish stocks or their ecosystem. This approach is widely accepted internationally as an essential part of 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.

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. A key component of the Precautionary Approach Framework requires that when a stock has declined to the Critical Zone, a rebuilding plan must be in place with the aim of having a high probability of the stock growing out of the Critical Zone within a reasonable timeframe.

More information related to the precautionary approach is available at: <http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/precautionary-precaution-eng.htm>

2.4 Science Research and Other Activities

The Albacore Working Group (ALBWG) of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) is the primary body for North Pacific Albacore Tuna science. Canada is a member of the ISC and scientists from Fisheries and Oceans Canada are part of the ALBWG along with scientists from Japan, Taiwan, USA, Mexico, Korea, the Inter-American Tropical Tuna Commission (IATTC), and the Secretariat of the Pacific Community (SPC).

The ALBWG has noted some important sources of uncertainties in the Albacore stock assessment due to the lack of sex-specific size or growth data, shortened modeling period, and simplified treatment of the spatial structure of north Pacific Albacore population.

The ALBWG has identified and prioritized some research needs. The top six priorities are: (1) further investigation of sex-specific growth; (2) evaluation of the use of Japan longline juvenile index to represent juvenile Albacore abundance trends instead of the use of the Japan pole-and-line index; (3) investigating ways of resolving the data conflict issue when incorporating the data in the early period (1966-1992) into the modelling process; (4) evaluation of sampling protocols and accuracies of historical and current size frequency data for all fleets; (5) standardization of size composition data to the CPUE index they represent; (6) collection of high quality samples for development of genetic sex markers.

2.5 Stock Assessments

Stock assessments for Albacore Tuna in the North Pacific Ocean are prepared approximately every three years by the ALBWG. The most recent stock assessment was completed in July 2020. In this assessment the ALBWG concluded that the North Pacific Albacore stock is likely not overfished, and overfishing is likely not occurring.

A link to the full stock assessment for North Pacific Albacore Tuna as well as links to stock assessment information for other Pacific tuna species are provided in Appendix 3.

3 SOCIAL, CULTURAL, AND ECONOMIC IMPORTANCE

3.1 Indigenous

Tuna fishing for Food, Social, and Ceremonial (FSC) purposes is may be authorized upon request. Tuna fishing may also be permitted through the Maa-nulth Harvest Document, or through other treaty-related mechanisms. Indigenous harvesters are also involved in the commercial fishery.

3.2 Recreational

Over 340,000 anglers² enjoy recreational fishing in British Columbia's tidal waters in many ways and in all seasons. Sport fishing gives anglers access to the land and the rich natural environment. It is also important for the almost \$390 million in provincial Gross Domestic Product it generated in 2016 in BC communities, whether through tourist and local angling or other non-angling activities.³ DFO provides fishing opportunities for commercial, Indigenous, and recreational harvest, and the Department's resource management policies consider access for recreational purposes.

There is recreational interest in fishing for Albacore Tuna when stock distribution allows. This interest has increased in recent decades as offshore technology improves the ability of recreational harvesters to access the stock. There are annual recreational tuna tournaments held in locations on the west coast of Vancouver Island where organized teams of fishers participate over several days. Various lodges and professional guides offer tuna fishing excursions, although many participants are non-guided. Estimates provided by the Sport Fishing Advisory Board (SFAB) indicated that at least 3,800 Albacore Tuna were captured in the recreational fishery in 2019, with more than 25% of this number released. For 2020, SFAB estimates that approximately 11,500 were captured, with about 35% released.

Expenditures related to the fishery are not well documented, and efforts are underway improve the collection and analysis of catch and effort data.

² DFO Internal Tidal Waters Sport Fishing Licences sales statistics

³ BC Stats. BC Fisheries and Aquaculture Sector, 2016 Edition, 2018.

3.3 Commercial

Pacific Albacore Tuna is one of the most valuable finfish in Canada’s major Pacific fisheries, both in terms of price per kilogram and total landed value in the fishery.⁴ The Pacific Albacore Tuna fishery contributed to around 4% of the landed value, and around 6% of the wholesale value for all wild caught BC seafood in 2017.⁵ The average annual total landed value from 2009-2018 was approximately \$19 million (in 2018 dollars), although, as seen in Table 1, total catch has varied considerably from year.

Table 1: Total Pacific Albacore Tuna Catch and Landed Value for Canadian Vessels

Year	Total Catch (Kg)*	Average Price per Kg (nominal)**	Average Price per Kg (2019\$)	Total Value (Expanded 2019\$)
2010	6,215,294.838	\$3.40	\$3.96	\$24,612,567.56
2011	5,323,543.904	\$5.33	\$6.03	\$32,100,969.74
2012	2,484,069.958	\$4.45	\$4.97	\$12,345,827.69
2013	5,070,479.348	\$4.58	\$5.09	\$25,808,739.88
2014	4,780,268.357	\$3.12	\$3.39	\$16,205,109.73
2015	4,382,786.741	\$3.19	\$3.43	\$15,032,958.52
2016	2,841,763.789	\$7.09	\$7.50	\$21,313,228.42
2017	1,829,974.689	\$8.93	\$9.32	\$17,055,364.1
2018	2,716,797.074	\$5.35	\$5.45	\$14,806,544.05
2019	2,386,537.272	\$4.82	\$4.82	\$11,503,109.65

*Total catch weight based on logbooks (DFO Resource Management).

**Price per kilogram based sales slip data (DFO Economics).

In 2016, seafood processors in BC provided an estimated 4,882 year round equivalent jobs, with about 82% attributable to the processing of wild seafood. According to the 2011 BC seafood processing survey, tuna processing accounted for about 6% of the wild seafood processing jobs⁶. More recent processor employment survey data are not available.

⁴ For comparison to other fisheries see: British Columbia Seafood Industry Year in Review 2016, BC Ministry of Agriculture, 2017.

⁵ See British Columbia Seafood Industry Year in Review 2017:

https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/statistics/industry-and-sector-profiles/year-in-review/bcseafood_yearinreview_2017.pdf

⁶BC Ministry of Agriculture. British Columbia Fish Processing Employment Survey Results. Multiple years.

4 MANAGEMENT ISSUES

The following section highlights a number of ongoing, longer-term issues identified with respect to the management of Pacific tuna species. Shorter-term and/or annual management issues are identified in fishing plans for each fishery (Appendices 4-9).

4.1 First Nations

No identified issues.

4.2 Recreational

Improvements to catch monitoring programs for recreational fisheries are under development. DFO has been working with recreational sector participants on the recreational tuna logbook program to capture detailed catch and effort data.

4.3 Commercial

International Progress on a Management Strategy Evaluation for North Pacific Albacore Tuna

Work to advance a management strategy evaluation (MSE) for North Pacific Albacore Tuna is ongoing. The MSE evaluates possible target reference points and alternative harvest control rules and supports the application of the precautionary approach at the international level. This work is being led by the Albacore Working Group (ALBWG) of the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (the ISC), a group that includes DFO scientists and is associated with both the IATTC and WCPFC.

Management objectives have been established and a suite of candidate reference points have been proposed through three Albacore Tuna MSE workshops involving managers, scientists and stakeholders. The ALBWG of the ISC has been working on evaluation of performances of these proposed biological reference points and harvest control rules through the MSE processes. Additional information may be posted on the ISC website (<http://isc.fra.go.jp/>) as it becomes available.

5 OCEANS AND ECOLOGICAL CONSIDERATIONS

5.1 Gear Impacts

Canadian tuna vessels currently use hook and line gear, primarily troll. Tuna fishing gear is deployed at the very top of the water column and under normal operating circumstances, there is no contact with benthic features and habitats, and minimal to no environmental impacts. Tuna fishing by troll is highly targeted; based on harvester reports there is minimal bycatch and little to no impact to marine mammals or sea birds.

5.2 Other Species Concerns

Species at Risk Act

The *Species at Risk Act* (SARA) came into force in 2003. The purposes of the *Act* are “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.” More information on SARA can be found at <https://www.registrelep-sararegistry.gc.ca>.

Encounters with SARA-listed species and other marine mammals and seabirds may occur in the tuna fishery. The Department and the fishing industry collect information on these encounters on behalf of the Species at Risk program and Marine Mammal Unit of DFO and Canadian Wildlife Service of Environment Canada.

In addition to the existing prohibitions under the *Fisheries Act*, under the SARA it is illegal to kill, harm, harass, capture, take, possess, collect, buy, sell or trade any marine species listed as endangered or threatened. It is also prohibited to take, possess, collect, buy, sell or trade any part or derivative of an individual of these species. 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.

To view the list of endangered, threatened, and special concern species currently listed under Schedule 1 of SARA, please visit: <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>

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 at:

http://wildlife-species.canada.ca/species-risk-registry/sar/listing/response_e.cfm

Committee on the Status of Endangered Wildlife Species (COSEWIC)

COSEWIC was formed in 1977 to provide Canadians with a single, scientifically sound classification of wildlife species at risk of extinction. COSEWIC began its assessments in 1978 and has met each year since then to assess wildlife species.

With the implementation of SARA, COSEWIC has been established as an independent body of experts responsible for identifying and assessing wildlife species considered to be at risk. This is the first step towards protecting wildlife species at risk. Subsequent steps include COSEWIC reporting its results to the Canadian government and the public, and the Minister of the Environment's official response to the assessment results. Wildlife species that have been designated by COSEWIC may then qualify for legal protection and recovery under SARA.

For a full list of species identified and assessed by COSEWIC, please visit:

<http://www.cosewic.ca/index.php/en-ca/>

Shark Codes of Conduct

Out of the fourteen shark species in Canadian Pacific waters, three species are listed under SARA. The Basking Shark (*Cetorhinus maximus*) is listed as Endangered, and the Bluntnose Sixgill Shark (*Hexanchus griseus*) and Tope Shark (*Galeorhinus galeus*) are listed as species of Special Concern. The primary threats to shark species have been identified as bycatch and entanglement. In order to address the conservation concerns with shark species, it is important that measures are taken to reduce the mortality of sharks resulting from these primary threats. As such, commercial fishing licences have been amended to include a Condition of Licence for Basking Sharks that specify mitigation measures in accordance with SARA permit requirements. Additionally, two 'Code of Conduct for Shark Encounters' documents have been developed to reduce the mortality of Basking Shark, as well as other Canadian Pacific shark species such as Bluntnose Sixgill and Tope Shark resulting from entanglement and bycatch in commercial, aquaculture, and recreational fisheries. These guidelines include boat handling procedures during visual encounters with Basking Sharks, as well as best practices for handling Canadian Pacific shark species during entanglement encounters.

These documents have been posted online and can be found at the following URL links.

Code of conduct for sharks: <https://dfo-mpo.gc.ca/species-especies/publications/sharks/coc/coc-sharks/index-eng.html>

Code of conduct for Basking Sharks: <https://dfo-mpo.gc.ca/species-especies/publications/sharks/coc/coc-basking/index-eng.html>

Whale, Leatherback Sea Turtle, and Basking Shark Sightings or Entanglements

The Department welcomes assistance in the reporting of any whale, Leatherback Sea Turtle or Basking Shark entanglement or sighting. While there are many whale species found in Pacific Canadian waters, sightings of Basking Shark and Leatherback Sea Turtles are infrequent. The collection of sighting data is useful to scientists in determining population size and species distribution and aids in recovery efforts under the Species at Risk Act (SARA).

Shark identification guide: (<https://waves-vagues.dfo-mpo.gc.ca/Library/40757067.pdf>)

Whale entanglement brochure (best practices to reduce entanglement and reporting an incident): <http://dev-public.rhq.pac.dfo-mpo.gc.ca/whales-baleines/docs/entanglements-empetrements-pub-eng.html>

To report whale or turtle sightings contact the BC Cetacean Sighting Network:

Toll free: 1.866.I.SAW.ONE (1-866-472-9663)

Email: sightings@ocean.org

Website: <http://wildwhales.org/>

App : WhaleReport

To report basking shark sightings contact the Basking Shark Sightings Network:

Toll free: 1-877-50-SHARK (1-877-507-4275)

Email: BaskingShark@dfo-mpo.gc.ca

Website: <http://www.pac.dfo-mpo.gc.ca/SharkSightings>

Marine Mammal Incident Reporting Hotline

The Department is responsible for assisting marine mammals and sea turtles in distress. If your vessel strikes a whale, or if you observe an entangled, sick, injured, distressed, or dead marine mammal in B.C. waters, please contact the B.C. Marine Mammal Response Network Incident Reporting Hotline immediately:

1-800-465-4336, DFO.ORR-ONS.MPO@dfo-mpo.gc.ca, OR VHF CHANNEL 16

What to report:

-
- Your name and contact information
 - Date and time of incident
 - Species
 - Animal alive/dead
 - Nature of injury
 - Location: Latitude/Longitude coordinates, landmarks
 - Pictures/Video taken

Southern Resident Killer Whale

The Government of Canada, together with Indigenous groups, partners and stakeholders, continues to take important steps to protect and recover the Southern Resident Killer Whale population, in keeping with direction provided in SARA recovery documents. In May 2018, the Minister of Fisheries, Oceans and the Canadian Coast Guard and the Minister of Environment and Climate Change Canada (ECCC) determined that the Southern Resident Killer Whale is facing [imminent threats](#) to its survival and recovery. Given the status of the population and ongoing threats to Southern Resident Killer Whale recovery, DFO implemented a number of enhanced measures starting in 2018, aimed at increasing prey availability and accessibility for Southern Resident Killer Whales - particularly with respect to Chinook salmon - and reducing threats related to physical and acoustic disturbance in key foraging areas.

Since 2018, Indigenous groups, the Indigenous and Multi-Stakeholder Advisory Group, Technical Working Groups (TWGs) and stakeholders have provided recommendations and feedback to Ministers and Departments on a range of measures (including measures related to increasing prey availability, sanctuaries, vessel disturbance [both noise and physical disturbance], and contaminants).

For the 2020 season, Canada focused on ways to support increased Chinook salmon prey availability and reduced physical and acoustic disturbance in key foraging areas within the Southern Resident Killer Whale critical habitat. The fishing-related management measures for the 2020 season included area-based closures for recreational and commercial salmon fishing in the southern Gulf Islands, Juan de Fuca Strait and Swiftsure Bank; Interim Sanctuary Zones (established via Interim Order under the *Canada Shipping Act*) that prohibit boating and fishing (with some exceptions) in a portion of Swiftsure Bank and off the south-west coast of Pender Island and south-east coast of Saturna Island; and a voluntary fishing avoidance zone which encourage fishers to stop fishing within 1000m of any killer whales within Canadian Pacific waters.

The mandatory closures did not apply to individuals or vessels being used to fish for food, social or ceremonial purposes, or for domestic purposes pursuant to a treaty under a license issued under the Aboriginal Communal Fishing Licenses Regulations.

For 2021, the Government of Canada will be reviewing the suite of [2020 management measures](#) and discussing potential adjustments to measures with Indigenous groups, the Southern Resident Killer Whale Indigenous and Multi-Stakeholder Advisory Group, Technical Working Groups, and with key stakeholders. Canada intends to ensure that any updates to actions for the 2021 season can be implemented by spring 2021 to coincide with the return of Southern Resident Killer Whales in typically greater numbers to the Salish Sea.

