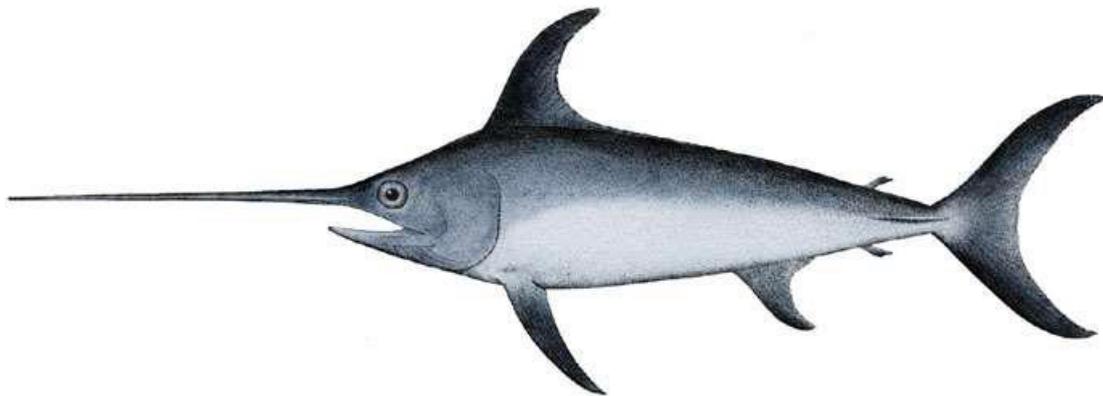


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## MSC SUSTAINABLE FISHERIES CERTIFICATION

### On-Site Surveillance Visit - Report for North West Atlantic Canada Longline Swordfish Fishery



1<sup>st</sup> Surveillance stage

April 2019

Certificate Code F-ACO-0057  
Prepared For: **Nova Scotia Swordfishermen's Association (NSSA)**  
Prepared By: **Lloyd's Register**  
Authors: Paul Knapman, Kevin Stokes, Rob Blyth-Skyrme



Assessment Data Sheet

|                        |  |   |
|------------------------|--|---|
| Fishery name           | North West Atlantic Canada Longline Swordfish Fishery                        |   |
| Species and Stock      | Atlantic Swordfish ( <i>Xiphias gladius</i> ) North Atlantic swordfish stock |   |
| CAB name               | Lloyd's Register   |   |
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# 1 Introduction

## 1.1 Scope of surveillance

This report outlines the findings of the 1<sup>st</sup> Annual Surveillance of the North West Atlantic Canada Longline Swordfish fishery. The scope of the certified fishery and therefore of this surveillance is specified in the Units of Certification (UoC) set out below:

### UoC

|                                |   |
|--------------------------------|---|
| <b>Species:</b>                | Atlantic Swordfish ( <i>Xiphias gladius</i> )   |
| <b>Stock:</b>                  | North Atlantic swordfish stock  |
| <b>Geographical area:</b>      | Atlantic Waters - Atlantic Canadian EEZ and international waters within the ICCAT Northern Swordfish Boundary Area (North of 5°N and west of 30°W). |
| <b>Harvest method:</b>         | Pelagic Longline  |
| <b>Client group:</b>           | Nova Scotia Swordfishermen's Association (NSSA)   |
| <b>Other eligible fishers:</b> | Harvesters who have an associate harvester membership of the NSSA. Primary or secondary processors who have a cost sharing agreement with the NSSA. |

## 1.2 Aims of the surveillance

The purpose of the annual Surveillance Report is fourfold:

1. to establish and report on whether or not there have been any material changes to the circumstances and practices affecting the original complying assessment of the fishery;
2. to monitor the progress made to improve those practices that have been scored as below "good practice" (a score of 80 or above) but above "minimum acceptable practice" (a score of 60 or above) – as captured in any "conditions" raised and described in the Public Report and in the corresponding Action Plan drawn up by the client;
3. to monitor any actions taken in response to any (non-binding) "recommendations" made in the Public Report;
4. to re-score any Performance Indicators (PIs) where practice or circumstances have materially changed during the intervening year, focusing on those PIs that form the basis of any "conditions" raised.

Please note: The primary focus of this surveillance audit is assess changes made in the previous year. For a complete picture, this report should be read in conjunction with the Public Certification Report (Knapman et al, 2017) for this fishery assessment which can be found here:

<https://fisheries.msc.org/en/fisheries/north-west-atlantic-canada-longline-swordfish/@assessments>

## 1.3 Certificate holder details

All longline licence holders in the fleet are represented by the Nova Scotia Swordfishermen's Association (NSSA). Entry to the swordfish fishery has been limited to 77 longline licences for both swordfish and tuna since 1992. A pelagic longline licence also enables the vessel to fish with harpoon gear, but since 2000, any landings of swordfish by harpoon gear from vessels operating under the pelagic longline licence are attributed to the longline quota. 40-50 vessels are active in the fishery in any given year. Of these, between 15 and 20 vessels may also fish with harpoon.

During the early years of the fishery, vessels targeted mainly swordfish, however, since the late 1990's, the fishery has also targeted tuna - bigeye, yellowfin and albacore. This shift not only influences where and how the fishery is conducted but also the composition of the by-catch. The change in fishing is attributed to good market prices for tuna species and the decline in swordfish quotas that occurred in the late 1990s.

Owing to their highly migratory behaviour, North Atlantic swordfish and tuna stocks come under the management of the International Commission for the Conservation of Atlantic Tunas (ICCAT). ICCAT is the Regional Fisheries Management Organisation (RFMO) responsible for the management of tunas and other highly migratory species in the Atlantic Ocean and adjacent seas, including the Mediterranean Sea.

Canada is one of 51 member countries or “Contracting Parties” to ICCAT and manages the Canadian swordfish fishery at a national level through the Department of Fisheries and Oceans (DFO). Management measures have been outlined by DFO in the Canadian Atlantic Swordfish and Other Tunas Integrated Fisheries Management Plan (IFMP) (DFO, 2013).

The swordfish Total Allowable Catch (TAC) is set by ICCAT and Canada receives an annual quota. The Canadian quota is then allocated between the longline and harpoon sectors based on the sectors historic catch of swordfish. This results in the longline fleet receiving 90% and harpoon 10% (but capped at 150 tonnes) of the Canadian quota<sup>1</sup>. The longline quota is then allocated to active harvesters in the fleet based on an Individual Transferable Quota (ITQ) sharing formula. The maximum permanent transfer of quota that can be held by any individual licence holder in the fleet is limited to 5% of the fleet's quota. The NSSA manages the fleet quota and DFO manages the total Canadian quota to ensure landings remain within the national allocation.

The vessels are multi-species so they can direct effort to other species, e.g. lobster and groundfish; swordfish fishing is not their primary fishery. Vessels range in length from 45-99 feet, with only seven licences for vessels >65 feet in length, although licences are transferable and so these >65 licences may be used on smaller vessels.

Principle ports of landing in the Atlantic Region include Shelburne, Sambro, Wood's Harbour and Clark's Harbour in Nova Scotia, and St. John's and Fermeuse in Newfoundland & Labrador.

