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Integrated Fishery Management Plan Summary

Greenland Halibut

(Reinhardtius hippoglossoides)

Northwest Atlantic Fisheries Organization Subarea 0

Effective 2019

Canada

Forward

The purpose of this Integrated Fishery Management Plan (IFMP) summary is to provide a brief overview of the information found in the full IFMP. This document also serves to communicate the basic information on the fishery and its management to Fisheries and Oceans Canada (DFO) staff, legislated co-management boards and other stakeholders. This IFMP provides a common understanding of the basic "rules" for the sustainable management of the fisheries resource.

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

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

1. Overview of the Fishery

The Greenland Halibut fishery addressed by this Integrated Fisheries Management Plan (IFMP) occurs in the Northwest Atlantic Fisheries Organization (NAFO) Subarea 0 (Figure 1). Subarea 0 is divided into a northern region, Division 0A (Baffin Bay) which extends from 78°10'N to 66°15'N, and a southern region, Division 0B (Davis Strait) which extends from 66°15'N to 60°12'N.

The Division 0A fishery is an enterprise allocation type fishery with quota reserved exclusively for Nunavut interests, as approved by the Minister. The Division 0B quota is currently shared between Special Allocations, Enterprise Allocations and a competitive allocation. Participants include interests from Nunavut, Nunavik, Labrador, Newfoundland and Nova Scotia.

The Division 0A fishery operates on the calendar year. The fishing season is dictated by the presence of sea ice but typically begins in June and ends in November. Both mobile (single and twin bottom otter trawl configurations) and fixed (longline or gillnet) gear vessels are used and vessels are typically greater than 28m (92') in length due to the harsh environment and location of this fishery. All vessels used in the offshore are outfitted with factory freezer capabilities. The average number of vessels operating in Division 0A between 2014 and 2018 was 10. During this time ~59% of the Division 0A quota was taken by mobile gear and ~41% by fixed gear. Lack of infrastructure (i.e. port facilities and processing plants) in the North presents landing constraints. As a result, catches are offloaded predominately in Greenland ports. In some years a limited amount of fishing has occurred under the 100t exploratory inshore quota.

The Division 0B fishery operates on the calendar year. In the offshore, both mobile (single and twin bottom otter trawl configurations) and fixed (longline or gillnet) gear vessels are used and all have factory freezer capabilities. The fishing season is dependent on ice conditions and usually starts in May and finishes at the end of November. The exception is the Fixed Gear Competitive fishery (quota = 900t) which historically has opened within the first or second week of June and ends when the quota is reached. On average between 2014 and 2018, there were 18 vessels fishing in Division 0B each year. During this time ~56% of the Division 0B quota was taken by mobile gear and ~44% by fixed gear. Interest exists in further development of an inshore summer fishery in the Division 0B portion of Cumberland Sound.

1.6. Governance

Canada and Denmark (on behalf of Greenland) request the NAFO Scientific Council to conduct the stock assessment for the Subarea 0 and Division 1A (offshore) and Divisions 1B-F stock area, including recommendations on Total Allowable Catch (TACs) for Division 0A and 1A (offshore) and 1B in the north and Divisions 0B and 1C-F in the south. Canada retains management authority for stocks in Subarea 0, while Greenland retains management authority in Subarea 1.

Canada's *Fisheries Act*, and the *Fishery (General) Regulations* and the *Atlantic Fishery Regulations*, as well as the *Oceans Act* and the *Species at Risk Act (SARA)* are the main pieces of federal legislation under which the Subarea 0 Greenland Halibut fishery is managed. The powers granted pursuant to these Acts and Regulations permit the Minister to specify licence conditions related to vessel type, gear, species and catch limits, incidental catch, fishing restrictions, information reporting, vessel monitoring system, *SARA* listed species etc.

The Subarea 0 Greenland Halibut fishery is managed consistent with the *Nunavut Agreement* (*NA*) and the *Nunavik Inuit Land Claims Agreement* (*NILCA*). While Government retains ultimate responsibility for wildlife management within and outside respective settlement areas, the Agreements, among other things, set out the harvesting rights of the beneficiaries to the respective Agreements, provide for the establishment of wildlife management structures, set out the role of those structures and cooperative management processes, and contain provisions related to defined waters outside of the settlement areas.