For more information on all of the Southern Resident Killer Whale management measures, please visit: <https://www.pac.dfo-mpo.gc.ca/whales-baleines/srkw-measures-mesures-ers-eng.html>

The Government of Canada is asking vessel operators to respect the following voluntary measures to protect Southern Resident Killer Whales:

- Stop fishing within 1,000 metres of killer whales and let them pass;
- Slow down to 7 knots or less when within 1000m of killer whales;
- Reduce noise by turning echo sounders and fish finders off when not in use; and
- Place engine in neutral idle and allow animals to pass if your vessel is not in compliance with the approach distance regulations.

For more information on the best ways to help whales while on the water, when on both sides of the border, please visit: bewhalewise.org

For further information regarding the Southern Resident Killer Whale management measures to support recovery, please contact the Marine Mammal Unit (DFO.SRKW-ERS.MPO@dfo-mpo.gc.ca).

Pacific Coast and Western Pacific Grey Whale

The Grey Whale is a medium- to large-sized baleen cetacean, found in the North Pacific. The population that ranges along the west coast of North America is migratory, breeding in warm-water coastal lagoons in Baja California during the winter, and moving to feeding areas as far north as Alaska, Russia and Canada in the spring, passing along the coast of British Columbia, where they feed over rocky bottoms and in kelp and eelgrass beds on herring eggs and larvae during the spring and summer months. As of 2017, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) recognizes three Grey Whale populations in Canadian Pacific waters. The Eastern North Pacific population, currently Special Concern under SARA, was split into two populations. A broader North Pacific Migratory population, which migrates from

winter breeding grounds in Mexico to summer feeding areas in the Bering Sea and Arctic waters, was assessed as Not at Risk. A small population which over-winters in Mexico and resides and feeds in British Columbia waters in summer and fall, the Pacific Coast Feeding Group, was assessed as Endangered. A new Western Pacific population was also assessed as Endangered as individuals from this population were recently shown to migrate through British Columbia waters to breeding areas in Mexico.

The two COSEWIC-assessed Endangered Grey Whale populations are under consideration for SARA listing. In-season changes to manage threats to these populations may be considered as part of the listing process. Consultations on these proposed changes and the potential impacts of SARA listing will be held in 2020. For further information, please contact the SARA Program at SARA.XPAC@dfo-mpo.gc.ca.

US Marine Mammal Protection Act – Fish and Fish Product Import Provisions

In 2016, the United States of America (USA) published new regulations (80 FR 54390) implementing the Fish and Fish Product Import Provision of the United States Marine Mammal Protection Act (“MMPA Import Provisions”) pertaining to the reduction of marine mammal bycatch in foreign commercial fishing operations.

NOAA Fisheries recently announced an interim final rule to provide a one-year extension to foreign nations to apply for and receive a comparability finding for their commercial fishing operations to export fish and fish products to the United States. As such, harvesting nations intending to continue to export fish and fish products to the USA after January 1, 2023, must apply to the US National Oceanic and Atmospheric Administration (NOAA) for a comparability finding for each of its commercial fisheries listed in the US List of Foreign Fisheries (LOFF).

The final 2020 US LOFF was published on the NOAA public registry on October 8, 2020. The Federal Register Notice for the final 2020 LOFF is available at:

<https://www.federalregister.gov/documents/2020/10/08/2020-22290/fish-and-fish-product-import-provisions-of-the-marine-mammal-protection-act-final-2020-list-of>

To receive a comparability finding for a fishery, the US MMPA import provisions mandate that the harvesting nation (country) demonstrate: 1) the prohibition of intentional mortality or serious injury of marine mammals in the course of commercial fishing operations; and 2) the implementation of a regulatory program comparable in effectiveness to the USA, including mandatory reporting of marine mammal bycatch, monitoring programs and management

mitigation measures. DFO continues to work closely with wild-capture fishing industry representatives to meet these requirements.

DFO will share information about this new USA regulation, its implications for Canadian fisheries, and discuss the process for ensuring continued access to USA markets. Further information regarding the US MMPA import provisions can be obtained on the NOAA website: <https://www.fisheries.noaa.gov/foreign/marine-mammal-protection/noaa-fisheries-establishes-international-marine-mammal-bycatch-criteria-us-imports> or by contacting the Regional Fisheries Coordinator or the DFO Marine Mammal Unit (MMU) (Contact: Lee Harber, Marine Mammal Advisor; Lee.Harber@dfo-mpo.gc.ca).

Amended Marine Mammal Regulations

On June 22, 2018 the amended Marine Mammal Regulations came into force. These amendments include requirements for boats to maintain a minimum approach distance of 100 m for whales, dolphins or porpoises, or 200m when in a resting position or with a calf and 200m from all Killer Whales. The amended regulations also provide clarification on what it means to disturb a marine mammal, including feeding, swimming or interacting with them; moving it (or enticing/causing it to move); separating a marine mammal from its group or going between it and a calf; trapping marine mammals between a vessel and the shore, or between boats; as well as tagging or marking it. In addition, regulations include mandatory reporting for incidental contact between a vehicle (vessel) or fishing gear unless the contact is reported as a bycatch in a log book.

Further information regarding the Marine Mammal Regulations can be obtained by contacting your Regional Fisheries Coordinator or the DFO Marine Mammal Unit (MMU) (Contact: Paul Cottrell, Marine Mammal Coordinator; Paul.Cottrell@dfo-mpo.gc.ca).

An infographic on approach distances from the Marine Mammal Regulations can be found here: <https://www.dfo-mpo.gc.ca/about-notre-sujet/publications/infographies-infographies/documents/100-200-400-eng.pdf>

5.3 Oceans and Habitat Considerations

Oceans Act

The Oceans Act came into force in 1997. 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.

For more information on the *Oceans Act* and other relevant publications, please visit:

<http://www.dfo-mpo.gc.ca/oceans/index-eng.html>

The *Oceans Act*, the *Canada Wildlife Act*, and the *National Marine Conservation Areas Act* have given rise to several initiatives on the Pacific coast, which are listed below. As goals, objectives, and management plans are finalized for these initiatives, the Department's management of fisheries will be adapted as appropriate, in consultation with interested parties through Integrated Fisheries Management Plan processes.

Canada's Marine and Coastal Areas Conservation Mandate

In August 2019, the Government of Canada surpassed its milestone of protecting 10% of Canada's marine and coastal areas by 2020, a target which is a reflection of Canada's United Nation Convention on Biological Diversity Aichi Targets commitments, collectively referred to as Canada's marine conservation targets. The Government of Canada further committed domestically to protecting 25% by 2025, and working towards 30% by 2030.

More information on the background and drivers for Canada's marine conservation targets is available at the following link: <http://www.dfo-mpo.gc.ca/oceans/conservation/index-eng.html>.

To meet our marine conservation target, Canada is establishing Marine Protected Areas (MPAs) and "other effective area-based conservation measures" ("Other Measures"), in consultation with industry, non-governmental organizations, and other interested parties.

An overview of these tools, including a description of the role of fisheries management measures that qualify as Other Measures is available at the following link: <http://www.dfo-mpo.gc.ca/oceans/mpa-zpm-aoi-si-eng.html>.

Sustainable Fisheries Framework

The Sustainable Fisheries Framework is a toolbox of existing and new policies for DFO to sustainably manage Canadian fisheries by conserving fish stocks while supporting the industries that rely on healthy fish populations. The Sustainable Fisheries Framework provides planning and operational tools that allow these goals to be achieved in a clear, predictable, transparent, and inclusive manner, and provides the foundation for new conservation policies to implement the ecosystem and precautionary approaches to fisheries management. These policies include:

- Policy for Managing the Impacts of Fishing on Sensitive Benthic Areas;

-
- Policy on New Fisheries for Forage Species;
 - A Fishery Decision-Making Framework Incorporating the Precautionary Approach;
 - Guidance for the Development of Rebuilding Plans under the Precautionary Approach Framework: Growing Stocks out of the Critical Zone;
 - Policy on Managing Bycatch; and
 - Ecological Risk Assessment Framework (ERAF) for Coldwater Corals and Sponge Dominated Communities.
 - Fishery Monitoring Policy

For more information on the Sustainable Fisheries Framework and its policies, please visit:

<https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/overview-cadre-eng.htm>

Catch Monitoring and the National Fishery Monitoring Policy

Robust fishery monitoring information is essential for stock assessment and to effectively implement management measures such as target and bycatch limits, quotas and closed areas. Fishery monitoring information is also needed to support the long-term sustainable use of fish resources for Food, Social, and Ceremonial and other Indigenous fisheries, commercial fisheries, recreational fisheries, and to support market access for Canadian fish products.

Following multi-sectoral consultations, DFO released the national Fishery Monitoring Policy in 2019, replacing the regional “Strategic Framework for Fisheries Monitoring and Catch Reporting in the Pacific Fisheries” (2012). The Fishery Monitoring Policy seeks to provide dependable, timely and accessible fishery information through application of a common set of procedural steps used to establish fishery monitoring requirements across fisheries. Policy principles include respecting Indigenous and Treaty rights, linkage of monitoring requirements to the degree of risk and complexity of fisheries, linkage of monitoring programs to fishery and policy objectives while accounting for cost-effectiveness and practicality of implementation, and shared accountability and responsibility between DFO, Indigenous groups and stakeholders.

The national Fishery Monitoring Policy has recently been finalized and is now available at: <http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/fishery-monitoring-surveillance-des-peches-eng.htm>. This policy aims to bring consistency in the development, delivery and evaluation of monitoring programs for all federally-managed wild capture fisheries in Canada, and will supersede the existing Pacific Region Strategic Framework.

The “Introduction to the Procedural Steps of Implementing the Fishery Monitoring Policy” is available at: <https://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/fmp-implementation-pp-mise-en-oeuvre-eng.htm>.

In cases where assessment of monitoring programs identifies a gap between the current and target level of monitoring, discussions will be held between DFO Indigenous groups and

stakeholders to identify options to address the monitoring gap, and the feasibility of these options (e.g. cost, technical considerations, etc.). To support Fishery Monitoring Policy principles, a collaborative approach is required.

Where monitoring options are determined to be feasible, the monitoring and reporting regime will be revised to incorporate these options, providing resource managers with sufficient information to meet Fishery Monitoring Policy objectives. Where monitoring options are not feasible, alternative management approaches are required to reduce the risk posed by the fishery. If there is no gap between the current and target level of monitoring, the management approach will not require any change.

National Fishery Monitoring Policy

The national Fishery Monitoring Policy has recently been finalized and is now available at: <http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/fishery-monitoring-surveillance-des-peches-eng.htm>. This policy aims to bring consistency in the development, delivery and evaluation of monitoring programs for all federally-managed wild capture fisheries in Canada, and will supersede the existing Pacific Region Strategic Framework.

To discuss the national Fishery Monitoring Policy with regional staff, please contact the Regional Catch Monitoring Coordinator at 604-666-1082. We welcome your feedback and questions, as your contributions and participation are valuable to the implementation of this national policy.

Pacific North Coast Integrated Management Area (PNCIMA)

Endorsed in February 2017, the Pacific North Coast Integrated Management Area (PNCIMA) plan was developed, in collaboration with the Province of British Columbia, First Nations and stakeholders to help coordinate various ocean management processes and to complement existing processes and tools including IFMPs. High level and strategic, the plan provides direction on integrated, ecosystem-based and adaptive management of marine activities and resources in the planning area as opposed to detailed operational direction for management. The plan outlines an ecosystem-based management (EBM) framework for PNCIMA that has been developed to be broadly applicable to decision-makers, regulators, community members and resource users alike, as federal, provincial and First Nations governments, along with stakeholders, move together towards a more holistic and integrated approach to ocean use in the planning area.

The endorsement of the PNCIMA plan supports the Government of Canada's commitment to collaborative oceans management for the Pacific North Coast and provides a joint federal-provincial-First Nations planning framework for conservation and the management of human

activities in the Pacific North Coast. One of the key priorities for the plan is the development of a marine protected area network. The planning for this network is well underway in the Northern Shelf Bioregion. It is anticipated that the network development will contribute to the Government of Canada's commitment to protecting 25% of Canada's oceans by 2025, and working toward 30% by 2030.

The PNCIMA Plan is available online at: <https://www.dfo-mpo.gc.ca/oceans/management-gestion/pncima-zgicnp-eng.html>

Northern Shelf Bioregion MPA Network

The Province of BC, the Government of Canada and 16 First Nations are working together to develop a Network of marine protected areas for the Northern Shelf Bioregion which extends from the top of Vancouver Island (Quadra Island/Bute Inlet and Brooks Peninsula) and reaches north to the Canada - Alaska border. This bioregion has the same footprint as the Pacific North Coast Integrated Management Area. The planning process is being developed under the policy direction outlined in the National Framework for Canada's Network of MPAs as well as the Canada-British Columbia MPA Network Strategy.

A draft MPA network design, which consists of a map of areas proposed for conservation as well as potential management measures for proposed sites, was shared with First Nations, who are currently not part of the collaborative governance arrangement, and with members of the Network Advisory Committees in February 2019. The various sectors engaged in a review of the draft network design provided substantial input by January 30, 2020. A stakeholder forum was held in February 2020 to present and discuss feedback received. DFO completed its internal review of the draft design scenario and presented the report to the MPA Technical Team in March 2020. Revising the draft scenario will occur during the winter 2021 after which there will be further consultations, including public engagement in coastal communities, on scenario #2 and the accompanying socio-economic analysis.

More information on MPA Network Planning can be found at: <http://www.mpanetwork.ca>.

Marine Spatial Planning South Coast

As part of a national marine spatial planning (MSP) initiative, DFO in collaboration with the Province of BC, federal departments (Transport Canada, Natural Resources Canada, Environment and Climate Change Canada, Parks Canada) and Indigenous groups, have begun marine spatial planning efforts on the South Coast, including the Strait of Georgia and Southern Shelf bioregions. The intent of MSP is to improve coordination across jurisdictions and activities in the marine space, and work is underway to define scope and objectives of the project. In the early phases, engagement on governance is taking place internally with GC partners, and externally with the Province of BC and local First Nations (beginning with representative

organizations like First Nations Fisheries Council). National MSP deliverables include: governance, a bioregional atlas, and a marine spatial plan. Harvesters can expect updates on this process via Advisory Boards in the future.

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 three MPAs in the Pacific Region.

MPA regulations and management plans articulate any restrictions on activities taking place within the MPA, where applicable. More information on MPAs can be found at:

<http://www.dfo-mpo.gc.ca/oceans/conservation/areas-zones/index-eng.html>.

Endeavour Hydrothermal Vents (EHV) MPA

The EHV MPA was designated in 2003 with the objective of conserving the unique hydrothermal vent ecosystems. The hydrothermal vents lie in waters 2,250 m deep 250 km southeast of Vancouver Island. The occasional licensed commercial pelagic fishing that occurs very near the ocean surface in the MPA is not considered to be in conflict with the conservation objectives of the MPA and will continue. All commercial groundfish fisheries are restricted within the Endeavour MPA. More information can be found online at: <http://www.dfo-mpo.gc.ca/oceans/mpa-zpm/endeavour/index-eng.html>.