The fishery follows the seasonal migration of swordfish and tuna through Canadian waters during summer and fall as they move into the productive waters of the continental shelf slope and shelf basins, in areas where distinct boundaries form between warm and cool bodies. Fishermen may refer to these boundaries as a “fence”. The fishery usually starts in April and may run through to as late as December, weather depending. The longline fishing effort generally progresses from west to east and back again and from offshore to inshore along the edge of the continental shelf (see Figure 1).

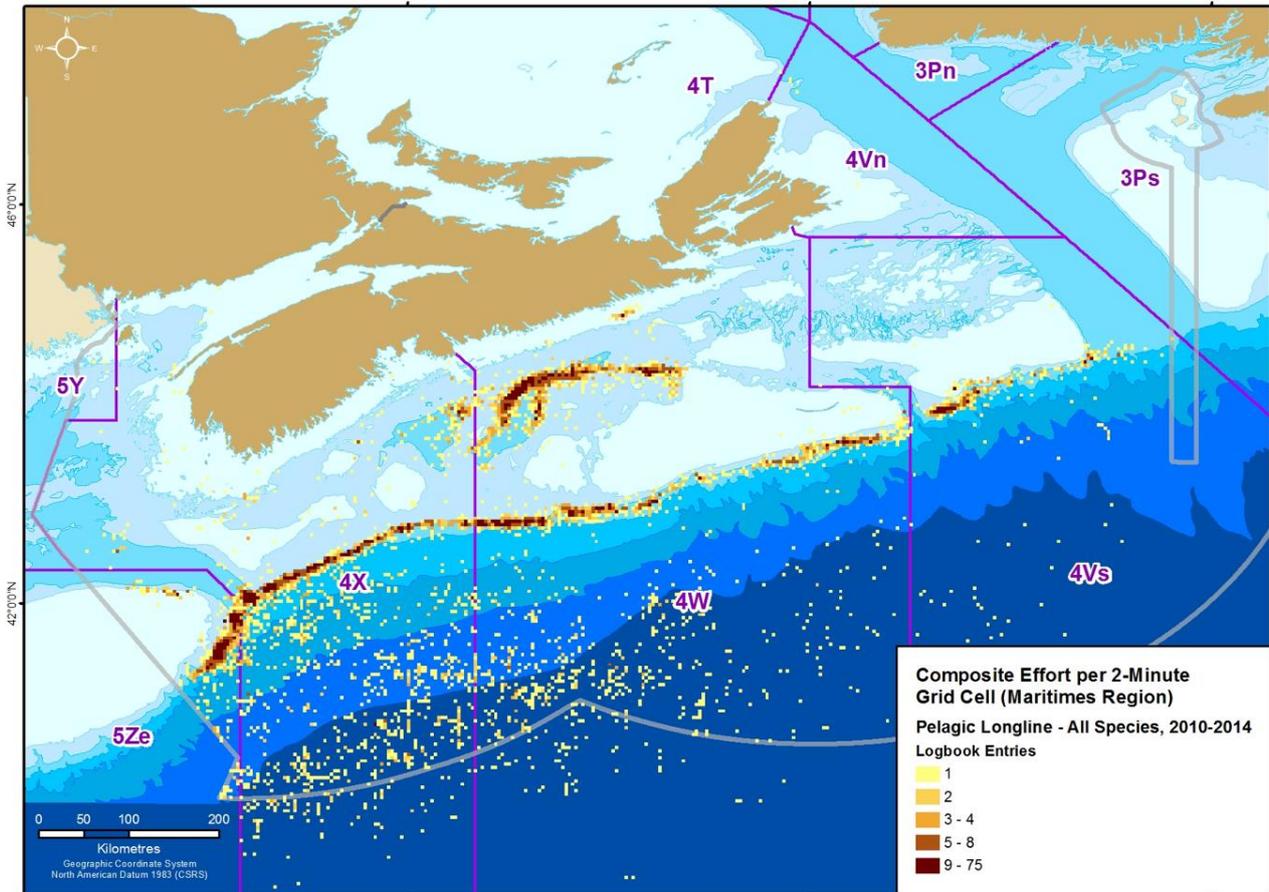
Pelagic longline fishing involves the use of a main monofilament fishing line with a series of shorter monofilament lines (“snoods” or “gangions”) with baited size 16/0 corrodible circle hooks attached at intervals. The number of hooks per set varies with line configuration and target catch. The lines are set near the surface – 7 metres or shallower, depending on weather and fish location - and suspended over water depths greater than 150 meters. The lines are not anchored. See Figure 2.

Each vessel sets between 20 and 60 miles of line, with the number of hooks per set ranging between 600 and 1,100. Hooks are baited with mackerel or squid, depending on the target species – mackerel are the preferred bait for swordfish, squid are preferred for tuna. During an average 14-day trip, up to 10 sets will be deployed.

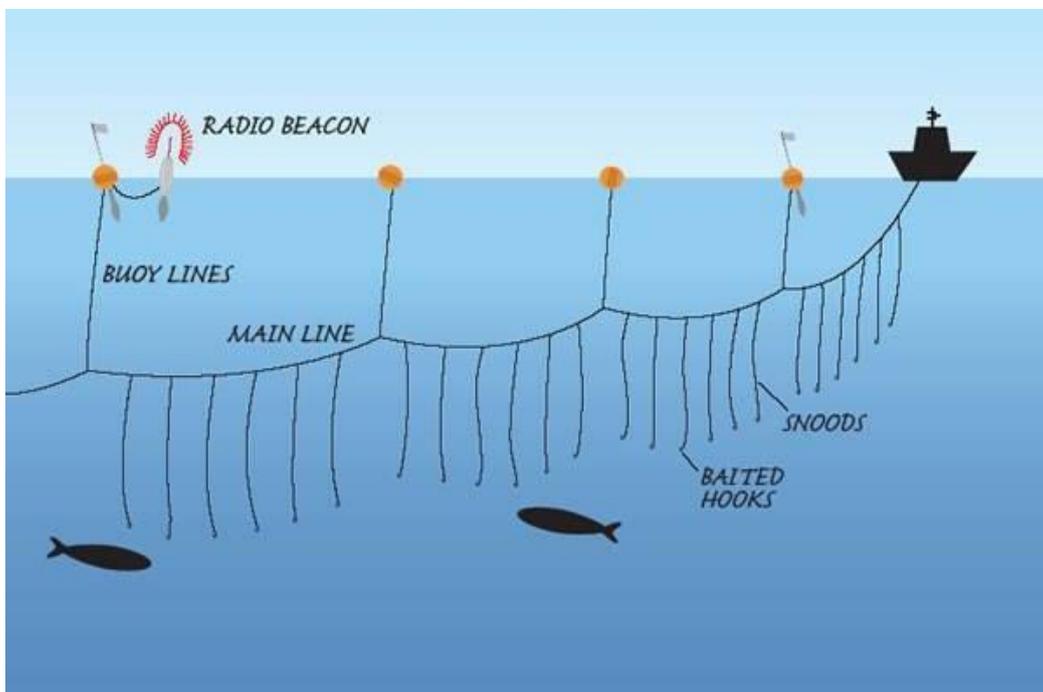
When targeting swordfish, the lines are generally deployed at sunset and hauled at sunrise to take advantage of swordfish nocturnal near-surface feeding habits. Fishing vessels preferentially target swordfish during periods when the moon is full to take advantage of increased densities of pelagic species near the surface.