DFO has developed a National Sustainable Fisheries Framework to promote an ecosystem-based approach to fisheries management. This policy framework applies to the Subarea 0 Greenland Halibut fishery.

This IFMP applies to the Subarea 0 Greenland Halibut fishery in waters both inside and outside the Nunavut Settlement Area (NSA). In addition to working with co-management organizations, the management of the Subarea 0 Greenland Halibut fishery is done in collaboration with fishery participants and other stakeholders. Fishery review meetings with co-management organizations and stakeholders are held to review current management measures, discuss management issues, and provide management recommendations. In accordance with the terms of the *NA*, applicable management recommendations are provided for NWMB decision and/or advice. Stakeholder and NWMB decision/recommendations, as approved by the Minister, are incorporated into the IFMP for final approval by the Minister (or designate).

2. Stock Assessment, Science, and Traditional Knowledge

Greenland Halibut of the Northwest Atlantic are highly migratory. The Northwest Atlantic population extends south from Baffin Bay to the waters off the continental slope of Labrador and outer Grand Banks east of Newfoundland, east into Greenland waters and Denmark Strait.

The Baffin Bay-Davis Strait Greenland Halibut stock is thought to originate primarily in the deep-water (800-2000m) spawning grounds in Davis Strait near the submarine ridge between Baffin Island and Greenland. Once spawning occurs, eggs and then larvae drift for up to four months before they metamorphose into the bottom-dwelling life stage. Eggs and larvae originating in the Davis Strait spawning grounds are thought to drift with the currents along the coast of West Greenland and then westwards, until larvae settle on the Greenland and Baffin Island shelves. These relatively shallow waters (<400m) in Baffin Bay and Davis Strait are considered nursery areas where fish are thought to spend the first few years of their lives. Larger fish are found at greater depths and it is believed that the fish migrate off the banks into deeper

waters, i.e. eastward into the fjords of Northwest Greenland and south and westward into Baffin Bay and Davis Strait.

Inuit and fisher Traditional Ecological Knowledge (TEK) is an important component of fisheries management and is used with scientific knowledge for effective fisheries decision-making. While Inuit did not traditionally fish Greenland Halibut, Inuit fishers as well as other users have knowledge of the resource. For example, Inuit have experience in the Cumberland Sound inshore fishery which can contribute to understanding in areas such as climate change, sea ice patterns, and fish movements. TEK can contribute to an understanding of long-term changes in environments that ultimately affect the management of Greenland Halibut in Subarea 0.

Biomass and abundance indices, length frequency distribution and catch-per-unit-effort are currently the key metrics used in stock assessments and subsequent recommendations from the NAFO Scientific Council on TACs.

NAFO Scientific Council recommended TACs are set on the basis of available stock biomass and abundance indices and catch size structure. In general, the lack of an appropriate assessment model and precise estimates of Greenland Halibut age and growth makes predicting the impact of fishing effort on future stock recruitment difficult.

Precautionary Approach

A precautionary approach to the management of the fishery, consistent with the basic tenets set out in DFO's *Fishery Decision-Making Framework Incorporating the Precautionary Approach* is applied. Priority is given to monitoring the stock and establishing a data time series to support management decisions. Monitoring stock indices and quantifying scientific uncertainty is done following specific criteria, and peer reviewed through the NAFO Scientific Council process.

3. Economic, Social and Cultural Importance of the Fishery

The Subarea 0 Greenland Halibut fishery adds significant economic value to Northern communities. The landed value average for Nunavut Enterprises from 2011-2017 was around $90 million per year. The fishery is also considered to be the most lucrative Atlantic groundfish fishery with the largest Greenland Halibut TAC in domestic waters.

In Division 0A, during 2011–2017, average Greenland Halibut landings were 7,252t generating an average landed value of $47 million. In Division 0B, during 2011–2017, average Greenland Halibut landings were 7,041t generating an average landed value of $43 million.

Several useful economic indicators are tracked to focus on the trends in recent years. Trends in these variables explain in part the current economic viability of the Greenland Halibut fishery. Exchange rates and ever increasing costs of production have significantly squeezed the profit margin in recent years.

Eco-certification of a fishery from one of the international certification bodies, which is being driven by retailers and the food service sector, has gained significant momentum and become much more main stream. Meeting these increasing buyer preferences imposes additional costs on harvesters.