SGaan Kinghlas-Bowie Seamount (SK-B) MPA

The SK-B MPA (180 km west of Haida Gwaii) was designated in 2008 and was established to conserve and protect the unique biodiversity and biological productivity of the area's marine ecosystem, including the surrounding waters, seabed, and subsoil. The MPA is cooperatively managed by DFO and the Council of the Haida Nation through the SK-B Management Board, which was established under a Memorandum of Understanding. The Management Board (in consultation with the SK-B Advisory Committee) has finalized the [SK-B MPA Management Plan](#) which guides the conservation and protection of the SK-B ecosystem. In 2018, the Government of Canada and the Haida Nation closed all bottom-contact fishing at SK-B MPA as a precautionary management approach to protect sensitive benthic habitats, resulting in the MPA being closed to all commercial fishing activities. More information can be found online at: <http://www.dfo-mpo.gc.ca/oceans/mpa-zpm/bowie-eng.html>

Hecate Strait and Queen Charlotte Sound Glass Sponge Reefs (HS/QCS) MPA

The Hecate Strait and Queen Charlotte Sound Glass Sponge Reefs Marine Protected Area (Hecate MPA) was designated under the *Oceans Act* in February 2017 to conserve the biological diversity, structural habitat and ecosystem function of the glass sponge reefs. The Hecate MPA Regulations are available online at: <http://www.dfo-mpo.gc.ca/oceans/mpa-zpm/hecate->

[charlotte/index-eng.html](#).

The Hecate MPA is located in the Northern Shelf Bioregion of the Pacific Region southeast of Haida Gwaii, North and South of the entrance to the Douglas Channel, covering an area of approximately 2,410 square kilometers. The Hecate MPA zoning approach involves different management measures within each zone. Under the Hecate MPA Regulations, each glass sponge reefs' Core Protection Zone (CPZ) is closed to all commercial, recreational, and Aboriginal fishing. Anchoring, cable installation, maintenance and repair are also prohibited in the CPZ. The Vertical Adaptive Management Zone and Adaptive Management Zone is currently closed to all commercial bottom contact fishing activities for prawn, shrimp, crab and groundfish (including halibut), as well as for midwater trawl for hake. For more detail on the fishery closure within the Hecate MPA, review Fishery Notice FN0198 found here:

https://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?DOC_ID=194216&ID=all&pg=view_notice.

Scientific research, monitoring, and educational activities are allowed in the Hecate MPA if a proponent submits an activity plan to DFO and it receives Ministerial approval. Additional maps and shapefiles of the Hecate MPA are available at:

<https://open.canada.ca/data/en/dataset/a1e18963-25dd-4219-a33f-1a38c4971250>.

Offshore Pacific Area of Interest

In May 2017, DFO announced a new Area of Interest (AOI) with the intention of making it one of Canada's largest Marine Protected Areas by 2020. The proposed MPA extends from the toe of the continental slope to the westward boundary of Canada's Exclusive Economic Zone (EEZ) in the southern portion of the Offshore Pacific Bioregion. On average, the proposed MPA would be approximately 150 km away from the west coast of Vancouver Island, and would have an approximate area of 133,019 km². The conservation objective for the proposed MPA is to conserve, protect and enhance understanding of unique seafloor features including seamounts and hydrothermal vents and the marine ecosystems they support. More information on the Offshore Pacific AOI can be found on the internet here: <http://www.dfo-mpo.gc.ca/oceans/aoi-si/offshore-hauturiere-eng.html>

Offshore Pacific Seamounts and Vents Closure

Fishery closures to restrict commercial and recreational bottom-contact fishing activities within the Offshore Pacific AOI were announced in October 2017. At approximately 83,000 km² in size, the closure protects and conserves unique seafloor features including seamounts and hydrothermal vents identified through a Canadian Science Advisory Secretariat process, as well as a number of species of regional importance including corals, sponges and other endemic or rare species. The closure boundary was informed by available science and input received during consultations with First Nations, federal and provincial government agencies, industry

and conservation organizations. Specific details of the closure can be found in the [Fishery Notice](#).

More information on the Offshore Pacific seamounts and vents closure can be found on the internet here: <http://www.dfo-mpo.gc.ca/oceans/oeabcm-amcepz/refuges/offshore-hauturiere-eng.html>

Race Rocks Area of Interest

Race Rocks, an area off Rocky Point, south of Victoria (currently designated as a Provincial Ecological Reserve), has been identified as an area of interest.

National Marine Conservation Area Reserves (NMCARs)

Gwaii Haanas

Gwaii Haanas National Park Reserve, National Marine Conservation Area Reserve, and Haida Heritage Site is a 5000 km² land-and-sea protected area in the southern part of Haida Gwaii (formerly the Queen Charlotte Islands), approximately 100 kilometres off the north coast of British Columbia. The Haida Nation designated the area a Haida Heritage Site in 1985. The terrestrial part of Gwaii Haanas was designated a National Park Reserve by the Government of Canada soon after, and Canada and the Haida Nation have been managing the area cooperatively since 1993. In 2010, the Gwaii Haanas marine area was designated a National Marine Conservation Area Reserve.

Gwaii Haanas is managed by the Archipelago Management Board (AMB), a cooperative body made up of three representatives of the Council of the Haida Nation and three representatives of the Government of Canada (Fisheries and Oceans Canada (1) and Parks Canada (2)). The AMB is guided by the *Gwaii Haanas Agreement* (1993) and the *Gwaii Haanas Marine Agreement* (2010), which describes how Canada and the Haida Nation will manage Gwaii Haanas cooperatively.

In November 2018, following an extensive consultation process, a new management plan for Gwaii Haanas was approved by Canada and the Haida Nation. The Gina 'Waadluxan KilGuhlGa Land-Sea-People plan includes a shared vision, guiding principles based on Haida cultural values, goals and objectives, and zoning for the land and the sea. The plan will be in place for the next decade.

To develop the zoning plan, key ecological and cultural features were identified using a range of ecological data and traditional knowledge. A set of design considerations, which included minimizing socio-economic impacts, was used to develop an initial zoning proposal. This proposal was reviewed with stakeholder groups including the commercial and recreational fishing sectors and major changes were made to the zoning plan based on advice the AMB

received.

The final zoning plan includes several areas of strict protection, where commercial and recreational fishing are prohibited.

The zoning plan can be found at: <https://www.pc.gc.ca/en/pn-np/bc/gwaiihaanas/info/consultations/gestion-management-2018>.

Refer to Fishery Notice 0536, released June 13, 2019 for a detailed description of the Strict Protection Zones and can be found at: https://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?pg=view_notice&DOC_ID=222098&ID=all

Council of the Haida Nation Fisheries Management Directions for the Gwaii Haanas Haida Heritage Site can be found at: <http://www.haidanation.ca/wp-content/uploads/2019/04/CHN-Fisheries-Management-Directions-FINAL.pdf#:~:text=COUNCIL%20OF%20THE%20HAIDA%20NATION%20FISHERIES%20MANAGEMENT%20DIRECTIONS,jurisdiction%20of%20the%20Council%20of%20the%20Haida%20Nation>.

A monitoring plan will be developed to assess the effectiveness of zoning in achieving ecological and cultural objectives. Regular monitoring within and outside of strict protection zones will illustrate ecosystem responses and facilitate adaptive management of the Gwaii Haanas marine area.

Implementation of the Land-Sea-People plan will also involve cooperative management of fisheries using an ecosystem-based management framework, and monitoring activities will be supported through partnerships. For more information on Gwaii Haanas and the Archipelago Management Board, visit www.parkscanada.gc.ca/gwaiihaanas. The Land-Sea-People plan can be downloaded at <https://www.pc.gc.ca/en/pn-np/bc/gwaiihaanas/info/consultations/gestion-management-2018>.

Users of the Gwaii Haanas marine area should be aware that, as specified in the *Gwaii Haanas Agreement*, there is "no extraction or harvesting by anyone of the resources of the lands and non-tidal waters of the Archipelago for or in support of commercial enterprise" (s3.3). There are specific requirements for visiting the Gwaii Haanas terrestrial area and advanced planning is necessary. Please contact the Gwaii Haanas administration office at 1-877-559-8818 for further information.

Southern Strait of Georgia National Marine Conservation Area Reserve (feasibility assessment)

Parks Canada, in partnership with the Government of British Columbia, launched a feasibility assessment for a National Marine Conservation Area Reserve (NMCAR) in the southern Strait

of Georgia in 2004. Since then, consultations with First Nations, key stakeholders, communities and the public have occurred. Informed by those discussions, a proposed boundary for consultation was announced by the provincial and federal Ministers of Environment in 2011.

Since 2011, the two governments have been consulting with First Nations, local governments and industry. A preliminary concept is currently being developed to help advance consultations on the feasibility assessment. If the results of the feasibility assessment indicate that establishment of a NMCAR is practical and feasible, an establishment agreement between the Governments of Canada and British Columbia will be negotiated and an interim management plan developed. If the NMCAR is determined to be feasible, further consultations related to establishment agreements and Indigenous rights will also take place with First Nations. Commercial and recreational fishing sectors, communities, landowners, recreation and environmental organizations and other stakeholders will also have opportunities to provide input to the development of the interim management plan.

Parks Canada information on the proposed NMCAR in the southern Strait of Georgia is available on the internet at: <https://www.pc.gc.ca/en/amnc-nmca/cnamnc-cnmca/dgs-ssg>

Scott Islands Marine National Wildlife Area

The Scott Islands Marine National Wildlife Area (mNWA) is the first protected marine area established by Environment and Climate Change Canada (ECCC) under the *Canada Wildlife Act*. In support of the conservation objectives of the Scott Islands mNWA, DFO is consulting on new regulations under the Fisheries Act to restrict certain fisheries that pose a risk to seabirds. A Notice of Intent was published in Canada Gazette Part 1 in June 2018 indicating the proposed regulations would prohibit fishing for three key forage fish species that serve as a key food source for seabirds (Pacific sand lance, Pacific saury, and North Pacific krill) as well as groundfish bottom trawling (in portions of the mNWA consistent with existing commercial closures) and salmon gill net and seine for commercial, recreational, and Indigenous fishing for food, social and ceremonial purposes. The anticipated pre-publishing of the regulations in Canada Gazette 1 is expected to occur in early 2021.

For further information on this, please contact DFO.ScottIslands-IlesScott.MPO@dfo-mpo.gc.ca

More information on the Scott Islands marine NWA can be found at:

<https://www.canada.ca/en/environment-climate-change/services/national-wildlife-areas/locations/scott-islands-marine.html>

The Scott Islands Protected Marine Area Regulations can be found at: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2018-119/index.html>

Strait of Georgia and Howe Sound Glass Sponge Reef Marine Refuges

Effective April 1st, 2019 all commercial, recreational and Aboriginal Food, Social and Ceremonial (FSC) bottom-contact fishing activities for prawn, shrimp, crab and groundfish, as well as the use of downrigger gear for recreational salmon trolling (restricted via Condition of Licence) are prohibited within portions of Subareas 28-2 and 28-4 to protect nine Howe Sound glass sponge reefs, as marine refuges. This includes prohibition of the following fishing activities:

- prawn and crab by trap
- shrimp and groundfish by trawl
- groundfish by hook and line
- use of downrigger gear in recreational salmon trolling

These eight closures are in addition to the nine areas closed to all commercial, recreational and Aboriginal FSC bottom-contact fishing activities in the Strait of Georgia and Howe Sound in 2015. Nine remaining areas in Howe Sound have been ground-truthed to assess their ecological significance and management measures are currently being considered.

For further information on this, please contact Lindsay Klopp at Lindsay.Klopp@dfo-mpo.gc.ca.

Current closure locations and more information are available at: <https://www.dfo-mpo.gc.ca/oceans/ceccsr-cerceef/closures-fermetures-eng.html>

Other Marine Conservation Initiatives

Ghost Gear Initiative

One of the biggest threats to oceans internationally is marine litter, and in particular, ghost fishing gear. Ghost gear refers to any fishing equipment or fishing-related litter that has been abandoned, lost or otherwise discarded and is some of the most harmful and deadly debris found in oceans.

In support of international efforts to reduce marine litter, in 2018, Canada signed the G7 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities. In doing so:

- Canada committed to accelerating the implementation of the 2015 Oceans Plastics Charter; and,
- Strengthened our domestic and international commitment to addressing marine litter by signing onto the Global Ghost Gear Initiative.

These commitments were further strengthened in DFO's 2019 Minister's Mandate Letter, emphasizing the importance of this work to Canadians.

Conditions of License to Report Lost and Retrieved Gear

In the spring of 2020 it became a condition of license for commercial harvesters to report lost and retrieved fishing gear. Not reporting lost and or retrieved gear is now a chargeable offence

that can have international trade implications.

Lost gear reporting forms can be found at: <https://www.dfo-mpo.gc.ca/fisheries-peches/commercial-commerciale/reporting-declaration-eng.html>

Sustainable Fisheries Solutions and Retrieval Support Contributions Program (a.k.a. The Ghost Gear Fund)

In the summer of 2020, DFO funded seven organizations in Pacific Region to work on the retrieval, collection and responsible disposal of lost or otherwise discarded fishing gear. To learn more about the DFO Ghost Gear Fund, go to: <https://www.dfo-mpo.gc.ca/fisheries-peches/management-gestion/ghostgear-equipementfantome/program-programme/projects-projets-eng.html>

Rockfish Conservation Areas

There are 162 Rockfish Conservation Areas (RCAs) in British Columbia, covering roughly 4,350km² of the Canadian Pacific Coast. These areas are closed to a range of recreational and commercial fisheries to protect inshore rockfish and their habitat.

DFO is currently undertaking a multi-year review of the conservation effectiveness of RCAs, including meeting the national criteria and standards for marine refuges to better conserve sensitive areas and contribute towards Canada's Marine Conservation Targets (MCT). To meet these standards, the risks to inshore rockfish, their habitat, and benthic communities will need to be avoided or mitigated. Peer-reviewed science advice also recommends that boundary changes to some RCAs will improve their spatial design by better capturing rockfish habitat features. RCAs in the Northern Shelf Bioregion have been selected for the first phase of engagement to align with the MPA network planning process in that area. Workshops with First Nations and stakeholders and online consultations were held in 2019. A summary of what we heard is available online at: <https://www.pac.dfo-mpo.gc.ca/consultation/ground-fond/rca-acs/2020-heard-entendu-eng.html#6>. There will be more opportunities to provide feedback on Rockfish Conservation Areas in the Northern Shelf Bioregion in the near future. We're also planning to review Rockfish Conservation Areas in other regions of British Columbia at a later date.

Further information on RCAs and the boundary proposals are available online at: <http://dfo-mpo.gc.ca/rockfish-conservation> or for further information on this, please contact DFO.RCA-ACS.MPO@dfo-mpo.gc.ca.

6 OBJECTIVES

6.1 National

DFO aims to:

- Meet conservation objectives and ensure healthy and productive fisheries and ecosystems
- Base management decisions on the best available scientific information
- Manage First Nations fisheries for FSC purposes in a manner consistent with the Sparrow Decision (SCC 1990) and other relevant court decisions (*R v. Gladstone 1996 and Ahousaht*) and treaty obligations
- Work collaboratively with commercial and recreational sectors to provide fishing opportunities in a manner that ensures the long term sustainability of the resource
- Provide stability and predictability in fisheries management and improved governance through an open and transparent consultation process
- Foster shared stewardship
- Manage commercial fisheries to improve economic performance, provide certainty for participants and to optimize harvest opportunities

6.2 Pacific Region

The overall goal of Fisheries Management in the Pacific Region is the conservation of Canada's fisheries resources and sustainable resource utilization to ensure priority (after conservation) FSC access for First Nations and generate economic prosperity. This is accomplished through close collaboration with resource users and stakeholders based on shared stewardship consistent with treaty and Indigenous rights. Fisheries Management is responsible for management of the Indigenous, commercial, and recreational fishing in the Pacific Ocean and creating the conditions for a vibrant and innovative aquaculture industry.