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<sup>1</sup> There is one non-client group member vessel with an offshore tuna licence based in the Maritimes Region. This licence receives a 5 t by-catch allocation for swordfish. Since it is not a member of the client group, the operation is not part of the UoC, and therefore product from that vessel is not eligible to use the MSC logo.



**Figure 1.** Fishing effort distribution for the Canadian pelagic longline fleet between 2010-14 (DFO 2016)



**Figure 2.** A schematic showing the general configuration of a pelagic longline (Source: <http://www.afma.gov.au/portfolio-item/longlining/> )

## 2 Surveillance Process

### 2.1 Findings of the original assessment

As a result of the assessment (Knapman et al. 2017), two conditions of certification were raised by the assessment team, and maintenance of the MSC certificate is contingent on the North West Atlantic Canada Longline Swordfish Fishery moving to comply with these conditions within the time-scales set at the time the certificate was issued. In addition, six recommendations were made which, whilst not obligatory, the client is encouraged to act upon within the spirit of the certification.

### 2.2 Surveillance Activity

#### 2.2.1 Surveillance team details

All team members listed below have completed all requisite MSC training and signed all relevant forms for audit team membership on this fishery. All the team members were part of the re-assessment team for the fishery. Paul and Rob were on-site for the surveillance audit while Kevin participated by phone.

**Audit team leader:** Paul Knapman - Principle 3.

Paul is an independent consultant based in Halifax, Nova Scotia, Canada. Paul began his career in fisheries nearly 30 years ago as a fisheries officer in the UK, responsible for the enforcement of UK and EU fisheries regulations. He then worked with the UK government's nature conservation advisors (1993-2001), as their Fisheries Programme Manager, responsible for establishing and developing an extensive programme of work with fisheries managers, scientists, the fishing industry and ENGOs, researching the effects of fishing and integrating nature conservation requirements into national and European fisheries policy and legislation.

Between 2001-2004 he was Head of the largest inshore fisheries management organisation in England, with responsibility for managing an extensive area of inshore fisheries on the North Sea coast. The organisations responsibilities and roles included: stock assessments; setting and ensuring compliance with allowable catches; developing and applying regional fisheries regulations; the development and implementation of fisheries management plans; the lead authority for the largest marine protected area in England.

In 2004, Paul moved to Canada and established his own consultancy providing analysis, advisory and developmental work on fisheries management policy in Canada and Europe. He helped draft the management plan for one of Canada's first marine protected areas, undertook an extensive review on IUU fishing in the Baltic Sea and was appointed as rapporteur to the European Commission's Baltic Sea Regional Advisory Council.

In 2008, Paul joined Moody Marine as their Americas Regional Manager, with responsibility for managing and developing their regional MSC business. He became General Manager of the business in 2012. Paul has been involved as a lead assessor, team member and technical advisor/reviewer for more than 50 different fisheries in the MSC programme. He returned to fisheries consultancy in 2015.

Paul has acted as Team Lead on many MSC assessments over the year. He has passed MSC training and has no conflict of interest in relation to this fishery. Full CV available on request.

**Expert team member:** Kevin Stokes - Principle 1.

Kevin is a fisheries science, management, and policy consultant with extensive international and Pacific experience. He has worked at senior management levels in both the public and private sectors as a fisheries scientist, manager, and advisor. Kevin worked for the Ministry, Agriculture, Fisheries and Food and the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) in the UK for 15 years. He was responsible for all finfish monitoring, assessment and advice and worked extensively in Europe, serving as chair of the EC Scientific, Technical and Economic Committee for Fisheries (STECF) and as UK representative on the International Council for the Exploration of the Sea (ICES) advisory Committee for Fisheries Management (ACFM), as well as chairing working groups and committees. He served on multiple UK research councils, led the UK scientific delegation to the International Whaling Commission (IWC) and served as UK Alternate IWC Commissioner for many years. He served for many years as an ad hominem member of the UK Special Committee on Seals. Kevin worked as Chief Scientist for the New Zealand Seafood Industry Council (SeafIC) for 9 years, responsible for science policy and process as well as leading a consulting group drawing on diverse international expertise. He has worked on a wide range of marine shellfish and finfish, and environmental issues and has provided advice nationally and internationally at senior governmental and ministerial levels, as well as to fishing, processing and

retail industries, and to NGOs. For nine years he chaired the New Zealand National Rock Lobster Management Group (NRLMG). Kevin was for many years a member of the New Zealand Institute of Directors and has worked on governance and strategy development projects, particularly in New Zealand.

Kevin has worked as a private consultant in the general area of fisheries but extending to governance and wider advisory matters. He has worked extensively across the globe as well as in New Zealand, doing technical reviews; certification programme review and design work as well as certification assessment; governance review and design; and sustainability advice to retailers and processors. He has worked on Ecological Risk Assessment (ERA) design and implementation. In 2007 Kevin participated in the MSC Quality and Consistency work, reviewing advice on development of the new P1 CR, and as part of the group that led development of the new P2 and P3 CR. He has undertaken more than 60 MSC pre-assessments as well as acting as an assessor, auditor, and peer reviewer for multiple certification assessments, ranging from prawns to tunas. He has carried out work for a number of Conformity Assessment Bodies (CABs).

Kevin has passed MSC training and has no conflict of interest in relation to this fishery. Full CV available on request.

**Expert team member:** Rob Blyth-Skyrme - Principle 2.

Rob started his career in commercial aquaculture, but subsequently shifted his focus to the sustainable management of wild fisheries. After his PhD he went to the Eastern Sea Fisheries Joint Committee, where he became the Deputy Chief Fishery Officer. He then moved to Natural England, the statutory adviser to UK Government on nature conservation in English waters, to lead the team dealing with fisheries policy, science and nationally significant fisheries and environmental casework. Rob now runs Ichthys Marine Ecological Consulting Ltd., a marine fisheries and environmental consultancy. As well as carrying out general consultancy, he has undertaken all facets of MSC work as a lead assessor, expert team member and peer reviewer across a wide range of fisheries, including those targeting highly migratory species. Rob is a member of the MSC's Peer Review College, and has completed the MSC v1.3, v2.0 and v2.1 training modules.

## 2.2.2 Date and location of surveillance audit

The site visit took place in Halifax, Nova Scotia, Canada, on 14<sup>th</sup> and 15<sup>th</sup> February 2019. For reasons of efficiency, the site visit combined the first annual audit of the Northwest Atlantic Canada longline and harpoon fisheries.