4. Management Issues

4.1. Fisheries Issues

Scientific Knowledge - The multi-species surveys are the main basis for Greenland Halibut stock assessment and TAC recommendations. These surveys also provide data on species, benthic habitats and oceanographic conditions. Specific studies on Greenland Halibut are required to delineate stocks and understand reproduction, age determination, recruitment and migration. Surveys and research need to continue to support management decisions and resource conservation.

Implementation of a precautionary approach - There are a number of scientific data limitations which preclude the use of standard biomass and harvest metrics to determine reference points and stock status for the Subarea 0 Greenland Halibut stock. Work is planned to explore the use of proxies for calculating reference points and defining harvest decision rules.

Size distribution of catch - Fish size composition of catches varies depending on the gear type and Division. Currently there is a mix of both fixed gear and mobile gear used to prosecute the fishery, with trawls catching primarily small, immature fish, whereas gillnets are catching larger fish with a mix of immature and mature status. Scientific assessments continue to show the stock is healthy with stable or increasing trends in biological indices, suggesting the level of exploitation and harvesting approach have been effective to date. DFO will continue to closely monitor biological indices and the size distribution of the catch, and will take action as needed to ensure sustainability of the resource.

Mitigation of impacts on sensitive benthic areas - Bottom contact fishing gear is used in the Greenland Halibut fishery and these gears are known to impact benthic habitat, communities, and species. Further implementation of DFO's Policy for Managing the Impacts of Fishing on Sensitive Benthic Areas in the Subarea 0 Greenland Halibut fishery may be required.

Bycatch management - Improvements are needed in bycatch management, including reporting on both retained and released bycatch species as well as clear and consistent information in all Subarea 0 Greenland Halibut fishery management documents. Effective solutions to specific bycatch issues need to be developed in collaboration with harvesters.

Reporting - Issues exist with the accuracy of information reported to DFO including discard amounts, bycatch amounts, landings, etc. Timeliness of reporting is also an issue in some cases. This information is used to monitor quotas and effectiveness of management measures. It is also essential for demonstrating sustainable harvesting and fish harvested are legal, reported and regulated. Concerted efforts are required by all licence holders to provide timely, accurate and complete information as outlined in licence conditions. DFO will continue to work with industry and, where applicable, international counterparts to improve reporting in the Greenland Halibut fishery.

Fishery monitoring - Monitoring is carried out by harvesters, third party At-sea Observers designated by DFO, and DFO staff. A variety of tools and best practices are used to meet fishery monitoring requirements. New approaches and technologies need to be considered and tested. In collaboration with fishery participants, DFO will assess the risks and management requirements of the fishery, review the efficiency of the current fishery monitoring and reporting program, and make changes as required to support sustainable harvesting practices.

Fishery modernization - DFO continues to implement a number of changes aimed at modernizing fisheries management to ensure Canada's fisheries are sustainable, prosperous and competitive for years to come.

Compliance - Conservation and Protection (C&P) is developing a risk-based enforcement plan to better identify the most significant compliance risks/issues in this fishery. C&P continues to work with industry representatives as well as vessel captains to address compliance issues.

Performance review - Progress on achieving the short term objectives and effective implementation of management measures identified in the Plan will be reviewed annually. Recommendations to improve management of the fishery will be developed to meet the long term objectives of maintaining a sustainable fishery.

4.2. Depleted Species Concerns

Subarea 0 contains several depleted species which have either been listed under *SARA*, assessed by Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and awaiting *SARA* listing, or are under a DFO moratorium. These species are of conservation concern for a number of reasons. Also to be noted is the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) of which Canada is a member.

There are also species which do not fall under any of the above formal listing processes but for which concerns exist. For example, sharks and skates typically grow slowly, mature late, and produce few offspring making them susceptible to overexploitation, thus a precautionary approach to management and conservation of these species is warranted.

4.3. Oceans and Habitat Considerations

DFO has developed criteria for the identification of Ecologically and Biologically Significant Areas (EBSAs) in Canada's oceans. EBSAs do not have legal status, but rather are to be considered as areas requiring risk adverse management during planning and decision making processes.