Fisheries Management will continue to develop and implement the Sustainable Fisheries Framework by integrating the precautionary and ecosystem approach frameworks into IFMPs with the goal of protecting vulnerable marine and freshwater ecosystems and vulnerable stocks from significant adverse impacts, and to help ensure long term sustainable management and support economic prosperity.

6.3 Pacific Tuna Resource Management

The Department has specific objectives for the management of Pacific tuna for each of the five issues specified below. Details on how performance with regards to these objectives will be evaluated are provided in Section 9.

Stock Conservation: to ensure that harvest of Pacific tuna species is conducted in a sustainable manner and to support the use of the precautionary approach to fisheries management within Regional Fisheries Management Organizations.

Ecosystem Processes: to ensure conservation of the Pacific tuna stocks, and manage for ecosystem impacts of fish harvest activities. Scientific management principles will be applied in a risk-based and precautionary manner based on the best scientific advice available, and through comprehensive monitoring of fish harvest activities.

Access for Indigenous People: to continue to provide opportunities for First Nations to harvest for food, social and ceremonial purposes, in a manner consistent with the *Sparrow Decision* (SCC 1990), and other court decisions. For more information, see: <http://www.pac.dfo-mpo.gc.ca/abor-autoc/index-eng.html>

Consultation: to maintain an open and transparent consultation process for discussions of harvest management issues for Pacific tuna fisheries, including the development of the annual IFMP, activities related to Regional Fisheries Management Organisations, and the long-term direction of the fishery.

Compliance: to continue to monitor fishing activity using hails, logbooks and aerial surveillance in cooperation with the US Coast Guard and other enforcement authorities. This program will be annually assessed for compliance and effectiveness.

7 ACCESS AND ALLOCATION

The Minister can, for reasons of conservation or for any other valid reason, modify access, allocations, and sharing arrangements as outlined in this IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

7.1 Indigenous

Indigenous harvest of Pacific tuna for FSC or domestic purposes may occur coast wide where authorized by a communal licence or Harvest Document.

Fisheries chapters in modern Indigenous treaties may articulate a treaty fishing right for FSC purposes that could be protected under Section 35 of the *Constitution Act*, 1982. Commercial access may be provided either through the general commercial fishery or a Harvest Agreement, which is negotiated at the same time as the treaty and is referenced in the treaty, but is not protected under the *Constitution Act*.

Four modern treaties (Nisga'a Final Agreement, Tsawwassen First Nation Final Agreement (TFA), Maa-nulth First Nations Final Agreement (MNA) and Tla'amin Final Agreement) have been ratified in British Columbia. Tsawwassen and Maa-nulth First Nations Treaties came into effect on April 3, 2009 and April 1, 2011, respectively. Most recently, the Tla'amin First Nations Treaty came into effect on April 5, 2016. These agreements articulate a treaty right to food, social and ceremonial harvest of fish and describe the role for First Nations in fisheries management.

Five Nuu-chah-nulth First Nations located on the West Coast of Vancouver Island - Ahousaht, Ehattesaht, Hesquiaht, Mowachaht/Muchalaht, and Tla-o-qui-aht (the Five Nations) - have Aboriginal rights to fish within their Fishing Territories and to sell that fish. The Department has developed a 2020/21 Five Nations Multi-species Fishery Management Plan (FMP). Feedback provided by the Five Nations during consultations was considered and incorporated into the 2020/21 FMP by DFO where possible. The FMP includes specific details about the fishery, such as allocation/access, licensing and designations, fishing area, harvesting opportunities, and fishery monitoring and catch reporting. For further information see the FMP at: <http://waves-vagues.dfo-mpo.gc.ca/Library/40869374.pdf>.

7.2 Recreational

Recreational harvest of Pacific Albacore Tuna is permitted through a British Columbia Tidal Waters Sport Fishing Licence. The daily limit for Pacific Albacore Tuna is 20 pieces and the possession limit is 40 pieces.

7.3 Commercial

Commercial harvest of Pacific Albacore Tuna is permitted in Canadian waters, USA waters, and in the high seas where appropriately licenced. There is no restriction on the number of licences available to Canadian harvesters for harvest in the high seas or Canadian waters, while the number of Canadian vessels permitted to harvest in the USA EEZ is set-out under the fishing regime of the Canada-USA Tuna Treaty. There is no limit to the total allowable catch in Canada's commercial Pacific Albacore Tuna fishery.

Commercial harvest of Pacific tuna species other than Pacific Albacore Tuna may be permitted in the high seas where appropriately licenced. Limits on effort and total allowable catch are established through the RFMOs and are specific to species targeted, gear-type used, and harvest location. See Appendix 9 for more information.

8 PERFORMANCE / EVALUATION CRITERIA

8.1 National

- Pacific Albacore Tuna conservation objectives are met such that fisheries and ecosystems are healthy and productive.
- Harvest opportunities are provided in a manner consistent with the Sparrow Decision (SCC 1990) and other relevant court decisions and treaty obligations.
- Reasonable effort has been made to provide opportunities for economic prosperity while meeting conservation objectives.
- Consultation and management processes are stable, transparent, and predictable.

8.2 Pacific Region

- The Pacific Albacore Tuna fishery is executed in accordance with the requirements outlined in the IFMP.
- The monitoring program provides accurate information on catch and effort as necessary for management of the tuna resource.
- Proper controls are in place for management and control of the fishery and the conservation and protection of fish.
- First Nations and stakeholders are engaged and informed with regards to management decisions; solutions to issues related to management of the tuna fishery are cooperatively developed.

8.3 Pacific Tuna Resource Management

Stock Conservation

- The ISC is engaged to determine stock levels and provide advice to RFMOs consistent with the precautionary approach.

Ecosystem Processes

- Mechanisms are in place to monitor the fishery by gathering catch and effort information through the hail and logbook programs.

Access for Indigenous People

- Mechanisms are in place for the Department to receive requests for FSC harvest authorizations or include tuna harvest as appropriate in Harvest Documents.

Consultation

- A draft IFMP is distributed with 30 days for review and feedback.
- Pre-season and post-season meetings are held with the Tuna Advisory Board.

-
- The Department participates in bilateral meetings with the USA in order to facilitate Treaty-related discussions and negotiations.

Compliance

- Aerial surveillance is conducted and results compared to relevant authorizations.
- Hail and logbook compliance is reviewed; non-compliance is addressed through appropriate measures.
- U.S. and international enforcement counterparts are engaged where appropriate.

REFERENCES

BC Ministry of Agriculture, 2017. British Columbia Seafood Industry Year in Review 2016.

BC Statistics, 2018. BC Fisheries and Aquaculture Sector, 2016.

Shaw, W. and A.W. Argue. 2000. The 1999 Canadian North Pacific Albacore troll fishery. Document submitted by DFO to the Seventeenth Meeting of the North Pacific Albacore Workshop, Taipei, Taiwan, December 6-13, 2000.

ISC, 2020. Stock Assessment of Albacore Tuna in the North Pacific Ocean in 2020. Report of the Albacore Working Group, Web Meeting, July 15 - 20, 2020.

Ware, D.M. and K.L. Yamanaka. 1991 MS. Catch statistics for the Canadian Albacore Tuna fishery: 1945-1990. Document submitted by DFO to the Annual Meeting of the International North Pacific Fisheries Commission, Tokyo, Japan.

APPENDIX I. POST-SEASON REVIEW

Performance against objectives is reviewed here for the 2020 season and reflect the objectives laid out in the IFMP covering that season.

Objective	DFO Activity
Stock Conservation: to ensure that harvest of Pacific Albacore Tuna is conducted in a sustainable manner and to support the use of the precautionary approach to fisheries management within Regional Fisheries Management Organizations.	Through the relevant Regional Fisheries Management Organizations, Canada is obligated to maintain fishing effort at or below historic levels. Hails and logbook data indicate that Canada did not surpass these effort limits in 2020.
Ecosystem Processes: to ensure conservation of the Pacific Albacore Tuna stock, and manage for ecosystem impacts of fish harvest activities. Scientific management principles will be applied in a risk-based and precautionary manner based on the best scientific advice available, and through comprehensive monitoring of fish harvest activities.	DFO led the ALBWG in conducting the most recent stock assessment for North Pacific Albacore. The assessment concluded that the stock is healthy, current productivity is sufficient to sustain recent exploitation levels, the stock is likely not overfished, and overfishing is likely not occurring. All vessels participating in the fishery were required to maintain a logbook of daily catch (and bycatch), effort, and landings. DFO reviewed logbook data and engages with harvesters to understand impacts of the fishery. No significant negative impacts to other species or ecosystems have been identified.
Access for Indigenous People: to continue to provide opportunities for First Nations to harvest for food, social and ceremonial purposes, in a manner consistent with the Sparrow Decision (SCC 1990), and other court decisions.	Indigenous harvest of Pacific tuna for FSC or domestic purposes may occur coast wide where authorized by a communal licence or Harvest Document.
Consultation: to maintain an open and transparent consultation process for	The TAB pre-season planning meeting was held on March 5, 2020 and post-season

discussions of harvest management issues for the Pacific Albacore Tuna fishery, including the development of the annual IFMP, activities related to Regional Fisheries Management Organisations, and the long-term direction of the fishery.

review meeting was held on November 16-17, 2020. Additional calls with and meetings were held with TAB advisors as necessary to discuss specific items related to management planning.

The draft IFMP was made available for review and comment and the public was advised via Fishery Notice.

Compliance: to continue to monitor fishing activity using hails, logbooks and aerial surveillance in cooperation with the US Coast Guard and other enforcement authorities. This program will be annually assessed for compliance and effectiveness.

Canada had a high logbook compliance rate and reported all aggregated catch (including bycatch) and effort data being prepared for the IATTC and WCPFC for the annual reporting deadline.

As a Condition of Licence, all vessel masters were required to notify Canadian authorities of their fishing activities through the hail program, to maintain and submit harvest logbooks, and register vessels with the IATTC and WCPFC as appropriate.

Hail information related to Canadian vessels entering and exiting USA waters was regularly provided to USA authorities.

APPENDIX 2. TUNA FISHERY AREA CLOSURES

Area 2

Closed year-round in Subareas 2-1, 2-63 to 2-68 and that portion of Subarea 2-69 from Hunter Point to Fame Point inside the 50-fathom contour line. (CHS Chart 3869). The intent of the closure is to reduce harvesting pressure on localized stocks of fish and to provide improved access to First Nations for Food, Social and Ceremonial purposes.

Areas 12 to 20, 28 and 29

Strait of Georgia/Johnstone/Juan de Fuca and Fraser River.

Area 121 (Swiftsure Bank)

Portions of Subareas 121-1 and 121-2 inside a line connecting the following latitude and longitude co-ordinates: 48°34'N, 125°06'W thence to 48°34'N, 124°54.20'W thence to 48°29.62'N, 124°43.40'W thence following the International Boundary between Canada and the USA to 48°29.30'N, 124°58'W then to the beginning point. This area falls within the Maa-nulth Domestic Fishing Area.

Rockfish Conservation Areas

Effective February 1, 2007, a suite of Rockfish Conservation Areas (RCAs) came into effect. There are currently 162 RCAs; the majority of the closed areas are located within the Strait of Georgia. Commercial tuna fishing is prohibited in all RCAs. The descriptions associated with the RCAs can be found at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/rca-acs/index-eng.htm>.

Gwaii Haanas National Marine Conservation Area Reserve and Haida Heritage Site

A management plan for the Gwaii Haanas National Park Reserve, National Marine Conservation Area Reserve, and Haida Heritage Site was approved by Canada and the Haida Nation in November 2018, following an extensive consultation process. On May 1, 2019, the new Gwaii Haanas National Marine Conservation Area Reserve and Haida Heritage management plan was implemented by closing all commercial and recreational fishing in strict protection zones.

A description of the closures, including their geographic coordinates, is available in the Fishery Notice FN0536 (https://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?pg=view_notice&DOC_ID=222098&ID=all)

The Gwaii Haanas Gina 'Waadluxan KilGuhlGa Land-Sea-People Management Plan is available here: <https://www.pc.gc.ca/en/pn-np/bc/gwaiihaanas/info/consultations>.

SGaan Kinghlas-Bowie Seamount Marine Protected Area

The SK-B MPA is closed year-round. The MPA's regulations establish the outer boundary of the MPA as the area of the Pacific Ocean that includes the SK-B, Hodgkins and Davidson Seamounts — consisting of the seabed, the subsoil and the water column above the seabed — which 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.

APPENDIX 3. STOCK ASSESSMENT INFORMATION

Pacific Albacore Tuna

Stock assessments for North Pacific Albacore Tuna (*Thunnus alalunga*) are conducted by the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC). Canada is a member of the ISC and scientists from Fisheries and Oceans Canada participate in the stock assessments.

The most recent stock assessment for North Pacific Albacore Tuna was completed in July, 2020. The assessment found that the stock is likely not overfished relative to the limit reference point adopted by the international body responsible for the stock⁷ and the fishing intensity during the period evaluated was likely at or below all seven potential reference points examined.

The complete ISC stock assessment document is available here:

http://isc.fra.go.jp/pdf/ISC20/ISC20_ANNEX12_Stock_Assessment_Report_for_Albacore_Tuna_in_NorthPacific.pdf.

Stock assessments for South Pacific Albacore Tuna (*Thunnus alalunga*) are conducted by the Secretariat of the Pacific Community (SPC). The most recent stock assessment was completed in 2018 and is available here:

<https://www.wcpfc.int/doc/04/south-pacific-albacore-tuna>

Pacific Bluefin Tuna

The most recent stock assessment for Pacific Bluefin Tuna (*Thunnus orientalis*) was completed by the ISC in July 2020. No reference points have been adopted to evaluate the status of this stock; however, when compared to common reference points used in other assessments the stock appears to be overfished. The full stock assessment document is available here:

http://isc.fra.go.jp/pdf/ISC20/ISC20_ANNEX11_Stock_Assessment_Report_for_Pacific_Bluefin_Tuna.pdf.

Bigeye Tuna, Yellowfin Tuna, and Skipjack Tuna

Stock assessments and science advice for all three tropical tuna species is provided by the IATTC Secretariat's scientific staff for the eastern Pacific Ocean (EPO), and by the SPC for the

⁷ The Northern Committee of the Western and Central Pacific Fisheries Commission manages the stock together with the Inter American Tropical Tuna Commission. The Northern Committee adopted a biomass-based limit reference point in 2014 of 20% of the current spawning stock biomass (<https://www.wcpfc.int/harveststrategy>)

western and central Pacific Ocean (WCPO). The latest stock assessments for Bigeye Tuna (*Thunnus obesus*), Yellowfin Tuna (*Thunnus albacares*), and Skipjack Tuna (*Katsuwonus pelamis*) in the EPO and WCPO are not available. However, updates on stock status and harvest advice are available from the Scientific Committee of the Western and Central Pacific Fisheries

Commission as follows:

- Bigeye Tuna: <https://www.wcpfc.int/doc/01/bigeye-tuna>
- Yellowfin Tuna: <https://www.wcpfc.int/doc/02/yellowfin-tuna>
- Skipjack Tuna: <https://www.wcpfc.int/doc/03/skipjack-tuna>

APPENDIX 4. INDIGENOUS FISHING PLAN

The Department is committed to improving its relationship with Indigenous people. Indigenous fisheries play an important role in this relationship and, therefore, are an integral part of fisheries resource management in the Pacific Region. Through consultation, cooperative management and stewardship activities, DFO and Indigenous groups are working together to build strong, healthy relationships and a sustainable fishery.