## 2.2.3 Stakeholder consultation & meetings

| 14 <sup>th</sup> February 2019, Halifax Central Library, Halifax, Nova Scotia (0900-1200) |  |                             |
|---|--|-----------------------------|
| Name  | Organisation                           | Role                        |
| Paul Knapman  | LR Audit Team Member                   | Team Lead and P3 Specialist |
| Rob Blyth-Skyrme  | LR Audit Team Member                   | P2 Specialist               |
| Troy Atkinson   | NSSA                                   | Client representative       |
| Dale Richardson   | Swordfish Harpoon Quota Society (SHQS) | Client representative       |

| 14 <sup>th</sup> February 2019, Bedford Institute of Oceanography, Dartmouth, Nova Scotia (1330 – 1600) |                      |                                  |
|---|----------------------|----------------------------------|
| Name  | Organisation         | Role                             |
| Paul Knapman  | LR Audit Team Member | Team Lead and P3 Specialist      |
| Kevin Stokes*   | LR Audit Team Member | P1 Specialist                    |
| Rob Blyth-Skyrme  | LR Audit Team Member | P2 Specialist                    |
| Carl MacDonald  | DFO                  | Resource Management              |
| Troy Atkinson   | NSSA                 | Client representative            |
| Dale Richardson   | SHQS                 | Client representative            |
| Heather Bowlby  | DFO                  | Shark Specialist                 |
| Alex Dalton*  | DFO                  | Aquatic Biologist Large Pelagics |
| Kyle Gillespie*   | DFO                  | Aquatic Biologist Large Pelagics |
| Anna Eyrich   | DFO                  | Policy and Economics             |
| Scott Coffen-Smout  | DFO                  | Ecosystem Management             |
| Jen Sainders  | DFO                  | Resource Management              |
| Laura Hussey Bondt  | DFO                  | Eco-certification Coordinator    |
| Brad Pye  | DFO                  | Conservation & Protection        |

\* participated by phone

## **2.2.4 What was inspected**

The following was inspected during the audit:

- Changes to the fishery and its management, e.g. legislation and regulations, personnel changes within the science and management structure and within the industry;
- Compliance with fishery management regulations and requirements;
- Changes and updates on ecosystem issues, including fishery interaction with secondary and ETP species;
- Harmonisation;
- Any changes that might affect traceability within the fishery and conformity with regulations;
- Progress against the conditions of certification; and,
- A review of follow up action by the client on the recommendation from the original assessment.

## **2.2.5 Stakeholder Consultation**

A total of 6 stakeholder organisations and individuals having relevant interest in the assessment were identified and consulted during this surveillance audit. The interest of others not appearing on this list was solicited through the postings on the MSC website.

## **2.3 Surveillance Standards**

### **2.3.1 MSC Standards, Requirements and Guidance used**

This surveillance audit was carried out according to the MSC Standard v1.3, and process requirements set out in MSC Fisheries Certification Requirements v2.0.

### **2.3.2 Confirmation that destructive fishing practices or controversial unilateral exemptions have not been introduced**

It was confirmed by stakeholders that neither destructive fishing practices or controversial unilateral exemptions have been introduced since the re-certification of the fishery.

### 3 Updated Fishery Background

The client representative provided the audit team with a letter from DFO's Regional Director General, Maritimes Region, which provided an update on any significant changes to the fishery within the last year. A copy of the letter has been included in Appendix 2 of this report. This letter, information provided by the client prior to the site visit and information gathered by the audit team at the site visit has been used to complete the following sections of the report. Access to this information can be provided on request from Lloyd's Register.

The client confirmed that while the 2018 fishing season was not formally over until the end of March, it had been a poor season with a shortfall in the longline catches. The distinct boundary, or "fence", during warm and cooler bodies of water where the swordfish congregate and feed was less prevalent during the season and so the fishery found targeting swordfish more challenging.

#### 3.1 Changes in management and regulations

New management requirements since the re-certification of the fishery are reported below. The requirements are set out in the Canadian longline swordfish licence conditions.

##### Sharks

In 2017, release of live porbeagle sharks in a way that causes least harm was made a requirement and, in 2018, this was extended to include shortfin mako sharks. It also became a requirement to record the number of released and discarded sharks in the logbook, indicating whether the shark was dead or alive; and, the removal of fins from shark carcasses is now prohibited until the shark has been landed and weighed by dockside monitors.

##### Bycatch

Mid-way through the 2017/18 season a 'supplementary bycatch logbook' was issued to all licence holders, with a requirement to record all fish caught, whether kept or discarded/released.

##### Marine mammals

Any sighting of marine mammals entangled in fishing gear or any interaction with marine mammals is now required to be reported.

Associated with mitigating marine mammal entanglements, a requirement to report any lost gear was introduced for the 2018 fishery.

##### Turtles

In April 2017, the loggerhead sea turtle was listed as endangered under schedule 1 of the Species at Risk Act (SARA). Since 2017, the swordfish longline fishery has been required to report any interactions with this species. It is anticipated that a proposed Recovery Strategy for loggerhead sea turtle, as required under SARA, will be published in 2019.

A Canadian Science Advisory Secretariat (CSAS) process to assess fishery and non-fishery interactions with leatherback sea turtle in Atlantic Canadian waters was completed in March 2018. It is understood that a Science Response report will be published in early 2019. A CSAS process to review information on important habitat for leatherback sea turtle previously described in 2012 took place in January 2019. The results of this CSAS process will support the identification of critical habitat in an amended Recovery Strategy.

The proposed version of the SARA action plan for leatherback sea turtle was posted on the Species at Risk Public Registry on September 27, 2018 for a 60-day public comment period. The audit team understands that the final version of the action plan is expected to be published in 2019. An amended version of the leatherback sea turtle Recovery Strategy is also in development and is expected to be posted on the public registry in 2019.