The federal government remains committed to protecting 10% by 2020. The 2017 and 2020 targets are collectively referred to as Canada's marine conservation targets. Through collaboration with industry and stakeholders, within NAFO Subarea 0 the Hatton Basin, Davis Strait, and Disko Fan Conservation Areas are closed to bottom contact fishing under the *Fisheries Act.* These Areas contribute to Canada's marine conservation targets.

4.4. Gear Impacts

Size and age composition of Greenland Halibut catches in the Greenland Halibut fisheries in Subareas 0 and 1 can vary depending on gear type. Bycatch species and rates may vary between gear types and management areas. In the Division 0A fishery the most commonly caught bycatch species includes Greenland Shark, Thorny Skate, Arctic Skate and Roughhead Grenadier. In the Division 0B the most commonly caught species includes Greenland Shark, Thorny Skate, several grenadiers, redfish, and Northern Wolffish.

There are a number of species of marine mammals (primarily seals and whales) found in Subarea 0 that have the potential to interact with fishing gear. Gear interactions with gillnet and trawl entanglements or entrapments can result in serious injury and/or mortality to marine mammals. Several different groups of marine birds have been reported as bycatch, including Northern fulmars (*Fulmarus glacialis*), gulls (unknown species) and phalaropes (unknown species). While fishing with longlines is limited some does occur within the foraging range of several colonies of northern fulmar. Fishing with gillnets also overlaps with the known Northern fulmar foraging ranges of some of the southern colonies in Nunavut.

Different gear types also have different benthic habitat impacts. Management of fishing gears has been developed in the Policy for Managing the Impacts of Fishing on Sensitive Benthic Areas (http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/benthi-back-fiche-eng.htm).

Abandoned, lost or otherwise discarded fishing gear (ALDFG, or "ghost gear") is a form of marine pollution that can be fatal to fish, marine mammals and other marine life, and poses a navigation hazard. As of 2019 mandatory reporting requirements for lost gear, as well as reporting the retrieval of gear previously reported lost, has been implemented in commercial fisheries.

4.5. International Issues

Canada has various international commitments, agreements and obligations regarding commercial marine fisheries and has developed domestic policies and tools (e.g. Sustainable

Fisheries Framework) to support them. These will be implemented in the Subarea 0 Greenland Halibut fishery in a phased and progressive manner over a number of years based on priorities established by DFO in consultation with the fishing industry and other stakeholders.
Also to be noted, a substantial portion of Greenland Halibut caught in this fishery is offloaded in foreign ports (i.e. Greenland). Canada is working with Greenland officials to establish protocols for sharing and exchange of landing information.

5. Objectives

Objectives for the Greenland Halibut fishery are a key component of the IFMP. Long term objectives guide the management of the fishery and may be categorized as stock conservation, ecosystem, shared stewardship, compliance, and social, cultural and economic objectives. Each long term objective is supported by one or more short term objectives to address existing management issues in the fishery. The objectives listed in Table 1 were developed in consultation with industry, co-management and Inuit organizations, and other stakeholders.

Table 1: Long and short term objectives for the Subarea 0 Greenland Halibut fishery

Long-term Objective	Short-term Objective
Stock Conservation	
Conserve the Greenland Halibut stock through sustainable use and effective fishery management.	• Improve knowledge of Greenland Halibut biology through the continuation of growth, maturity, genetics and migration studies. • Secure funding for annual multi-species surveys to monitor Greenland Halibut abundance and biomass. • Monitor size distribution of catch. • Promote fishing practices that maximize quality of the catch thereby minimizing discards.
Take a precautionary approach to fishery decisions for the Greenland Halibut stock	• Given uncertainties related to the Greenland Halibut stock, take a precautionary approach to setting TACs. • Develop a Harvest Strategy, containing Harvest Control Rules, for this fishery.
Ecosystem	
Conserve sensitive benthic areas through effective fishery management.	• Promote fishing practices that avoid or mitigate impacts on sensitive benthic habitats. • Determine priority areas within Baffin Bay and Davis Strait for future Ecological Risk Assessments.
Conserve bycatch species through effective fishery management.	• Promote fishing practices that avoid or mitigate impact on bycatch species. • Explore population based bycatch limits for vulnerable bycatch species (e.g., *SARA* and COSEWIC listed species, elasmobranchs). • For Northern Wolffish and Spotted Wolffish adhere to pertinent licence conditions. Also, implement fishery management related recommendations found in the Recovery Plan and Action Plan. • Reduce harm to Greenland Shark by promoting awareness of safe release techniques.