Through the Aboriginal Fisheries Strategy, the Department seeks to negotiate with Aboriginal organizations access for Food, Social, and Ceremonial (FSC) purposes. Subject to conservation, this access has priority over access for commercial and recreational harvest. FSC fisheries are managed through communal licences that are issued to First Nations organizations. The Department will consult with First Nations organizations to determine appropriate levels of access. In some cases, a portion of a PFMA may be closed to fishing except for fishing by a First Nation organization. These closures may be for the season or for specified times. Whenever possible, the appropriate annual fishing plan will identify such closures. It is possible that situations may arise in the implementation of the plan where in-season closure adjustments will be required to ensure access to the fishery by First Nations organizations for FSC purposes.

For additional information on DFO's Treaty and Indigenous Fisheries programs, please visit: <http://www.pac.dfo-mpo.gc.ca/abor-autoc/index-eng.html>

APPENDIX 5. RECREATIONAL FISHING PLAN

Overview and Special Considerations

The recreational tuna fishery in British Columbia is limited to Pacific Albacore Tuna as only this species is regularly present in Canadian waters.

Albacore Tuna harvest typically occurs much further offshore than is common with other species. The safety precautions that should be observed may therefore be different, and likely considerably more stringent, than what fishers might consider appropriate when fishing closer to shore.

Further, Albacore Tuna require special handling after capture to maintain quality. Improperly handled Albacore Tuna can cause severe illness if consumed.

To promote safety and catch quality, the Sport Fishing Advisory Board (SFAB) has developed Catch Handling & Vessel Safety guidelines to assist recreational fishers. These guidelines are available at: <https://sportfishing.bc.ca/tuna/>.

General Stipulations

Online Regulations

The regulations for recreational fishing are summarized online in the British Columbia Tidal Waters Sport Fishing Guide, which lists open and closed times, catch limits, size limits (where applicable) and open/closed areas: <http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/index-eng.html>.

When required, Fishery Notices are issued to advise of changes to the regulations which are kept up-to-date in the online Sport Fishing Guide; view or sign-up to receive Fishery Notice notifications by email at: <http://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm>. The old printed Sport Fish Guide booklet is no longer being produced/distributed, both to reduce costs and in recognition that the online guide does a better job at reporting in-season changes, which was not possible with the printed guide. You may also call your local fishery office to obtain regulatory information for your area of interest – visit <http://www.dfo-mpo.gc.ca/contact/regions/pacific-pacifique-eng.html> or call 604-666-0384 or email info@dfo-mpo.gc.ca.

Licensing

Tidal Water Sport Fishing – Licensing and Regulations

The recreational harvest of various fish and invertebrate species in BC is regulated via the *British Columbia Sport Fishing Regulations, 1996* made under the *Fisheries Act*. A DFO Tidal Waters Sport Fishing licence is required for the recreational harvest of all species of fish and invertebrates. The daily maximum for Pacific Albacore Tuna is 20 pieces, with a possession limit of 40 pieces. Tidal Waters Sport Fishing licences may be purchased for a 1, 3, 5 day, or annual period. Fees depend on licence duration, age (senior, adult, juvenile) and residency status. Licences for juveniles (ages 15 and under) are free. In accordance with the Service Fees Act, the annual licence renewal fees will be adjusted by the annual rate of inflation determined by Consumer Price Index published by Statistics Canada. Licence renewal fees may be found at: <https://www.pac.dfo-mpo.gc.ca/fm-gp/rec/licence-permis/application-eng.html>

Purchase your licence online via the National Recreational Licensing System:
<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/licence-permis/application-eng.html>

E-licences and Paper licences

Although many recreational fishers continue to use the traditional paper copy of their licence, an e-licence – which is an electronic/pdf copy of your licence – may be used on a mobile device, such as a cell phone or tablet; however there are restrictions on its use.

Using Mobile Devices and the FishingBC App

The FishingBC App <http://www.fishingbcapp.ca/>, as developed by the Sport Fishing Institute of BC, may be downloaded to your mobile device to assist with having access to regulatory information for species/areas/fishing gear while out on the water (along with other functionality). Please note that the DFO website is the official site for regulatory information in the event of a discrepancy between the two.

Catch Reporting

Recreational harvesters are required as a condition of the Tidal Waters Sport Fishing Licence to report information on their recreational fishing activity and catch to DFO representatives when requested to do so, whether in person or via an internet survey. Recreational harvesters may be requested by a Fishery Officer or designated DFO representative at the dock, or through a creel or internet survey to provide catch and effort information on their recreational fishing activities.

The Internet Recreational Effort and Catch (iREC) Survey was initiated in 2012 to provide monthly estimates of effort for all methods of recreational fishing. Survey participants will be selected at time of licence purchase, and have their iREC survey access code printed to their

licence. A reminder notice will also be sent by email. By completing the survey, fishers provide information essential to understanding the full impacts of the recreational fishery, and thus support sustainable fishery management. More information on the iREC Survey is available at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/irec-iarc/index-eng.html>.

Participants in the recreational tuna fishery may also be requested to complete and submit a harvest log documenting the location, times, and amounts of tuna catch retained and released.

APPENDIX 6. COMMERCIAL FISHING PLAN FOR PACIFIC ALBACORE TUNA – CANADIAN VESSELS IN THE CANADIAN EEZ AND HIGH SEAS

Overview

Fishery Covered

This commercial fishing plan covers Canadian vessels harvesting Albacore Tuna in Canada's Exclusive Economic Zone (EEZ) and the high seas of the Pacific Ocean (i.e. areas outside the EEZs of Canada or other states).

Conditions of Licence

Licences authorizing the harvest of Pacific tuna species are issued with attached "Conditions of Licence" which stipulate requirements specific to each licence. Harvesters operating under the authority of a fishing licence are legally obligated to comply with the requirements specified in the Conditions of Licence. The IFMP outlines only some of these requirements and does not provide the full information necessary to ensure compliance. Harvesters should review and understand their Conditions of Licence prior to commencing fishing.

General Stipulations

Licences

Commercial harvest of Albacore Tuna is permitted under the authority of vessel-based category CT licence for Canadian waters and the high seas or a vessel-based Section 68 High Seas licence for high seas waters only.

Licence Fees

In accordance with the Service Fees Act, annual licence renewal fees will be adjusted by the annual rate of inflation determined by Consumer Price Index (CPI) published by Statistics Canada.

The commercial Albacore Tuna (Category CT) and Section 68 High Seas (Category SEC68) licence renewal fee may be found on the following link: <http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/renewalfees-fraisrenouvellement-eng.html>.

Areas

Harvesters operating under the authority of a CT licence are permitted to harvest tuna in Canada's EEZ with the exception of those closed areas specified in Appendix 2.

Harvesters operating under the authority of a CT licence or under the authority of a Section 68 High Seas licence are permitted to harvest tuna in the high seas area (outside the EEZ of any state) of the IATTC Convention Area. The IATTC Convention Area can be generally considered to encompass the Eastern Pacific Ocean (see Figure 1 in Section 1.7 of the IFMP); detailed boundaries are specified in Conditions of Licence.

Harvesters operating under the authority of a CT licence or under the authority of a Section 68 High Seas licence are not permitted to harvest tuna in the WCPFC Convention Area unless authorized through amended Conditions of Licence. The WCPFC Convention Area can be generally considered to encompass the Western Pacific Ocean, west of 150 degrees west longitude (see Figure 1 in Section 1.7 of the IFMP); detailed boundaries are specified in Licence Conditions. Harvesters can request amended Conditions of Licence authorizing harvest in the WCPFC Convention Area from the Tuna Resource Manager.

Times

Both CT licences and Section 68 High Seas licences are valid from April 1, 2021 to March 31, 2022.

Gear

Harvesters targeting Pacific Albacore Tuna in Canadian waters are permitted to use hook and line gear, not including longline gear. No other gear types are permitted.

Harvesters targeting Pacific Albacore Tuna in the high seas are permitted to use hook and line gear, not including longline gear unless specifically authorized through amended Conditions of Licence. Authorization to use longline gear may be requested from the Tuna Resource Manager and will be subject to a detailed plan ensuring that relevant requirements can be met. No other gear types are permitted.

Permitted Species

Harvesters operating under the authority of a CT or Section 68 High Seas licence are authorized to capture and retain Pacific Albacore Tuna (*Thunnus alalunga*).

Harvesters targeting Pacific Albacore Tuna under the authority of a CT or Section 68 High Seas licence may retain the following species when encountered as bycatch:

- Pacific Bluefin Tuna (*Thunnus orientalis*)
- Pacific Bonito (*Sarda chiliensis*)
- Skipjack Tuna (*Katsuwonus pelamis*)
- Yellowfin Tuna (*Thunnus albacares*)
- Yellowtail Amberjack (*Seriola lalandi*)

Harvesters targeting Pacific Albacore Tuna under the authority of a Section 68 High Seas licence may retain the following species additional species when encountered as bycatch:

- Bigeye Tuna (*Thunnus obesus*)
- Marlins (*Tetrapturus* sp.; *Makaira* sp.)
- Sail-fishes (*Istiophorus* sp.)
- Blackfin Tuna (*Thunnus atlanticus*)
- Swordfishes (*Xiphias gladius*)
- Little Tuna (*Euthynnus* sp.)
- Sauries (*Scomberesox* sp.; *Colobais* sp.)
- Frigate Mackerel (*Auzis* sp.)
- Dolphin fish (Mahi Mahi) (*Coryphaena* sp.)
- Pomfrets (Family *Bramidae*)

Vessels fishing under the authority of a CT licence are not permitted to retain these species.

Maximum Retention Amounts

There is no limit to the amount of Pacific Albacore Tuna that may be retained.

Each licence holder is permitted to retain a maximum of 100kg of each of the species other than Pacific Albacore Tuna listed above when encountered as bycatch in the Pacific Albacore Tuna fishery.

For information on targeted harvest of species other than Pacific Albacore Tuna please see Appendix 9.

Licencing

Eligibility

Both the CT and the Section 68 High Seas licences are vessel-based; all vessels receiving these licences must be registered Canadian commercial vessels.

In order to be eligible for a CT licence, a commercial or communal commercial licence with Schedule II privileges is required. If the primary licence with Schedule II privileges is replaced or relinquished an associated CT licence will no longer be valid.

Section 68 High Seas licences do not require a primary licence.

Licence Issuance

All fish harvesters/licence holders/vessel owners are now required to use the National Online Licensing System (NOLS) to view, pay for, and print their commercial fishing licences, licence conditions, and receipts. Training materials, including step-by-step guides and a detailed user training manual, are available online (<http://www.dfo-mpo.gc.ca/FM-GP/SDC-CPS/licence-permis-eng.htm>) to guide users of the system in completing their licensing transactions. The Department also provides client support and assistance on how to use the system via e-mail at fishing-peche@dfo-mpo.gc.ca or by calling toll-free at 1-877-535-7307 (7:00 AM to 8:00 PM Eastern, Monday to Friday). For more information on how to register and use the system, visit the Department's website at the address above, or contact client support.

Completed applications for Section 68 High Seas licences may be submitted through NOLS or by email to the Pacific Fisheries Licencing Unit. The vessel owner or authorized representative must sign the application form. High Seas applications for species other than tuna will be forwarded to the appropriate DFO Fishery Manager or Co-ordinator for review and approval prior to licence issue.

Licence Documents

Schedule II Species Tuna documents are valid from the date of issue to March 31, 2022. Section 68 documents are also valid from the date of issue to March 31, 2022. Replacements for lost or destroyed licence documents may be obtained by reprinting the licence documents through the NOLS.

Regional Fishery Management Organizations

Inter-American Tropical Tuna Commission (IATTC)

All Canadian tuna vessels operating in the Pacific Ocean, including within Canada's Pacific EEZ, must be listed on the IATTC Regional Vessel Registry. Harvesters can check the IATTC Regional Vessel Registry (www.iattc.org/VesselDataBaseENG.htm) to ensure that their vessel is registered. Registration forms are available here: https://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/pelagic-pelagique/tuna-thon/form/wcpfc_iattc-cppoc_citt-eng.pdf.

As part of their registration with the IATTC, all vessels over 12 metres in length must have an International Maritime Organization (IMO) number. IMO numbers can be obtained at no cost online at <https://imonumbers.lrfairplay.com>.

Western and Central Pacific Fisheries Commission (WCPFC)

Harvesters wishing to fish for tuna in the WCPFC Convention Area will need to request amended Conditions of Licence from the Tuna Resource Manager. These amended Conditions of Licence will be issued once it has been confirmed that the various requirements specific to harvesting in the WCPFC Convention Area have been met.

All vessels used to harvest tuna in the WCPFC Convention Area must be listed on the WCPFC Record of Fishing Vessels (<https://www.wcpfc.int/record-fishing-vessel-database>). Vessels on this list must be authorized annually.

All vessels used to harvest tuna in the WCPFC Convention Area must also have a vessel monitoring system (VMS) approved and registered with the WCPFC Secretariat. Only certain VMS units and service providers are accepted. Vessel operators must sign an authorization form permitting the WCPFC Secretariat to track the vessel while operating in the WCPFC Convention Area.

Certain additional requirements for fishing in the WCPFC Convention Area depend on the specific location, type of harvest (fresh or frozen fish), gear type, and other considerations. Harvesters will need to discuss with the Tuna Resource Manager how these requirements relate to their intentions for fishing in the WCPFC Convention Area.

To request authorization to fish in the WCPFC Convention Area and obtain the necessary registration forms contact the Tuna Resource Manager.

Fishery Monitoring

Financial Responsibilities

Commercial tuna licence holders fund the fishery monitoring program which consists of, logbooks, vessel hails, associated data entry, and the provision of data to DFO. Licence holders are also responsible for the cost of VMS units, installation, operation, and maintenance; however, the costs associated with management of VMS data are covered by the Department.

Logbook

Harvesters must keep an accurate harvest log (logbook) with complete records of all catch (including bycatch), dates and times, coordinates, and offload information. Harvesters are also requested to provide length measurements for a sample 10 fish at the start of each successful day. Logbooks must be submitted by November 1, 2021 or no later than seven days after final landing.

Logbooks that meet the requirements of the Department are available for purchase from the Canadian Highly Migratory Species Foundation (CHMSF) by calling (250) 658-0179. The purchase of the CHMSF logbook includes a service to receive hard copy (paper) logbooks and to verify, edit, keypunch, and provide the data in the required format to the Department.

Vessel Hail Program

The hail component of the fishery monitoring program for the Pacific Albacore Tuna fishery collects data such as vessel name, date, time and location of fishing activities. The objective of this program is for DFO to be able to accurately determine and report on which vessels are fishing, and the fishing zones they are active in, at any given time during the fishing season. This information is also needed as part of the post season reporting of fishing effort and catch areas. All hail reports must be submitted to an approved hail service provider who then provides the data to DFO.

All vessel operators are required to submit a “Hail-Out Report” before leaving port to start fishing at the beginning of the season or after having submitted a “Hail-In Report” during the season. A “Hail-In Report” is required if the vessel has ceased fishing for more than 7 days.