##### Species at Risk Act Logbook

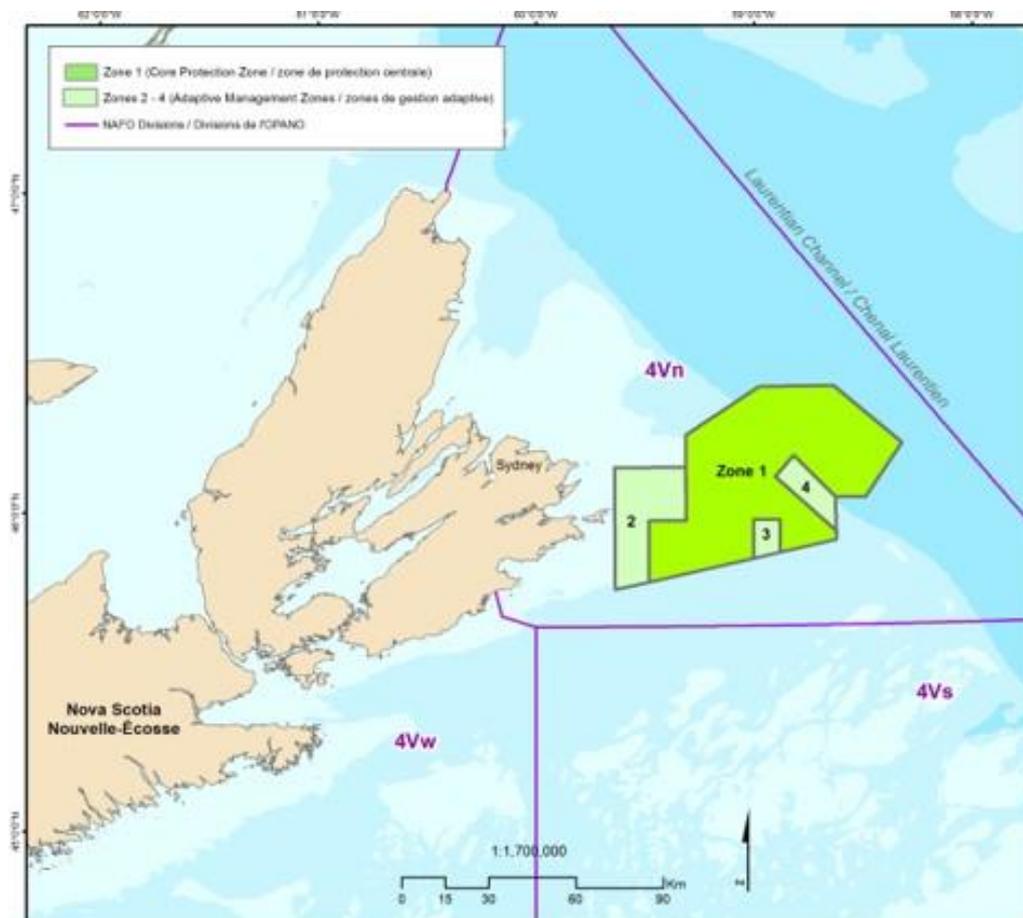
In 2018, an updated version of the SARA logbook was issued and included specific loggerhead sea turtle reporting requirements. There is a dedicated set of data columns for pelagic longline interactions which requests the start date and time of the set in which any interactions are reported, and condition of any animals at release. The logs have accompanying instructions which have specific text for "If fishing using pelagic longline gear"; reporting of nil interactions is also required.

### Marine Protected Areas

The St. Anns Bank Marine Protected Area (MPA) was designated in June 2017 - see Figure 3. Any activities that disturb, damage, or remove living marine organisms or any part of their habitat are prohibited from taking place in management zone 1 of the MPA. The swordfish pelagic longline fishery is prohibited in all of the management zones, whereas, some other fishing activities, including harpoon swordfish, are allowed in management zones 2, 3 and 4. It is noted that the MPA is well to the North West of where the fishery normally operates (see Figure 1) and so the risk of the fishery operating here is negligible. Furthermore, the swordfish longline fleet are required to operate VMS and so their location can be monitored.

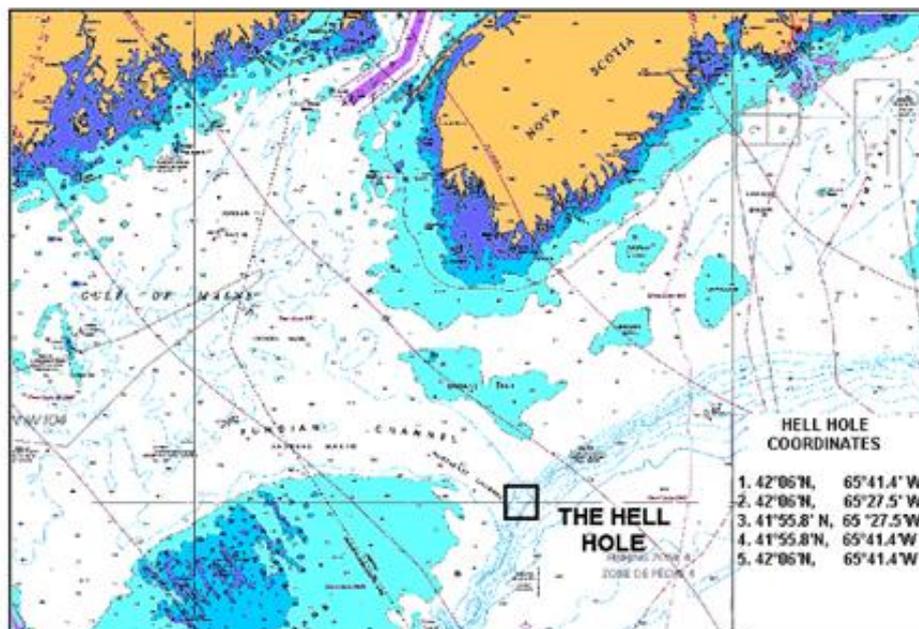
### Trial Fishing in the “Hell Hole”

The “Hell Hole” is a five square nautical mile area 80 km SW of Yarmouth, Nova Scotia on the southern edge of Brown’s Bank and the Fundian Channel (see Figure 4); in 2003 the Hell Hole was closed to swordfish longlining to avoid bluefin tuna bycatch (at a time when swordfish vessels had no access to bluefin tuna quota). In 2018, swordfish pelagic longline was authorized in this area on a trial basis to those who requested a special licence condition amendment. Any fishing under this licence condition was subject to a maximum of 30 sets and having an observer on-board.



**Figure 3.** St. Anns Bank Marine Protected Area (MPA) (Source: <http://www.dfo-mpo.gc.ca/oceans/mpa-zpm/stanns-sainteanne/index-eng.html>)

### THE HELL HOLE



**Figure 4.** Location of the Hell Hole (Source: <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/bluefin-tuna-thon-rouge/bluefin-thonrouge2007-eng.htm>)

### 3.2 Compliance

DFO provided the client with a summary of enforcement activities for the swordfish fishery. A total of 880 fishery patrol hours were dedicated to the fishery. There was a total of 20 violations, none of which resulted in penalties. Conservation and Protection (C & P) did not consider the numbers of violations to be unusually high or serious and are not an indication of systematic non-compliance.

| Violation type               | Number of violations<br>Jan 1 <sup>st</sup> – Dec 31 <sup>st</sup> 2017 | Number of fines |
|------------------------------|---|-----------------|
| Illegal buy / sell / possess | 1   | 0               |
| Registration/licence         | 16  | 0               |
| Reporting                    | 2   | 0               |

### 3.3 Changes in legislation

Amendments to the *Fisheries Act* (Bill C-68) were passed by the House of Commons in June 2018 and second reading in the Senate in December 2018. They are currently with the Standing Committee on Fisheries and Oceans. For more detailed information on the Bill, and the steps in this process, see: <http://www.parl.ca/LEGISInfo/BillDetails.aspx?Language=e&Mode=1&billId=9630814>.

### 3.4 Changes to personnel involved in science, management or industry

DFO reported that Gary Melvin (Assessment biologist, Large Pelagics and ICCAT responsibilities) has retired and Kyle Gillespie has joined DFO Science, Large Pelagics Unit and will be contributing to assessments and advice in this fishery. This is not considered to fundamentally change anything with respect to the management of the fishery.