	• Improve data collection methods that facilitate improved assessment of seabird bycatch rates and possible impacts.
Shared Stewardship	
Promote collaboration, participatory decision making, and shared responsibility with resource users, co-management organizations and other interested parties.	• Conduct Greenland Halibut fishery meetings with stakeholders on a regular basis. • Work towards specific, measurable, achievable, realistic and time-sensitive (SMART) objectives and commensurate indicators and targets with which to measure progress. • Transition shared responsibility, accountability and decision making to licence holders within the constraints of the *Fisheries Act* and land claim agreements.
Promote collaborative science and management initiatives with Greenland.	
Support effective fishery management through reliable, timely and accessible fishery information.	• Obtain and evaluate information on total catch, effort, and other ecosystem components. • Improve the timeliness and accuracy of discard and landings reporting in the fishery to account for total catch. • Improve bycatch reporting in order to account for total catch. • Improve reporting of Species At Risk in order to account for total catch. • Establish standards and the infrastructure within DFO to support electronic logbooks and encourage their use. • Review monitoring program to identify gaps in monitoring and the associated risks.
Social, Cultural and Economic	
Promote a competitive and prosperous fishing industry that is able to maximize value from fisheries resources and generate economic growth, while ensuring stocks remain healthy and abundant for future generations.	• Support stability in allocation and effective management (subject to the 4th bullet). • Work with stakeholders to improve management of the Division 0B competitive fixed gear fishery including the possibility of moving to a share based regime. • Support increased market access initiatives such as eco-certification. • Continue to take into account relevant land claim agreements and Government of Canada strategies and policies when making access and allocation decisions.
Compliance	
Support effective fishery management through a comprehensive compliance program.	• Conduct a risk assessment of compliance issues. • Develop and implement compliance strategies to address identified compliance risks in this fishery. • Conduct targeted at-sea fishery inspections/patrols. • Conduct targeted aerial surveillance flights. • Collaborate with Newfoundland and Labrador Region for operational planning to support compliance measures. • Strengthen the collection and reporting on intelligence in the fishery. • Conduct an enforcement driven compliance assessment. • Develop and implement a risk-based enforcement plan (including enhanced stakeholder engagement on compliance issues in this fishery to support compliance planning and effectiveness).

6. Access and Allocation

There are two elements that frame the sharing of adjacent marine resources: access (i.e. licences and validations for participation in the fishery) and allocation (i.e. distribution of quota). The Minister can, for reasons of conservation or for any other valid reasons, modify access, allocations and sharing arrangements as outlined in this IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

Access

There has been no increase in non-Nunavut access to the fishery since 2002. The Government of Canada is supportive of the development of Nunavut's fisheries and recognizes the importance of the commercial fishery to the economy of Nunavut.

Allocations

When making decisions regarding allocation of fisheries resources, primary consideration is given to conservation. Other important considerations include relevant land claim agreements, adjacency, historical dependence and economic viability. With respect to the Greenland Halibut Subarea 0 fishery and land claim agreements, relevant provisions of the *NA* and *NILCA* apply.

Allocations and the NA

With the exception of the 100t inshore allocation in Division 0A, the fishery occurs in the waters of Baffin Bay and Davis Strait (in Division 0A and 0B), which are adjacent to the NSA. Inside the NSA, the NWMB is the main instrument of wildlife management and the main regulator of access to wildlife, including fish.

Access to Nunavut's share of the resource in Divisions 0A and 0B is determined in cooperation with the NWMB who provides decisions and recommendations to the Minister for decision with respect to allocations to Nunavut interests. To make these decisions and recommendations, the NWMB follows its *Allocation Policy for Commercial Marine Fisheries*.

Allocations and the NILCA

Within the Nunavik Marine Region (NMR), the Nunavik Marine Region Wildlife Board (NMRWB) is the main instrument for the management of fish and other wildlife. Where required the Minister seeks the advice of the NMWMB on the allocation of the Division 0B Greenland Halibut TAC to Nunavik Inuit.