All vessel operators are required to submit a “Change of Zone Report” if they cross into a different zone for a period of greater than 48 hours. There are 4 fishing zones in Canada’s Pacific Albacore Tuna fishery: (1) the Canadian EEZ, (2) the USA EEZ, (3) the High Seas of the IATTC Convention Area, and (4) the High Seas of the WCPFC Convention Area (a map of the IATTC and WCPFC convention areas is included in Section 1.7 of the IFMP). Hails must be made within 24 hours, or the next business day. Specific information on hail requirements are provided in the Conditions of Licence.

Other Information

National Oceanic and Atmospheric Administration Fisheries Southwest Science Center Tagging Project

The Southwest Fisheries Science Centre (SWFSC) is working with The American Fishermen’s Research Foundation (AFRF) on an albacore tagging project. The objective of the project is to

better understand the movements of North Pacific Albacore. Tags can be identified by the presence of a green dart tag behind the dorsal fin and a plastic coated stalk protruding from the rear portion of the belly. The SWFSC is offering a \$500 (U.S. dollars) reward for the return of a tagged fish with the archival tag in place along with the date, latitude and longitude of where the tagged fish was caught and the gear used to catch the fish. The reward can be obtained by returning the tagged fish and capture information to:

National Marine Fisheries Service
Southwest Fisheries Science Centre
8604 La Jolla Shores Dr.
La Jolla, CA 92037

More information on the tagging program can be found at:
<http://swfsc.noaa.gov/textblock.aspx?Division=FRD&id=1194>

APPENDIX 7. COMMERCIAL FISHING PLAN FOR PACIFIC ALBACORE TUNA – USA VESSELS IN THE CANADIAN EEZ

Overview

The activities of USA-flagged tuna vessels (USA vessels) in the Canadian EEZ are governed by the *Treaty between the Government of the United States of America and the Government of Canada on Pacific Coast Albacore Tuna Vessels and Port Privileges* (the Canada-USA Tuna Treaty) and by Canada’s domestic legislation and regulations.

The *Coastal Fisheries Protection Act* (CFPA) and the *Coastal Fisheries Protection Regulations* (CFPR) are the legislative tools for authorizing foreign fishing vessel access to, and activities in, Canadian fisheries waters and ports. Under the CFPA, foreign fishing vessels are prohibited from entering Canadian fisheries waters and ports for any purpose unless authorized to do so by the Act, the Regulations, any other law of Canada or a treaty.

On May 26, 2020 Canada and the United States concluded the negotiation on the renewal of the fishing regime under the Canada-USA Tuna Treaty. Canada and the United States agreed to renew the previous fishing regime for an additional three years, until December 31, 2022.

Please note that much of the information contained in this commercial fishing plan, along with links to required forms and additional information relating to the entry of foreign vessels into Canadian waters can be found here: <https://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/forms/eez-instruc-zee-eng.html>.

General Stipulations

Licences

All USA vessels must obtain a Canadian EEZ Tuna Fishing Licence from DFO prior to commencing fishing in Canada’s EEZ.

All USA vessels must obtain a Canadian Port Access Licence from DFO prior to accessing Canadian ports. The Port Access Licence is formally known as the “Authorization for Port Activity and Exclusive Economic Zone (EEZ) Entry by a Foreign Vessel”.

All vessel licences, issued by either the United States or Canada, must be kept onboard the vessel at all times and may be inspected by DFO Fishery Officers at any time while in Canadian waters.

Areas

Under the terms of the Treaty, authorized USA vessels are permitted to harvest Albacore Tuna throughout Canada's EEZ, at a distance of 12 nautical miles or greater from the baseline of Canada's territorial sea, with the exception of the areas closed to all commercial tuna fishing specified in Appendix 2.

Pursuant to the Treaty, USA vessels are authorized to enter, land catch, exchange crew, sell or tranship catch, and obtain fuel, supplies, repairs and equipment at the following Canadian ports:

- a) Coal Harbour
- b) Port Hardy
- c) Prince Rupert
- d) Victoria
- e) Vancouver
- f) Ucluelet

Note that the vessel master and crew of USA vessels entering port are required to clear with Canadian Customs and Border Services Agency (CBSA) prior to any person or cargo being allowed to disembark the vessel.

Times

Under the terms of the Treaty, authorized USA vessels are permitted to fish for Albacore Tuna in Canadian fisheries waters from June 15, 2021 to October 31, 2021 and may access Canadian ports for various activities from June 15, 2021 to December 31, 2021.

Gear

Within Canada's EEZ, commercial tuna fishing is permitted with hook and line gear not including longline gear.

Permitted Species

Under the terms of the Treaty, authorized USA vessels are permitted to harvest Pacific Albacore Tuna (*thunnus alalunga*) in Canadian fisheries waters.

Licencing

Fees

There are no fees for either the Port Access Licence or the EEZ Fishing Licence.

Eligibility

In order to be eligible for either a Port Access Licence or a EEZ Fishing Licence, USA vessels must not have any history of serious enforcement issues in Canada's EEZ.

Additionally, in order to be eligible for a EEZ Fishing Licence USA vessels must be on the authorized treaty vessel list (the USA's "seasonal list" under the Canada-USA Tuna Treaty). The USA authorized treaty vessel list is administered by USA government fisheries officials (contact albacore.fish@noaa.gov or 562-980-4238 for more information).

Licence Issuance

To apply for either a Port Access Licence or a EEZ Fishing Licence, USA vessel operators or their authorized agents must complete a "License Application and Authorisation for Port Activity and Exclusive Economic Zone (EEZ) Entry by a Foreign Vessel" (application form) and submit this to DFO. Applicants can submit an application for one or both licences using the same form.

The application form can be found at <https://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/forms/eez-zee-eng.html>. Completed applications can be submitted via email to: fishing-peche@dfo-mpo.gc.ca (specify Pacific Region in the subject line)

Fishery Monitoring

In coordination with USA authorities, DFO monitors the locations of USA vessels operating in Canadian waters, the amount of Albacore Tuna caught by USA vessels in Canadian waters, and landings of Albacore Tuna by USA vessels in Canadian ports.

Vessel Locations

Operators of USA vessels entering Canadian fisheries waters for the purposes of transiting to port or fishing for Albacore Tuna are required to report to Canadian Coast Guard at least 24 hours prior to entry to Canada's domestic waters, at least 24 hours prior to entry to a Canadian port, and at least 72 hours prior to exiting Canada's domestic waters.

Vessel masters must communicate with Canadian Coast Guard (Prince Rupert or Victoria as appropriate) and provide details such as vessel name and ID number, type and length of vessel,

current position, intended route, destination port, Canadian EEZ Licence Number, and any other information requested.

Communications to Canadian authorities must be made to Canadian Coast Guard (Prince Rupert or Victoria as appropriate) via:

- a) VHF channel 83a (within a 60 mile range);
- b) MF channel 2054 (within a 200 mile range);
- c) HF channel 4125 (within a 400 mile range);
- d) Using a satellite phone or cellular phone and dialling 250-627-3081 (Prince Rupert), or 250-363-6333 (Victoria).

Note that the vessel master and crew of USA vessels entering port are also required to clear with Canadian Customs and Border Services Agency (CBSA) prior to any person or cargo being allowed to disembark the vessel.

The locations of USA vessels in Canadian waters is also monitored by surveillance aircraft, radar and satellite technologies, and additional information provided from USA authorities.

Catch and Landings

Under the terms of the Treaty, operators of all USA vessels must submit information detailing the amount (number and weight) of Albacore Tuna caught in Canadian waters to USA fisheries authorities who must subsequently provide this information to DFO. DFO also collects information on USA vessel Albacore Tuna landings in Canada directly from Canadian fish buyers and processors.

Logbook

Harvesters must keep an accurate harvest log (logbook) with complete records of all catch (including bycatch), dates and times, coordinates, and offload information. Logbooks may be inspected by DFO Fishery Officers at any time while in Canadian waters.

APPENDIX 8. COMMERCIAL FISHING PLAN FOR PACIFIC ALBACORE TUNA – CANADIAN VESSELS IN THE USA EEZ

Overview

The activities of Canadian tuna vessels in the Exclusive Economic Zone (EEZ) of the USA are governed by the *Treaty between the Government of the United States of America and the Government of Canada on Pacific Coast Albacore Tuna Vessels and Port Privileges* (the Canada-USA Tuna Treaty) as well as Canada’s domestic legislation and regulations. Additionally, the entirety of the USA EEZ falls within the IATTC Convention Area and Canada is therefore obliged to ensure that Canadian vessels operating in the USA EEZ comply with the requirements of relevant IATTC resolutions.

On May 26, 2020 Canada and the United States concluded the negotiation on the renewal of the fishing regime under the Canada-USA Tuna Treaty. Canada and the United States agreed to renew the previous fishing regime for an additional three years, until December 31, 2022.

Fishery Covered

This commercial fishing plan covers Canadian vessels harvesting Pacific Albacore Tuna in the EEZ of the USA.

Conditions of Licence

Licences authorizing the harvest of Pacific tuna species are issued with attached “Conditions of Licence” which stipulate requirements specific to each licence. Harvesters operating under the authority of a fishing licence are legally obligated to comply with the requirements specified in the Conditions of Licence. The IFMP outlines only some of these requirements and does not provide the full information necessary to ensure compliance. Harvesters should review and understand their Conditions of Licence prior to commencing fishing.

General Stipulations

Licences

Commercial harvest of tuna in USA waters by Canadian vessels is permitted under the authority of a USA Section 68 (“USA68”) licence. Other licence categories do not authorize tuna fishing in the USA EEZ.

Areas

Harvesters operating under the authority of a USA68 licence are permitted to harvest tuna throughout the USA EEZ at a distance of 12 nautical miles from the baseline of the USA territorial sea, with the exception of any areas closed by USA authorities.

Canadian fishing vessels authorized to fish Albacore Tuna in USA waters may (pursuant to Article III of the Treaty) enter, land their catches, sell or tranship their catch, obtain fuel, supplies, repairs and equipment at the ports listed below (USA Customs Service contact information in parenthesis):

- Bellingham, Washington (Port of Bellingham, 360-734-5463)
- Westport, Washington (Serviced out of Aberdeen, Washington, 360-532-2030 or 360-580-2146)
- Astoria, Oregon (1402 Marine Drive, Astoria, Oregon 97103, 503-325-5541 08:00 to 16:30 Weekdays)
- Newport, Oregon (1430 SE Bay Blvd., Newport, Oregon 97365, 541-265-6456 08:00 to 16:00 Weekdays)
- Coos Bay, Oregon (3229 Broadway Street, Suite E, North Bend, Oregon 97459, 541-756-2396 08:00 to 16:00 Weekdays)
- Eureka, California (317 3rd Street, Suite 6, Eureka, California 95501, 707-442-4822 08:30 to 16:30 Weekdays)

Vessels are required to clear with USA Customs and Border Protection and are reminded of the requirement that sanitary facilities must be closed off prior to entry to any USA port. For USA customs requirements or for additional information, visit <https://www.cbp.gov/> or <http://www.us-immigration.com> or phone the National Customer Service Center at 1-800-375-5283.

Times

Under the terms of the Treaty, authorized Canadian vessels are permitted to access USA waters from June 15, 2021 to September 15, 2021.

Gear

Under the terms of the Treaty, authorized Canadian vessels are permitted to use troll gear only and the use of live bait is not permitted.

Permitted Species

Canadian vessels operating under the authority of a USA68 licence are permitted to harvest Pacific Albacore Tuna (*Thunnus alalunga*) only.

Licencing

Eligibility

Eligibility for USA68 licences is limited to vessels on the previously established 1-179 eligibility ranking for Canadian vessels under the Treaty (see Section 1.7 of the IFMP for background).

Only vessels on this list can receive a USA68 licence. Each USA68 licence issued corresponds with the 1-179 ranking; for example, the vessel ranked #54 on the 1-179 list will receive USA68 licence #54 (USA68-54).

Under the terms of the current Treaty regime only vessels ranked 1-45 on the eligibility list are permitted to fish in the USA EEZ. As such, the USA68 licences issued to vessels ranked 46-179 do not authorize fishing.

Eligibility may be transferred from one vessel to another provided the replacing vessel meets certain criteria. For eligibilities 46-179, the replacing vessels cannot be larger than the outgoing vessel. For eligibilities 1-45, the replacing vessel:

1. cannot be larger than the outgoing vessel,
2. must also be on the 1-179 eligibility list,
3. must have a history of fishing in the USA EEZ, and
4. must not have had any enforcement incidents in the USA EEZ.

Note that all transfers of eligibilities 1-45 must be approved by a Canada-USA Joint Review Committee which typically meets once annually in May or June each year. Eligibilities 1-45 cannot be transferred during the fishing season, although temporary replacements may be possible under extenuating circumstances. Requests for transfers of eligibilities 1-45 must be received by DFO no later than May 15, 2021 in order to be processed in advance of the fishing season.

Licence Issuance

Eligible vessels do not have to apply annually to receive USA68 licences or maintain their position on the eligibility list.

Fishery Monitoring

Financial Responsibilities

Commercial tuna licence holders fund the fishery monitoring program which consists of, logbooks, vessel hails, associated data entry, and the provision of data to DFO. Licence holders are also responsible for the cost of VMS units, installation, operation, and maintenance; however, the costs associated with management of VMS data are covered by DFO.

Logbook

Harvesters must keep an accurate harvest log (logbook) with complete records of all catch (including bycatch), dates and times, coordinates, and offload information. Harvesters are also requested to provide length measurements for a sample 10 fish at the start of each successful day. Logbooks must be submitted by November 1, 2021 or no later than seven days after final landing.

Logbooks that meet the requirements of the Department are available for purchase from the Canadian Highly Migratory Species Foundation (CHMSF) by calling (250) 658-0179. The purchase of the CHMSF logbook includes a service to receive hard copy (paper) logbooks and to verify, edit, keypunch, and provide the data in the required format to the Department.

Vessel Hail Program

The telephone and email hail component of the fishery monitoring program for the Pacific Albacore Tuna fishery collects data such as vessel name, date, time and location of fishing activities. The objective of this program is for DFO to be able to accurately determine and report on which vessels are fishing, and the fishing zones they are active in, at any given time during the fishing season. This information is also needed as part of the post season reporting of fishing effort and catch areas. All hail reports must be submitted to an approved hail service provider who then provides the data to DFO.

All vessel operators are required to submit a “Hail-Out” (start fishing) report before leaving port to start fishing at the beginning of the season or after having submitted a “Hail-In Report” (stop fishing) during the season. A “Hail-In” (stop fishing) report is required if the vessel has ceased fishing for more than 7 days.

All vessel operators are required to submit a “Change of Zone” report when entering or exiting USA waters for a period of greater than 48 hours. More details on hail requirements can be found in Conditions of Licence. Hail information for Canadian vessels entering or exiting the USA EEZ is shared with USA fisheries authorities.

Other Information

National Oceanic and Atmospheric Administration Fisheries Southwest Science Center Tagging Project

The Southwest Fisheries Science Centre (SWFSC) is working with The American Fishermen’s Research Foundation (AFRF) on an albacore tagging project. The objective of the project is to

better understand the movements of North Pacific albacore. Tags can be identified by the presence of a green dart tag behind the dorsal fin and a plastic coated stalk protruding from the rear portion of the belly. The SWFSC is offering a \$500 (U.S. dollars) reward for the return of a tagged fish with the archival tag in place along with the date, latitude and longitude of where the tagged fish was caught and the gear used to catch the fish. The reward can be obtained by returning the tagged fish and capture information to:

National Marine Fisheries Service
Southwest Fisheries Science Centre
8604 La Jolla Shores Dr.
La Jolla, CA 92037

More information on the tagging program can be found at:

<http://swfsc.noaa.gov/textblock.aspx?Division=FRD&id=1194>

APPENDIX 9. COMMERCIAL FISHING PLAN FOR BIGEYE TUNA, PACIFIC BLUEFIN TUNA, SKIPJACK TUNA, AND YELLOWFIN TUNA – CANADIAN VESSELS IN THE HIGH SEAS

Overview

Fishery Covered

This commercial fishing plan covers Canadian vessels harvesting Bigeye Tuna, Pacific Bluefin Tuna, Skipjack Tuna, or Yellowfin Tuna in the high seas of the Pacific Ocean (i.e. areas outside the EEZs of Canada or other states).