### 3.5 Changes to scientific base of information including stock assessments

#### Assessment and advice

New stock assessments were conducted by ICCAT for North Atlantic swordfish in 2017. A summary (ICCAT 2017a) is available at: [https://www.iccat.int/Documents/SCRS/ExecSum/SWO\\_ATL\\_ENG.pdf](https://www.iccat.int/Documents/SCRS/ExecSum/SWO_ATL_ENG.pdf).

The full stock assessment report (ICCAT 2017b) is available at: [https://www.iccat.int/Documents/Meetings/Docs/2017\\_ATL\\_SWO\\_ASS\\_REP\\_ENG.pdf](https://www.iccat.int/Documents/Meetings/Docs/2017_ATL_SWO_ASS_REP_ENG.pdf).

Updated catch and catch per unit effort (CPUE) data were used, with three assessment models applied to estimate status. Two biomass dynamics models were used. ASPIC, a stock production model was used for continuity purposes but was not used for final advice on status. BSP2, a Bayesian stock production model, was applied to provide a base case while a variety of sensitivity runs were explored. In addition to the biomass dynamics models, an age- and length-based assessment was conducted using SS3, Stock synthesis 3. As for BSP2, a range of sensitivity runs were conducted in addition to a defined base case.

For BSP2 and SS3, models were carefully fit with final base case choices well-justified. Sensitivity tests were carried out and retrospective analyses suggested status estimates were well-defined.

The previous assessment considered for certification was conducted in 2013. The 2017 assessment used new catch and effort data. Notably, CPUE since 2013 has been low and this caused status estimates from 2017 models to be lower since 1996 (the nadir) than those made in 2013. Nevertheless, all models suggested the stock in 2017 was above  $B_{MSY}$  and fishing was at a rate below  $F_{MSY}$ . For BSP2, the base case run suggested  $B_{2017}=B_{MSY}$  while all sensitivity tests suggested higher status. The base case estimate was that  $F_{2017}=0.8F_{MSY}$ , with all sensitivity tests suggesting the same value or lower. The SS3 model made fullest use of data and provided estimates of confidence intervals around median estimates. The SS3 base case suggested  $B_{2015}=1.13B_{MSY}$  (with 95% CIs of  $0.81-1.45B_{MSY}$ ). Corresponding F estimates were  $F_{2015}=0.81F_{MSY}$  ( $0.61-1.10F_{MSY}$ ).

The ICCAT Scientific Committee considered that the 2017 assessment provided a significant improvement in understanding of current stock status and provided advice on future catches and likely stock status. The advice was that while the 2013 assessments suggested a greater than 90% probability of the stock being above  $B_{MSY}$ , the latest assessments, due to lower CPUE since 2013, suggested the probability of being above  $B_{MSY}$  in 2017 was 61%. Further, catches of around 13,000t pa (cf  $B_{MSY}$  of 13,400t) should maintain the stock at or above  $B_{MSY}$  through to 2028.

#### Management

Recommendation (Rec) 17-02 (ICCAT 2017c) amended ICCAT Rec 16-03. Consistent with advice from the Scientific Committee, it sets the TAC for 2018-2021 at 13,200 t with conditions for adjusting party catch limits (which cumulatively exceed the TAC) should any annual catch exceed 13,200 t. The conditions give inter-annual flexibility to parties while providing mechanisms to constrain overall catch to the TACs.

Importantly for MSC consideration, Rec 17-02 reiterates Rec16-03 provisions on Harvest Control Rules with a clear statement at paragraph 7 of what should be done if the biomass falls to a specified level.

#### Implications for scoring

Nothing in the status advice suggests scoring at MSC Performance Indicator (PI) 1.1.1 needs to be adjusted. The ICCAT assessments clearly use the same data flows and assessments and are carefully considered and well-reported. There are no implications for scoring at PIs 1.2.3 and 1.2.4. The TAC decisions and reiteration of Rec16-03 through Rec 17-02 suggest no need for rescoring at PIs 1.2.1 and 1.2.2.

### **3.6 Changes and updates on ecosystem issues**

Data for the 2016 and 2017 fishery years showing total catch from observed sets were provided to the audit team ( Following on from the information on porbeagle shark landings that was provided in the reassessment report for the fishery (Knapman et al. 2017), the total landings of porbeagle have continued to decline and less than 1 t was retained in the last three years combined (DFO pers. comm.). For 2016 and 2017, total shortfin mako shark landings were around 85 t in each year, which is very similar to the figure reported for the fishery in 2015 by Knapman et al. (2017).

Table 1). Comparison of these data with the bycatch data for 2011 - 2015 (as presented in the Public Certification Report for the fishery – Knapman et al. 2017) showed that, as in previous years, the most commonly taken species were blue shark, swordfish, shortfin mako shark, yellowfin tuna, bigeye tuna and bluefin tuna. No other species comprised on average more than 1% of the observed catch. Following on from the information on porbeagle shark landings that was provided in the reassessment report for the fishery (Knapman et al. 2017), the total landings of porbeagle have continued to decline and less than 1 t was retained in the last three years combined (DFO pers. comm.). For 2016 and 2017,

total shortfin mako shark landings were around 85 t in each year, which is very similar to the figure reported for the fishery in 2015 by Knapman et al. (2017).

**Table 1: Observer longline catch for the 2011-2015, 2016 and 2017 years.**

| Species                | Mean 2011-2015 |        | 2016        |        | 2017        |        |
|------------------------|----------------|--------|-------------|--------|-------------|--------|
|                        | Weight (kg)    | %      | Weight (kg) | %      | Weight (kg) | %      |
| Blue shark             | 78,263         | 44.82  | 128,299     | 43.69  | 94,865      | 44.44  |
| Swordfish              | 89,399         | 42.82  | 98,418      | 33.51  | 77,832      | 36.46  |
| Shortfin mako shark    | 4,972          | 2.53   | 7,682       | 2.62   | 10,769      | 5.05   |
| Yellowfin tuna         | 2,892          | 1.56   | 2,310       | 0.79   | 9,545       | 4.47   |
| Bigeye tuna            | 4,576          | 2.69   | 20,543      | 7.00   | 7,360       | 3.45   |
| Bluefin tuna           | 6,256          | 2.69   | 22,679      | 7.72   | 5,945       | 2.79   |
| Atlantic manta         | 121            | 0.09   | 251         | 0.09   | 1,254       | 0.59   |
| Leatherback sea turtle | 1,129          | 0.74   | 1,928       | 0.66   | 1,141       | 0.53   |
| Basking shark          | 0              | 0.00   | 3,978       | 1.35   | 1,001       | 0.47   |
| Porbeagle shark        | 1,428          | 0.69   | 3,370       | 1.15   | 834         | 0.39   |
| Blue marlin            | 142            | 0.08   | 0           | 0.00   | 797         | 0.37   |
| White marlin           | 316            | 0.22   | 266         | 0.09   | 578         | 0.27   |
| Albacore tuna          | 627            | 0.45   | 1,305       | 0.44   | 542         | 0.25   |
| Thresher shark         | 569            | 0.30   | 2,411       | 0.82   | 330         | 0.15   |
| Loggerhead sea turtle  | 501            | 0.19   | 179         | 0.06   | 302         | 0.14   |
| Great hammerhead shark | 42             | 0.01   | 0           | 0.00   | 182         | 0.09   |
| Pelagic stingray       | 48             | 0.03   | 20          | 0.01   | 144         | 0.07   |
| Wahoo                  | 7              | 0.00   | 0           | 0.00   | 16          | 0.01   |
| Herring gull           | 0              | 0.00   | 0           | 0.00   | 15          | 0.01   |
| Blackfin tuna          | 0              | 0.00   | 4           | 0.00   | 0           | 0.00   |
| Black marlin           | 36             | 0.01   | 0           | 0.00   | 0           | 0.00   |
| Dolphin (ns)           | 142            | 0.05   | 0           | 0.00   | 0           | 0.00   |
| Great blackbacked gull | 1              | 0.00   | 0           | 0.00   | 0           | 0.00   |
| Great shearwater       | 1              | 0.00   | 0           | 0.00   | 0           | 0.00   |
| King mackerel          | 2              | 0.00   | 0           | 0.00   | 0           | 0.00   |
| Longfin mako shark     | 19             | 0.01   | 0           | 0.00   | 0           | 0.00   |
| Oceanic whitetip shark | 6              | 0.00   | 0           | 0.00   | 0           | 0.00   |
| Shark (ns)             | 25             | 0.01   | 0           | 0.00   | 0           | 0.00   |
| Skipjack tuna          | 0              | 0.00   | 19          | 0.01   | 0           | 0.00   |
| Smooth hammerhead      | 6              | 0.00   | 0           | 0.00   | 0           | 0.00   |
| Total                  | 188,961        | 100.00 | 293,662     | 100.00 | 213,452     | 100.00 |