7. Management Measures

Management measures outline the controls or rules adopted for the fishery, including stock conservation and ecosystem management measures. These measures are based on the *Fisheries Act* and *SARA* and the regulations made under these acts. Also, non-quota limitations may be established under the *NA* on harvesting activities in the NSA. Variation Orders outline fishing season, management areas and conservation area closures. In addition to the provisions set out in the *Fishery (General) Regulations* and *Atlantic Fishery Regulations, 1985*, specific management measures are outlined in annual licences. Conservation Harvest Plans for each

fleet reiterate key management measures found in licences and the IFMP, as well as any industry proposed Codes of Conduct for responsible fishing. *SARA* requirements are included as licence conditions that list species and specific mitigation measures. Habitat protection measures (including closures or partial closures) are also listed in licences. Table 2 provides an overview of management measures currently in place in the NAFO Subarea 0 Greenland Halibut fishery and is appended to this summary.

Quota reconciliation is applied to the Subarea 0 Greenland Halibut fishery and helps to achieve conservation objectives for the resource, ensures that overruns by one fleet/licence holder does not impact others, and provides industry with increased responsibility in meeting conservation objectives.

The Subarea 0 Greenland Halibut fishery is not currently eligible for the carry forward of quota, however Subarea 0 stakeholders continue to support the introduction of Carry Forward provisions in this fishery.

8. Shared Stewardship Arrangements

The Greenland Halibut fishery has a long history of shared stewardship arrangements. Internationally, Canada and Denmark (on behalf of Greenland) ask the NAFO Scientific Council to conduct the Greenland Halibut stock assessment and provide TAC recommendations. As well DFO and the Greenland Department of Fisheries, Hunting and Agriculture are signatories to a Memorandum of Understanding on Issues Related to Satellite Based Vessel Monitoring System (VMS). DFO and the GINR support collaborative research projects and the implementation of the multi-species survey. Research undertaken in collaboration with the Government of Nunavut and its research vessel Nuliajuk supports the development of inshore fisheries.

Through a Memorandum of Understanding with Transport Canada, there is a commitment ensuring safety considerations are outlined in every fisheries management plan.

9. Compliance Plan

The Conservation and Protection (C&P) Program promotes compliance with legislation, regulations and management measures implemented to achieve the conservation and sustainable use of Canada's aquatic resources, and the protection of species at risk, fish habitat and oceans.

The program is delivered through a balanced regulatory management and enforcement approach including the following:

- promotion of compliance through education and shared stewardship;
- monitoring, control and surveillance activities;
- management of major cases/special investigations in relation to complex compliance issues; and
- strengthening the collection and reporting on intelligence in the fishery.

Designated At-sea Observers are deployed to perform duties best described as “Observe, Record and Report.” Duties are related to monitoring of fishing activities, examination and measurement of fishing gear, collection of biological samples, recording of scientific data, monitoring the landing of fish, and verification of the weight and species of fish caught and retained.

All vessels engaged in the NAFO Subarea 0 Greenland Halibut fishery are required to carry a DFO approved satellite tracking device. This VMS is used to monitor fleet activity particularly in and around closed areas and international boundaries as well as deploy surveillance resources. When a vessel is fishing in the NSA, the NWMB requires that vessels carry two (2) VMS units onboard.

With respect to monitoring capacities, the focus is on targeted air surveillance and at-sea patrols in the NAFO Subarea 0 Greenland Halibut fishery. Patrol coverage using government or chartered aircraft with a Fishery Officer onboard is used to identify concentrations and distribution of fishing vessels. In particular, air patrols are necessary to monitor closed and/or conservation areas and the boundary between Canada and Greenland for illegal fishing.

Fishery Officers will focus on targeted compliance and enforcement of the Greenland Halibut commercial fishery by developing and implementing a Risk-based Enforcement Plan and action plan. Fishery Officers conduct investigations in response to reported violations on compliance issues such as fishing in closure areas, licence conditions, regulations, international boundary complaints and other elements of the fishery. Where warranted appropriate enforcement action is taken.

10. Performance Review

This IFMP was developed through a consultative process including resource users, co-management organizations, and other interested parties. DFO will continue to consult and liaise with these groups on an annual basis and as circumstances require, both through formal advisory processes as well as informal ad hoc or issue-related basis between advisory processes.