All harvesters wishing to participate in this fishery must contact the Tuna Resource Manager to obtain authorization. Licences issued for the harvest of Pacific Albacore Tuna do not authorize targeted harvest of non-Albacore species unless amendments are made to the Conditions of Licence.

Conditions of Licence

Licences authorizing the harvest of Pacific tuna species are issued with attached “Conditions of Licence” which stipulate requirements specific to each licence. Harvesters operating under the authority of a fishing licence are legally obligated to comply with the requirements specified in the Conditions of Licence. The IFMP outlines only some of these requirements and does not provide the full information necessary to ensure compliance. Harvesters should review and understand their Conditions of Licence prior to commencing fishing.

General Stipulations

Licences

Commercial harvest of Pacific tuna species in the high seas may be permitted under the authority of a vessel-based category CT licence or a vessel-based Section 68 High Seas licence.

Areas

This commercial fishing plan covers fishing operation in the high seas of the Pacific Ocean (areas that are not included in the Exclusive Economic Zone, the territorial sea, or the internal waters of any state).

Times

Both CT licences and Section 68 High Seas licences are valid from April 1, 2021 to March 31, 2022. Licence Conditions will authorize fishing until December 31, 2021 but this time may be extended upon request.

Gear

Harvesters operating in the high seas under the authority of a CT or Section 68 High Seas licence are permitted to use hook and line gear, not including longline gear unless specifically authorized through amended Conditions of Licence. Authorization to use longline gear may be requested from the Tuna Resource Manager and will be subject to a detailed plan ensuring that relevant requirements can be met. No other gear types are permitted.

Permitted Species

Harvesters operating under the authority of a CT or Section 68 High Seas licence may be permitted to capture and retain the following non-Albacore species:

- Pacific Bluefin Tuna (*Thunnus orientalis*)
- Pacific Bonito (*Sarda chiliensis*)
- Skipjack Tuna (*Katsuwonus pelamis*)
- Yellowfin Tuna (*Thunnus albacares*)
- Yellowtail Amberjack (*Seriola lalandi*)

Harvesters operating under the authority of a Section 68 High Seas licence may retain the following species additional species:

- Bigeye Tuna (*Thunnus obesus*)
- Marlins (*Tetrapturus* sp.; *Makaira* sp.)
- Sail-fishes (*Istiophorus* sp.)
- Blackfin Tuna (*Thunnus atlanticus*)
- Swordfishes (*Xiphias gladius*)
- Little Tuna (*Euthynnus* sp.)
- Sauries (*Scomberesox* sp.; *Colobais* sp.)
- Frigate Mackerel (*Auzis* sp.)
- Dolphin fish (Mahi Mahi) (*Coryphaena* sp.)
- Pomfrets (Family *Bramidae*)

Vessels fishing under the authority of a CT licence are not permitted to retain these species.

Maximum Retention Amounts

Retention amounts for the targeted harvest of Bigeye Tuna, Pacific Bluefin Tuna, Skipjack Tuna, and Yellowfin Tuna will be established on a case by case basis upon request and in accordance with Canada's relevant obligations under the IATTC and WCPFC.

Each licence holder will typically be permitted to retain a maximum of 100kg of each of the other permitted species when encountered as bycatch.

Licencing

Eligibility

Both the CT and the Section 68 High Seas licences are vessel-based and all vessels receiving these licences must be registered Canadian commercial vessels.

In order to be eligible to apply for a CT licence, a commercial or communal commercial licence with Schedule II privileges is required. If the primary licence with Schedule II privileges is replaced or relinquished an associated CT licence will no longer be valid.

Section 68 High Seas licences do not require a primary licence.

Licence Issuance

All fish harvesters/licence holders/vessel owners are now required to use the National Online Licensing System (NOLS) to view, pay for, and print their commercial fishing licences, licence conditions, and receipts. Training materials, including step-by-step guides and a detailed user training manual, are available online (<http://www.dfo-mpo.gc.ca/FM-GP/SDC-CPS/licence-permis-eng.htm>) to guide users of the system in completing their licensing transactions. The Department also provides client support and assistance on how to use the system via e-mail at fishing-peche@dfo-mpo.gc.ca or by calling toll-free at 1-877-535-7307 (7:00 AM to 8:00 PM Eastern, Monday to Friday). For more information on how to register and use the system, visit the Department's website at the address above, or contact client support.

Completed applications for Section 68 High Seas licences may be submitted through NOLS or by email to the Pacific Fisheries Licencing Unit. The vessel owner or authorized representative must sign the application form. High Seas applications for species other than tuna will be forwarded to the appropriate DFO Fishery Manager or Co-ordinator for review and approval prior to licence issue.

Licence Documents

Schedule II Species Tuna documents are valid from the date of issue to March 31, 2022. Section 68 documents are also valid from the date of issue to March 31, 2022. Replacements for lost or destroyed licence documents may be obtained by reprinting the licence documents through the NOLS.

Regional Fishery Management Organizations

Inter-American Tropical Tuna Commission (IATTC)

All Canadian tuna vessels operating in the Pacific Ocean, including within Canada's Pacific EEZ, must be listed on the IATTC Regional Vessel Registry. Harvesters can check the IATTC Regional Vessel Registry (www.iattc.org/VesselDataBaseENG.htm) to ensure that their vessel is registered. Registration forms are available here: https://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/pelagic-pelagique/tuna-thon/form/wcpfc_iattc-cppoc_citt-eng.pdf.

As part of their registration with the IATTC, all vessels over 12 metres in length must have an International Maritime Organization (IMO) number. IMO numbers can be obtained at no cost online at <https://imonumbers.lrfairplay.com>.

Western and Central Pacific Fisheries Commission (WCPFC)

Harvesters wishing to fish for tuna in the WCPFC Convention Area will need to request amended Conditions of Licence from the Tuna Resource Manager. These amended Conditions of Licence will be issued once it has been confirmed that the various requirements specific to harvesting in the WCPFC Convention Area have been met.

All vessels used to harvest tuna in the WCPFC Convention Area must be listed on the WCPFC Record of Fishing Vessels (<https://www.wcpfc.int/record-fishing-vessel-database>). Vessels on this list must be authorized annually.

All vessels used to harvest tuna in the WCPFC Convention Area must also have a vessel monitoring system (VMS) approved and registered with the WCPFC Secretariat. Only certain VMS units and service providers are accepted. Vessel operators must sign an authorization form permitting the WCPFC Secretariat to track the vessel while operating in the WCPFC Convention Area.

Certain additional requirements for fishing in the WCPFC Convention Area depend on the specific location, type of harvest (fresh or frozen fish), gear type, and other considerations. Harvesters will need to discuss with the Tuna Resource Manager how these requirements relate to their intentions for fishing in the WCPFC Convention Area.

To request authorization to fish in the WCPFC Convention Area and obtain the necessary registration forms contact the Tuna Resource Manager.

Fishery Monitoring

Financial Responsibilities

Commercial tuna licence holders fund the fishery monitoring program which consists of, logbooks, vessel hails, associated data entry, and the provision of data to DFO. Licence holders are also responsible for the cost of VMS units, installation, operation, and maintenance; however, the costs associated with management of VMS data are covered by the Department.

Logbook

Harvesters must keep an accurate harvest log (logbook) with complete records of all catch (including bycatch), dates and times, coordinates, and offload information.

Logbooks that meet the requirements of the Department are available for purchase from the Canadian Highly Migratory Species Foundation (CHMSF) by calling (250) 658-0179. The purchase of the CHMSF logbook includes a service to receive hard copy (paper) logbooks and to verify, edit, keypunch, and provide the data in the required format to the Department.

Vessel Hail Program

The hail component of the fishery monitoring program for Pacific tuna fisheries collects data such as vessel name, date, time and location of fishing activities. The objective of this program is for DFO to be able to accurately determine and report on which vessels are fishing, and the fishing zones they are active in, at any given time during the fishing season. This information is also needed as part of the post season reporting of fishing effort and catch areas. All hail reports must be submitted to and approved hail service provider who then provides the data to DFO.

All vessel operators are required to submit a "Hail-Out Report" before leaving port to start fishing at the beginning of the season or after having submitted a "Hail-In Report" during the season. A "Hail-In Report" is required if the vessel has ceased fishing for more than 7 days.

All vessel operators are required to submit a "Change of Zone Report" if they cross into a different zone for a period of greater than 48 hours. There are 4 fishing zones in Canada's Pacific Albacore Tuna fishery: (1) the Canadian EEZ, (2) the USA EEZ, (3) the High Seas of the IATTC Convention Area, and (4) the High Seas of the WCPFC Convention Area (a map of the IATTC and WCPFC convention areas is included in Section 1.7 of the IFMP). Hails must be made within 24 hours, or the next business day. Specific information on hail requirements are provided in the Conditions of Licence.

APPENDIX 10. TUNA ADVISORY BOARD MEMBERSHIP

Advisor Name	Representation	Term Start (January 1 st)	Term End (December 31 st)
Fraser MacDonald	USA Zone	2021	2024
VACANT	USA Zone	2021	2024
Tad Larden	USA Zone	2019	2022
Peter de Greef	USA Zone	2019	2022
VACANT	Canadian Zone	2021	2024
VACANT	Canadian Zone	2021	2024
John Jenkins	Canadian Zone	2019	2022
Gordon Brooks	Canadian Zone	2019	2022
Ron Kay	High Seas Zone	2021	2024
Tom Hearty	High Seas Zone	2019	2022
Lorne Clayton	Canadian Highly Migratory Species Foundation	N/A	N/A
Tiare Boyes	British Columbia Tuna Fishermen's Association	N/A	N/A
Mike Kelly	Sport Fishing Advisory Board	N/A	N/A
Scott Wallace	Marine Conservation Caucus	N/A	N/A
Blake Tipton	Processor/Buyer	N/A	N/A
Brad Mirau	Processor/Buyer	N/A	N/A
Larry Neilson	Province of BC	N/A	N/A
Harold Amos	First Nations Representative	N/A	N/A
Bradley Langman	DFO – Fisheries Management	N/A	N/A
Zane Zhang	DFO – Science	N/A	N/A
Jason Gibson	DFO – Conservation and Protection	N/A	N/A

APPENDIX I I. FISHING VESSEL SAFETY

Overview – 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 TC; emergency response with the Canadian Coast Guard (CCG) and DFO has responsibility for management of the fisheries resources. The Transportation Safety Board is an independent agency that advances transportation safety by investigating selected occurrences in the air, marine, pipeline and rail modes of transportation including fishing vessel occurrences. In BC, WorkSafeBC exercises jurisdiction over workplace health and safety and conducts inspections on commercial fishing vessels in order to ascertain compliance with the Workers Compensation Act (WCA) and the Occupational Health and Safety Regulation (OHSR).

Before departing on a voyage the owner, master, or operator must ensure that the fishing vessel is capable of and safe for the intended voyage and fishing operations. Critical factors for a safe voyage include the seaworthiness of the vessel, having the required personal protective and life-saving equipment in good working order, adequate number of properly trained crew, 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 training
- Fish Safe – Stability Education Program & 1 Day Stability Workshop
- Fish Safe – SVOP (Subsidized rate for BC commercial fishers provided)
- Fish Safe – *Safest Catch* program – **FREE** for BC commercial fishers
- Fish Safe *Safe At Sea* DVD Series – Fish Safe
- Fish Safe Stability Handbook – *Safe at Sea* and *Safest Catch* – DVD Series
- Fish Safe *Safest Catch* Log Book

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- Fish Safe *Safety Quiz*
 - First Aid training
 - Radio Operators Course (Subsidized rate for BC commercial fishers provided)
 - Fishing Masters Certificate training
 - Small Vessel Operators Certificate training

Publications:

- *Gearing Up for Safety* - WorkSafeBC
- Transport Canada Publication TP 10038 Small Fishing Vessel Safety Manual (can be obtained at Transport Canada Offices from their website at: <http://www.tc.gc.ca/eng/marinesafety/tp-tp10038-menu-548.htm>)
- Amendments to the Small Fishing Vessel Inspection Regulations (can be obtained from: <http://www.gazette.gc.ca/rp-pr/p2/2016/2016-07-13/html/sor-dors163-eng.php>)
- Safety Issues Investigation into Fishing Safety in Canada report can be accessed: <https://www.tsb.gc.ca/eng/rapports-reports/marine/etudes-studies/M09Z0001/M09Z0001.html>

For further information see:

- <https://tc.canada.ca/en/marine-transportation>
- www.fishsafebc.com
- www.worksafebc.com
- www.tsb.gc.ca/eng/rapports-reports/marine/index.html

Important priorities for vessel safety

There are three areas of fishing vessel safety that should be considered a priority. These are: vessel stability, emergency preparedness, and cold water immersion.

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 to correct ballasting. Fish harvesters must be familiar with their vessel's centre of gravity, the effect of liquid free surfaces on stability (e.g. loose water or fish on deck), loading and unloading operations, watertight integrity and the vessel's freeboard. Know the limitations of your vessel; if you are unsure contact a 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. These instructions must include detailed safe operation documentation kept on board the vessel.

In 2017, Transport Canada Marine Safety (TC) issued Ship Safety Bulletin (SSB) [No. 03/2017](#) announcing the coming into force of the New Fishing Vessel Safety Regulations. The initial regulations were published in the Canada Gazette Part II on July 13, 2016 and came into force on July 13, 2017. The bulletin includes important information on changes to requirements for Written Safety Procedures, Safety Equipment and Vessel Stability.

As of July 13, 2017, new regulations pertaining to stability assessments to be performed by a competent person came into effect, as follows:

- A new fishing vessel that has a hull length of more than 9 m where the vessel construction was started or that a contract was signed for the construction after July 13, 2018;
- A fishing vessel more than 9 m and that has undergone a major modification or a change in activity that is likely to adversely affect its stability;
- A fishing vessel that is fitted with an anti-roll tank at any time;
- A fishing vessel more than 15 gross tonnage and used for catching herring or capelin during the period beginning on July 6, 1977 and ending on July 13, 2017
- For an existing fishing vessel that is not required to undergo a stability assessment, the owner shall be capable of demonstrating that their vessel has adequate stability to safely carry out the vessel's intended operations. Guidelines have been developed and are available online to help small fishing vessel owners and operators meet their regulatory requirements
- Two good resources can be found here: [TP 15393 - Adequate stability and safety guidelines for fishing vessels \(2018\)](#) and [TP 15392 – Guidelines for fishing vessel major modification or a change in activity \(2018\)](#)

Further, the new Regulation requires a "Stability Notice" to be developed after a stability assessment. This notice includes a simple diagrammatic of the vessel, its tanks and fish holds, or deck storage as the case may be. It is intended to assist fishing vessel crews in quickly determining the safe carriage limits of the vessel without having to reference a complicated Trim and Stability Book.