### 3.7 Harmonisation

An extensive harmonisation process took place in August 2016 for assessed and in-assessment North Atlantic swordfish fisheries managed under the auspices of ICCAT. This is documented in the Public Certification Report for this fishery (Knapman et al. 2017).

As of February 14<sup>th</sup> 2019, three North Atlantic swordfish fisheries were MSC certified and no others were reported to be in assessment. As well as this longline fishery they are: the Southeast US North Atlantic Swordfish Fishery and the North West Atlantic Canada Harpoon Swordfish Fishery .

The Canadian longline and harpoon fisheries are being audited together and so this ensures harmonisation between these fisheries. In order to ensure harmonisation with the Southeast US North Atlantic Swordfish fishery the Conformity Assessment Body (CAB) for the fishery was contacted prior to this site visit and it was confirmed that while an extension of scope for the fishery had taken place resulting in Atlantic yellowfin and albacore tuna being assessed and added to the MSC certificate, no issues related to harmonised outcomes with respect to Principle 1 (the North Atlantic swordfish stock) or Principle 3 (ICCAT management) were apparent.

On the 14<sup>th</sup> February 2019, the MSC published a variation request from multiple CABs highlighting that for fisheries for highly migratory species (HMS), particularly tunas and swordfish, harmonisation of any Principle 1 conditions has been achieved but the timeline for meeting these conditions has not. Furthermore, some of these fisheries are scored against MSC CR v1.3 and have Principle 1 related

conditions that are no longer applicable under MSC FCR v2.0 (e.g. PI 1.2.2 Reference Points). Therefore, in order to ensure consistency with respect to conditions and timelines, the CABs proposed that all the Principle 1 aspects of HMS fisheries in the MSC programme should be aligned and, in order to do this, it was requested that all the certified and in assessment HMS fisheries be assessed against MSC FCR v2.0 and any resultant conditions should have timelines harmonised with their respective RFMO work plans.

Also, on the 14<sup>th</sup> February 2019, MSC published an acceptance to the variation request.

While there are no existing harmonisation issues with the three MSC certified North Atlantic swordfish fisheries the consequence of the accepted variation request means that at the next annual audit of the Southeast US North Atlantic Swordfish Fishery the Principle 1 aspects of the fishery will be re-assessed using v2.0. Then, at the next audit of the Canadian longline and harpoon fishery the same will need to happen.

At this stage, no conditions of certification are anticipated to result from this exercise.

### 3.8 Any developments or changes within the fishery which impact traceability or the ability to segregate between fish from the UoC and from outside the UoC (non-certified fish)

No changes or developments that might impact traceability within the fishery were identified or reported.

### 3.9 TAC and catch data

|  |                                  |             |               |                         |
|--|----------------------------------|-------------|---------------|-------------------------|
| <b>TAC</b>                             | <b>Year</b>                      | <b>2017</b> | <b>Amount</b> | <b>13,700 tonnes</b>    |
| <b>UoA share of TAC</b>                | <b>Year</b>                      | <b>2017</b> | <b>Amount</b> | <b>1,883.831 tonnes</b> |
| <b>UoC share of TAC</b>                | <b>Year</b>                      | <b>2017</b> | <b>Amount</b> | <b>1,883.831 tonnes</b> |
| <b>Total green weight catch by UoC</b> | <b>Year (most recent)</b>        | <b>2017</b> | <b>Amount</b> | <b>974.410 tonnes</b>   |
|  | <b>Year (second most recent)</b> | <b>2016</b> | <b>Amount</b> | <b>1,339.649 tonnes</b> |

### 3.10 Summary of assessment conditions

| <b>Condition number</b> | <b>Performance indicator (PI)</b> | <b>Status</b> | <b>PI original score</b> | <b>PI revised score</b> |
|-------------------------|-----------------------------------|---------------|--------------------------|-------------------------|
| 1                       | 3.2.2                             | Closed        | 75                       | 80                      |
| 2                       | 3.2.5                             | On target     | 75                       | N/A                     |

## 4 Results

### 4.1 Condition 1

|                               | PI  | Scoring Issue text  | Score |
|-------------------------------|---|---|-------|
| Performance Indicator & Score | 3.2.2   | <b>SG 80, SI (c):</b> Decision-making processes use the precautionary approach and are based on best available information. | 75    |
| Rationale                     | <p><b>Canada</b></p> <p>The precautionary approach is required for all fisheries as a matter of policy as outlined in the “Sustainable Fisheries Framework” (DFO 2009a). The IFMP (DFO, 2013) includes a section on the precautionary approach and how it is adopted in fisheries management within Canada. The focus of the approach in this fishery is on fisheries resources, i.e. swordfish, tuna and shark species, and is based on best available information.</p> <p>How the precautionary approach is used in decision-making processes for non-commercial species is not explicit within the management plan or any other document that the assessment team had access to. Given the fisheries interaction with turtle species, the lack of an explicit rationale for how the precautionary approach is, or is not necessarily, being used with respect to this issue means the SG 80 is not met.</p>  |   |       |
| Condition                     | By the third audit the client shall provide evidence of how the precautionary approach is used in the decision-making processes within the Canadian longline swordfish fishery.   |   |       |
| Milestones                    | <p><b>At the first audit</b> the client will provide evidence in the form of minutes and/or meeting reports showing discussion of the how the precautionary approach is or is not necessarily, being used in decision making processes with respect to the management of the Canadian longline swordfish fishery.</p> <p>This milestone is an incremental step toward fulfilling the condition. Its successful completion will not result in a change of score to the PI; the score will remain at 75.</p> <p><b>At the second audit</b> the client shall provide evidence in the form of minutes and/or meeting reports showing how the precautionary approach will, or will not necessarily, be used in decision making processes with respect to the management of the Canadian longline swordfish fishery.</p> <p>This milestone is an incremental step toward fulfilling the condition. Its successful completion will not result in a change of score to the PI; the score will remain at 75.</p> <p><b>At the third audit</b> the client shall provide evidence of how the precautionary approach is, or is not necessarily being used, with respect to the fisheries interaction with turtle species in the decision-making processes within the Canadian longline swordfish fishery.</p> <p>Successful completion of this and the previous milestones will demonstrate that decision-making processes use the precautionary approach and are based on best available information. This will result in the rescoring of this PI to at least 80.</p> |   |       |
| Client action plan            | The MSC assessment team concluded that while the IFMP (DFO, 2013) includes details of how the precautionary approach is used in the management decisions for fisheries resources, i.e. swordfish, tuna and shark species, and is based on best available information, there was a lack of evidence in the IFMP, or other  |   |       |