The stock will continue to be assessed through the NAFO Scientific Council and monitoring of the fishery will be accomplished using several tools including quota reports, daily hails, logbooks, VMS, Dockside Monitoring Programs, At-sea Observers, air surveillance and at-sea patrols.

Figure 1. Northwest Atlantic Fisheries Organization Subareas and Divisions Relevant to the Greenland Halibut fishery

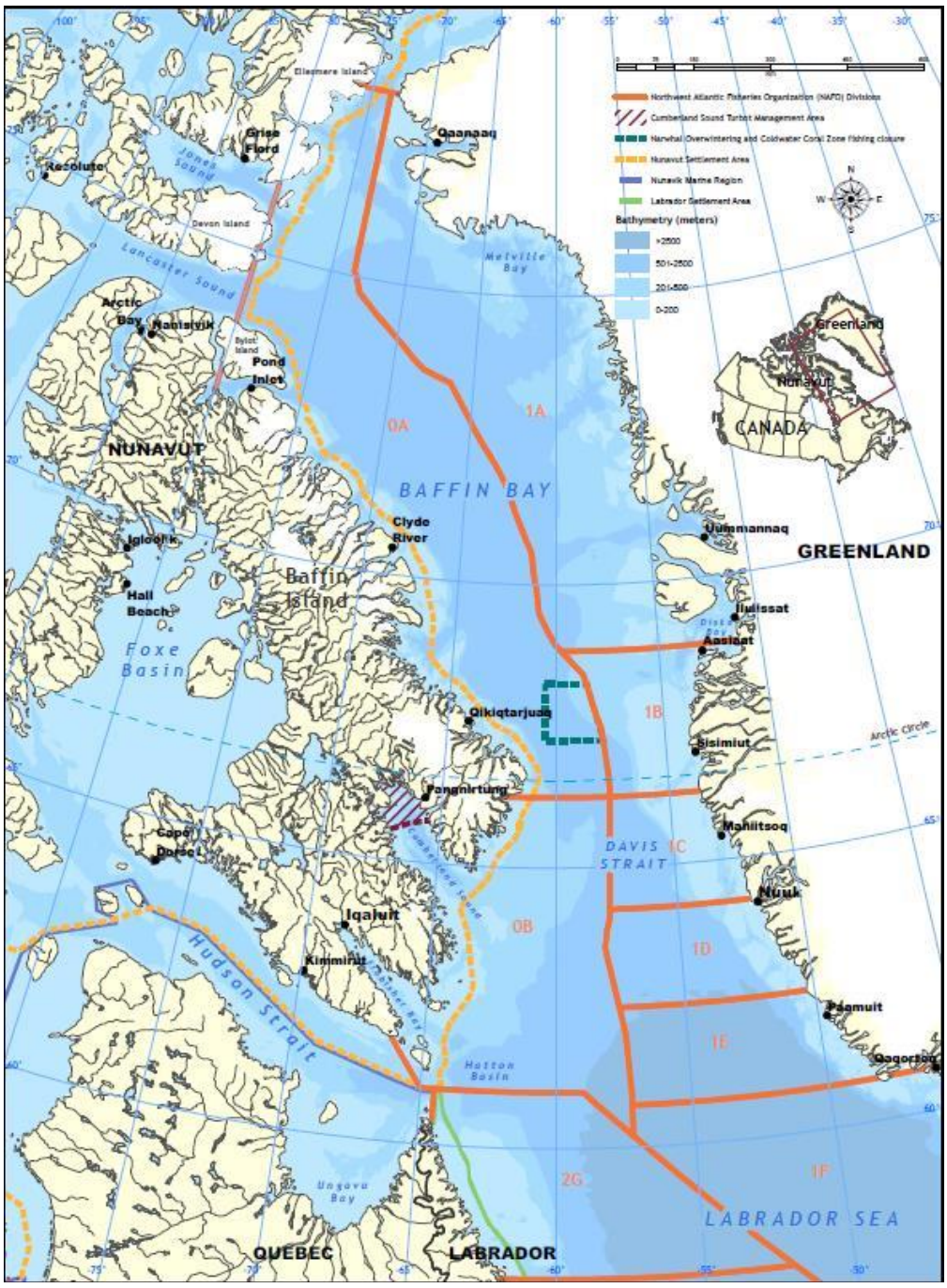

Table 2 - Overview of current management measures in the Subarea 0 Greenland Halibut fishery