Additionally, Transport Canada published a Stability Questionnaire ([SSB No. 04/2006](#)) and Fishing Vessel Modifications Form ([SSB No. 01/2008](#)) which enable operators to identify the criteria which will trigger a stability assessment. Please contact the nearest Transport Canada

office if you need to determine whether your vessel requires a stability assessment, or to receive guidance on obtaining competent assessor.

In 2019, TC provided an updated [SSB 03/2019](#), which sets out a voluntary record of modifications for the benefit of owners/masters of any fishing vessels. For vessels of more than 15 gross tons, the record of modifications was to be reviewed by TC inspectors during regular inspections and entered on the vessel's inspection record. However, information gathered during the Transportation Safety Board's (TSB) Safety Issues Investigation into the fishing industry showed minimal recording of vessel modifications prior to this date.

The TSB has investigated several fishing vessel accidents since 2005 and found a variety of factors that effected the vessel's stability were identified as contributing factors in vessels capsizing, such as with: [M05W0110](#) - *Morning Sunrise*, [M07M0088](#) - *Big Sisters*, [M08W0189](#) - *Love and Anarchy*, [M09L0074](#) - *Le Marsouin I*, [M10M0014](#) - *Craig and Justin*, [M12W0054](#) - *Jessie G*, [M12W0062](#) - *Pacific Siren*, [M14P0121](#) - *Five Star*, [M15P0286](#) - *Caledonian*, [M16A0140](#) - *C19496NB*, [M17C0061](#) - *Emma Joan*, [M17P0052](#) - *Miss Cory*, [M18P0073](#) - *Western Commander* and [M18A0425](#) - *Charlene A*.

Vessel masters are advised to carefully consider stability when transporting gear. Care must be given to the stowage and securing of all traps, cargo, skiffs, equipment, fuel containers and supplies and also to correct ballasting. Know the limitations of your vessel; if you are unsure contact a reputable marine surveyor, naval architect or the local Transport Canada Marine Safety office.

WorkSafeBC's Occupational Health and Safety Regulations (OHSR) require owners of fishing vessels to provide documentation on board, readily accessible to crew members, which describes vessel characteristics, including stability.

Fish Safe has developed a code of best practices for the food and bait/roe herring fisheries and the prawn fishery: These Best Practices are available on Fish Safe's website for convenient download here: <https://www.fishsafebc.com/best-practices> Please contact Ryan Ford at Fish Safe for a copy of the program materials they developed to address safety and vessel stability in these fisheries. Ryan Ford – office: (604) 261261-9700 - Email: ryan@fishsafebc.com.

Emergency Drill Requirements

The *Canada Shipping Act, 2001* requires that the Authorized Representative of a Canadian Vessel shall develop procedures for the safe operation of the vessel and for dealing with emergencies.

The Act also requires that crew and passengers receive safety training. The Marine Personnel Regulations require that all personnel on board required to meet the minimum safe manning levels have received MED (Marine Emergency Duties) training to an A1 or A3 level, depending on the vessel's voyage limits, within 6 months of serving aboard. MED A3 training is 8 hours in duration and is applicable to seafarers on fishing vessels less than 150 GRT that are within 25 miles from shore (NC2). MED A1 training is 19.5 hours duration and is applicable to all other fishing vessels.

To assist fishers in meeting their crew training requirements, Fish Safe has created a downloadable '*New Crew Orientation Form and How To Guide*' available on Fish Safe's website here: <https://www.fishsafebc.com/downloadable-tools>

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.

WorkSafeBC's Occupational Health and Safety Regulation (OHSR) requires written rescue and evacuation procedures for work on or over water. Additionally, fishing vessel masters must establish procedures and assign responsibilities to each crew member to cover all emergencies, including the following: crew member overboard, fire on board, flooding of the vessel, abandoning ship, and calling for help. Fishing vessel masters are also required to conduct emergency drills at the start of each fishing season, when there is a change of crew, and at periodic intervals to ensure that crewmembers are familiar with emergency procedures.

Between 2011 and 2015 the TSB investigated 17 fishing vessel accidents which resulted in 17 fatalities. The report's findings highlighted the lack of safety drills and safety procedures and practices. The *Safest Catch* program, delivered by Fish Safe and free to BC commercial fishers, includes comprehensive practice of drills such as abandon ship, man overboard and firefighting drills.

Cold Water Immersion

Drowning is the number one cause of death in BC's fishing industry. Cold water is defined as water below 25 degrees Celsius, but the greatest effects occur below 15 degrees C. BC waters are usually below 15 degrees C. Normal body temperature is around 37 degrees Celsius; cold water rapidly draws heat away from the body. 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 WorkSafeBC Bulletin Cold Water Immersion (available from the WorkSafeBC website at www.worksafebc.com).

Under the recently amended (June 2019) OHS Regulation, section 24.96.1, a crewmember must wear a PFD or lifejacket when on board a fishing vessel that has no deck or deck structure or when on the deck of a fishing vessel that has a deck or deck structure. The use of a PFD will prepare a crewmember to remain afloat, to survive the effects of cold shock, reduce the need to swim and give rescuers time to respond.

Section 8.26, which requires workers to wear a PFD or lifejacket when working “under conditions which involve a risk of drowning”, would continue to apply to fishing crewmembers and other workers (e.g. when they are working on shore, docks and other vessels). The specific requirements can be found on WorkSafeBC’s PFD Primer provided on Fish Safe’s website here: <https://www.fishsafebc.com/cold-water-survival>.

It has been demonstrated time and again that, when worn, PFD's save lives - and the chance of surviving a mishap increases significantly when these devices are worn while working on deck.

Resulting from the TSB investigations into the Diane Louise - [M14P0110](#) and the Caledonian – [M15P0286](#) fishing vessel accidents the Board recommended that both TC and WorkSafeBC require that persons wear a suitable personal flotation devices (PFDs) at all times when: on the deck of a commercial fishing vessel; or, when on board a commercial fishing vessel without a deck or deck structure, and ensure that programs are developed to confirm compliance.

Other Issues

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

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. The TSB notes that there have been several recent occurrences on board vessels not equipped with an EPIRB, and that were either unable or did not use any other means of emergency signaling distress (e.g. [M14P0121](#), [M14A0289](#), [M15A0189](#), [M16A0327](#), [M18A0076](#), [M18A0303](#), [M18A0078](#), M18P0184, M19A0082, M19P0242, [M20A0258](#), [M20A0160](#)) which resulted in 24 fatalities.

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. Further information is available at [Radio Aids to Marine Navigation General](#)

Since August 1, 2003 all commercial vessels greater than 8 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 Coast Guard website at: <http://www.ccg-gcc.gc.ca/eng/CCG/Home> or go directly to the Industry Canada web page: www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01032.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 DSC can be found here: [TC DSC Safety Bulletin](#). Questions regarding Coast Guard DSC capabilities can be obtained by contacting your local MCTS centre (Prince Rupert MCTS (250)627-3070 or Victoria MCTS (250)363-6333).

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:

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- 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 either Prince Rupert MCTS (250)627-3070 or Victoria MCTS (250)363-63336333 or from the Coast Guard website:

<https://www.ccg-gcc.gc.ca/publications/mcts-sctm/ramn-arnm/part3-eng.html>

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/voyage 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.

WorkSafeBC

WorkSafeBC exercises jurisdiction over workplace health and safety, including the activities of crews of fishing vessels. Commercial fishing, diving and other marine operations are subject to the provisions of the *Workers Compensation Act (WCA)* and requirements in Part 24 of the Occupational Health and Safety Regulation (OHSR). Examples of Part 24 regulatory requirements related to fishing include, but are not limited to, the requirement to establish emergency procedures, to conduct emergency drills, to provide immersion suits for the crew, to provide stability documentation for the vessel, safe work procedures, injury reporting, correction of unsafe working conditions, the requirement to wear personal floatation devices (PFDs), etc.

Other sections of the OHSR also apply to commercial fishing operations. For example, Part 3 addresses training of young and new workers, first aid, and employer incident/accident investigations. Part 4 addresses general conditions such as maintenance of equipment, workplace conduct and impairment. Part 8 addresses issues related to safety headgear, safety footwear, eye and face protection, limb and body protection and personal flotation devices (PFDs) when working on the dock. Part 12 addresses issues related to tools, machinery and equipment, including safeguarding. Part 15 addresses issues related to rigging.

Both owners and masters of fishing vessels are considered to be employers. Under the *Workers Compensation Act* and the OHS Regulation (OHSR) they have varying and overlapping duties and responsibilities. Masters, because they have the most control during fishing and related activities, are considered to be the employer with primary responsibility for the health and safety of the crew.

The OHSR and the WCA are available from the Provincial Crown Printers or by visiting the WorkSafeBC website: www.worksafebc.com

NOTE: Regarding the OHSR requirement to wear PFD's, WorkSafe BC has produced a video entitled "Turning the Tide – PFD's in the Fishing Industry". For more information on PFD use, including a link to the video, please access the following site:

<https://www.worksafebc.com/en/about-us/news-events/news-releases/2018/November/new-fishing-industry-safety-video?origin=s&returnurl=https%3A%2F%2Fwww.worksafebc.com%2Fen%2Fsearch%23q%3DTurning%2520the%2520Tide%26sort%3Drelevancy%26f%3Alanguage-facet%3D%5BEnglish%5D>

For further information, contact an Occupational Safety Officer:

Bruce Logan – Vancouver/Richmond/Delta – (604) 244-6477

Mark Lunny – Courtenay – (250) 334-8732

Cody King – Courtenay – (250) 334-8733

Gregory Matthews – Courtenay – (250) 334-8734

Paul Matthews – Courtenay – (250) 334-8741

Jessie Kunce – Victoria – (250) 881-3461

or the Manager of Interest for Marine and Fishing, Pat Olsen (250) 334-8777

For information on projects and initiatives related to commercial fishing health and safety please contact Tom Pawlowski, Manager, OHS Consultation and Education Services, at (604) 233-4062 or by email: tom.pawlowski@worksafebc.com or Tim Pryde, OHS Consultant at (604) 802-2954 or by email: tim.pryde@worksafebc.com.

Fish Safe BC

Fish Safe encourages Vessel masters and crew to take ownership of fishing vessel safety. Through this industry driven and funded program Fish Safe provides fishing relevant tools and programs to assist fishers in this goal. The Fish Safe Stability Education Program and 1 Day Stability Workshop are available to all fishers who want to improve their understanding of stability and find practical application to their vessel's operation. The SVOP (Small Vessel Operator Proficiency) Course is designed to equip crew with the skills they need to safely navigate during their wheel watch. The *Safest Catch* Program, along with fisher-trained Safety Advisors, is designed to give fishers the tools they need to create a vessel specific safety management system.

As referenced throughout the above documentation, Fish Safe provides a broad range of courses, programs and services that are either free for BC commercial fishers or highly subsidized.

Fish Safe is managed by Ryan Ford, Program Manager and support staff including John Krgovich, Program Coordinator, Stephanie Nguyen, Program Assistant, Rhoda Huey, Bookkeeper/Administrative Assistant, and an experienced team of fisher Safety Advisors. All activities and program development is directed by the Fish Safe Advisory Committee (membership is open to all interested in improving safety on board fishing vessels). The Advisory Committee meets two to three times annually to discuss safety issues and give direction to Fish Safe in the development of education and tools for fish harvesters.

Fish Safe also works closely with WorkSafeBC to improve the fishing injury claims process. For further information contact:

Ryan Ford, Program Manager
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#100, 12051 Horseshoe Way
Richmond, BC V7A 4V4
Cell: (604) 739-0540
Office: (604) 261-9700

Email: ryan@fishsafebc.com
www.fishsafebc.com

Transportation Safety Board

The Transportation Safety Board (TSB) is not a regulatory board. The TSB is an independent agency that investigates marine, pipeline, railway and aviation transportation occurrences to determine the underlying risks and contributing factors. Its sole aim is the advancement of transportation safety by reporting publicly through Accident Investigation Reports or Marine Safety Information Letters or Advisors. It is not the function of the Board to assign fault or determine civil or criminal liability. Under the TSB Act, all information collected during an investigation is completely confidential.

In 2014 the TSB pacific region released three investigation reports:

- the collision between trawl fishing vessel [Viking Storm](#) and US long line fishing vessel *Maverick* and the subsequent fatality,
- the person over board off the prawn fishing vessel [Diane Louise](#) and the subsequent fatality, and
- the capsizing of the crab fishing vessel [Five Star](#) and subsequent fatality.

In 2016 the TSB pacific region released one investigation report:

- the capsizing of the trawl [Caledonian](#) and subsequent fatalities.

In 2018 the TSB pacific region released two investigation reports:

- the capsizing and sinking of the [Miss Cory](#) and subsequent fatality
- the sinking of the [Western Commander](#) and loss of life

In 2020 the TSB pacific region is currently investigating the fatal accident involving the [Arctic Fox II](#) on August 11.

The TSB issued five recommendations following the *Caledonian* report. Three recommendations issued are aimed at ensuring all crews have access to adequate stability information that meets their needs. That means:

- All commercial fishing vessels should have a stability assessment appropriate for their size and operation.
- The information from that assessment must then be kept current, and it must be used to determine safe operating limits.

Moreover, these operating limits must be easily measurable, and relevant to the vessel's operation. For example, that could mean marking the sides of a vessel's hull to indicate the maximum operating waterline, or maximum permitted loads can be specified in the most relevant unit of measure—total catch weight for instance, or the safe number of traps. Regardless, for it to be of real, practical use, the information must be presented in a format that is clearly understood and easily accessible to crew.

The other two recommendations address the most basic step that harvesters can take: wearing a personal flotation device. Here in British Columbia, roughly 70 percent of all fishing-related fatalities in the past decade came while not wearing a PFD. Yet many harvesters still do not wear them. TC regulations currently require that PFDs be worn only if harvesters identify a risk, however; you never know when you could end up in the water. So the TSB is recommending to TC to require persons to wear suitable personal flotation devices at all times when on the deck of a commercial fishing vessel or when on board a commercial fishing vessel without a deck or deck structure and that programs are developed to confirm compliance. In June 2019, WorksafeBC amended its fishing regulation related to the use of PFDs. Under the amendments, crewmembers must wear a PFD or lifejacket when on board a fishing vessel that has no deck or deck structure, or when on the deck of a fishing vessel that has a deck or deck structure. Crewmembers are not required to wear lifejackets or PFDs below deck or when inside a deck structure where there is risk of entrapment. This amendment removes the need for a risk of drowning to be present before a PFD must be worn.

For more information about the TSB, visit the website at www.tsb.gc.ca
For information about the TSB's investigation into fishing safety, or to view a brief video, visit: <http://www.tsb.gc.ca/eng/medias-media/videos/marine/m09z0001/index.asp>

To view information on the TSB's recent safety Watchlist, visit: <http://www.bst-tsb.gc.ca/eng/surveillance-watchlist/marine/2018/marine.html>

Reporting an Occurrence: www.tsb.gc.ca/eng/incidents-occurrence/marine/
After a reportable occurrence happens; you can fill out the TSB 1808 form or call the TSB at the contact information below.

Recently the TSB produced a Safe at Sea: Activity book on fishing safety intended for the next generation of fish harvesters (ages 4-7). Download a copy.
[www.tsb.gc.ca > eng > medias-media > prudence-safe > safe-at-sea](http://www.tsb.gc.ca/eng/medias-media/prudence-safe/safe-at-sea)

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