Management Measure	Description
Total Allowable Catch (TAC)	• The Minister determines the Canadian TAC for the Greenland Halibut stock.
Licences	• Required when fishing Greenland Halibut.
Vessels	• Specified by fishing licence.
Species, area and catch limitations	• Species, quantity and area permitted to fish are specified in a schedule attached to licence. • Conversion factors for various product forms have been defined by DFO. • Quota reconciliation is applied to all overruns.
Fishing Season	• For Enterprise Allocation and Special Allocation holders, January 1 - December 30 (subject to identified closure provisions). • For Division 0B fixed gear competitive participants, to be determined annually.
Notification of closure	• Via broadcasting, electronic means, or Fishery Officer.
Fishing gear	• Trawl (mobile) • Longline (fixed) • Gillnet (Fixed) o Gillnets require a valid tag securely attached to the headrope of each net. • Gear size specifications can be found in Conditions of Licence • Every reasonable effort made to retrieve lost nets. • Fishing gear is not to be left unattended in water for more than 72 consecutive hours.

Management Measure	Description
Fishing restrictions	• No fishing in the NSA or Nunavik Marine Region unless granted permission by respective wildlife board. • No fishing with otter trawls >19.8m in waters <12 nautical miles from Atlantic seacoast. • For fixed gear between May 1 and Dec.31, 20% At-sea Observer coverage is required. • No fishing in Division 0B with gillnets south of 63°10'N from October 1 to December 31. • No fishing with longline in Division 0B south of 63°10'N from October 1 to December 31 except where water depth is >1372m. • Disko Fan Conservation Area*, Davis Strait Conservation Area, and Hatton Basin Conservation Area closed to all Greenland Halibut fishing. • Division 0A closed to fixed gear as of November 11 – December 31 and closed to all gear January 1 – May 31 of each year. Close date may be extended depending on ice conditions.
Bycatch/incidental catch and discards	• Groundfish are to be retained (unless specified otherwise in Conditions of Licence). • Any other fish other than groundfish are to be released and, where alive, in a manner causing the least harm. • Catch of each bycatch species for each trip is not to exceed a specified percentage of the weight of Greenland Halibut caught. • Procedures for Monitoring and Control of Small Fish Catches and Incidental Catches may be applied in this fishery.
Treatment of species listed under the *Species At Risk Act*	• Species at Risk identified in Condition of Licence are to be released and, where alive, in a manner causing the least harm. • Information on interactions with these species is to be recorded in logbook.

Management Measure	Description
Fish Harvester Reporting requirements	• Pre-departure report (hail out) to an At-sea Observer company. • Daily At-sea Reports (daily hails). • Logbook completed daily and provided to DFO by the end of each trip. • Proper labelling of product forms. • End of trip report (hail in) to a Dockside Monitoring Company in Canada. • Lost Fishing Gear Form. • Retrieved Gear Form • Marine Mammal Interaction Form. • Greenland Offloading Notification Form.
Vessel monitoring system (VMS)	• Required to have an approved and operational VMS. • Within the NSA, vessels are to have two VMS transponders onboard that operate on the iridium satellite system.
At-sea Observers	• 100% At-sea Observer required in Division 0A for both mobile and fixed gears. • 100% At-sea Observer required for mobile gear in Division 0B throughout the year and for fixed gear between January 1 and April 30. • Where required, the operator is not to depart for fishing until an At-sea Observer is onboard.
Fish landing procedures	• Offloading in Canady may only be carried out in the presence of a dockside observer. • Offloading in a Greenland can only occur in a port that is authorized under the control of the European Union Border Inspection Post (i.e. Nuuk or Sisimiut). ○ the offload is to be monitored and documentation related to the offloading completed and submitted to DFO as set out in licence conditions.

Note: For complete information refer to the *Fisheries Act*, *Species at Risk Act*, *Fishery (General) Regulations* and *Atlantic Fishery Regulations, 1985*, as well as specific licences, Notices to Fishers, and Conservation Harvest Plans. Measures may vary based on fleet. In the event of discrepancies between the above table and licence conditions, licence conditions will prevail.