documents, on how the precautionary approach is used in decision making for non-commercial species, in particular, sea turtles.

In order to meet the condition, the client will follow a step-wise approach, necessitated by the consultative and administrative process associated with the DFO management of the fishery to achieve the incremental steps identified in the condition milestones.

**At the first audit** the client, will provide evidence that during the first year of certification, they have worked with DFO and other stakeholders to ensure that the precautionary approach is used in decision making with respect to the fishery's interactions with non-commercial species, in particular, sea turtles.

The client will undertake the following actions:

- Advocate, through correspondence with the Regional Director of Fisheries for the Maritimes Region, their support and willingness to work with DFO to consider how best to ensure and have the management process more clearly articulate and document how the precautionary approach is used in decision making for non-commercial species, in particular, sea turtles, in the management of the swordfish longline fishery. The client will promote that this is done through and in combination with: the IFMP, Species at Risk Action Plans, Recovery Strategies for Loggerhead and Leatherback Sea Turtles, the DFO Sustainable Fisheries Framework (SSF) and their policy on managing By-Catch by the pelagic longline (PLL) fleet.
- Request, through the annual meetings of the Scotia Fundy Large Pelagics Advisory Committee (SFLPAC) and the Atlantic Large Pelagic Advisory Committee (ALPAC), that DFO consider how best to ensure and more clearly articulate and document how the precautionary approach is used in decision making for non-commercial species, in particular, sea turtles, in the management of the swordfish longline fishery.

At the first surveillance audit, the client will provide minutes / meeting reports and any correspondence with DFO, SFLPAC, and ALPAC showing the above actions.

This will demonstrate the client's active participation and advocacy in ensuring and demonstrating how the precautionary approach is used in decision making for non-commercial species, in particular, sea turtles, in the management of the swordfish longline fishery.

**At the second audit** the client shall demonstrate that during the second year of certification, they have undertaken the following:

- Continue to work with DFO and other stakeholders, through the SFLPAC and the ALPAC, and / or Working Groups thereof, to ensure and demonstrate how the precautionary approach is used in decision making for non-commercial species, in particular, sea turtles, in the management of the swordfish longline fishery.
- Correspond with senior DFO regional staff and request that DFO provide an update on how they intend to more clearly document how the precautionary approach is used in decision making for non-commercial species, in particular, sea turtles, in the management of the swordfish longline fishery. This information will be requested so that it will be available for the second surveillance audit.

At the second surveillance audit, the client will provide minutes / meeting reports and any correspondence with DFO, SFLPAC, and ALPAC to demonstrate the client's active participation and advocacy in ensuring and demonstrating how the precautionary approach is used in decision making for non-commercial species, in particular, sea turtles, in the management of the swordfish longline fishery. As a result, it will also demonstrate the outcomes that have been achieved.

**At the third audit** the client, through advocacy and promotion in years 1 and 2, will provide documentary evidence that demonstrates how the precautionary

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|  | <p>approach is used in decision making for non-commercial species, in particular, sea turtles, in the management of the swordfish longline fishery.</p>   |
| <p><b>Progress on Condition</b><br/>[Year 1]</p> | <p><b><u>Client and DFO evidence</u></b></p> <p>The client provided evidence in the form of a letter, dated 7<sup>th</sup> November 2017, to the DFO, Regional Director General (RGD), Maritimes Region, requesting assistance from the DFO to help demonstrate that the precautionary approach to the management of sea turtles is clearly documented and being applied in either the IFMP, Species at Risk Action plans, Recovery Strategies for loggerhead and leatherback turtles, the Sustainable Fisheries framework or the policy on managing by-catch by the pelagic longline fleet. The letter also requested that, in the absence documentation on how the precautionary approach is being used for the management of sea turtles with respect to the fishery that it be added as an agenda item for the Scotia Fundy Large Pelagic Advisory Committee (SFLPAC) and the Atlantic Large Pelagics Advisory Committee (ALPAC)</p> <p>The client provided a response from the RGD which, in summary stated that the leatherback and loggerhead turtles are managed in accordance with the Species at Risk Act (SARA, 2002) and, as such the species are protected through its prohibitions. Furthermore, through the development and implementation of recovery strategies and action plans which identify management approaches to address threats to the species, a precautionary approach to the conservation of these species is incorporated into the management of the swordfish fishery.</p> <p>Action Plans and Recovery Strategies are currently being developed for these two species:</p> <p><u>Leatherback turtle</u> - The Action Plan was posted on the Species at Risk Public Registry on September 27, 2018 for a 60-day public comment period and the final version of the action plan is expected to be published in 2019; An amended Recovery Strategy is expected to be posted on the public registry in 2019.</p> <p><u>Loggerhead turtle</u> – A proposed version of the recovery strategy is anticipated to be published on the SARA public registry in 2019 for a 60-day public comment period. An Action Plan is expected to follow within 2-3 years of the final recovery strategy being published.</p> <p>At the site visit, the audit team were provided with the, “Threat Assessment for Loggerhead Sea Turtle (<i>Caretta caretta</i>), Northwest Atlantic Population” (DFO, 2017). The intent of a “threat assessment” is described as a document to inform species listing recommendations, recovery strategies, and action plans. Furthermore, information on threats is needed to, amongst other things, inform the regulatory and management decisions made by DFO regarding human activities that interact with the species (DFO, 2017).</p> <p>DFO (2017) identifies the “threat risks” for loggerheads when they are in Atlantic Canadian waters and also throughout their entire range in the Northwest Atlantic. Bycatch in pelagic longline is a recognised risk and while the extent to which this is contributing to population decline in Atlantic Canada is not known, mainly because the population estimates are not available, it is considered unlikely that it would result in jeopardy to survival or recovery of the population (DFO, 2017).</p> <p>The Threat Assessment for Loggerhead was discussed with DFO staff at the site visit and in follow up correspondence. DFO highlighted that the preamble to SARA is consistent with the precautionary approach, i.e. “...<i>the Government of Canada is committed to conserving biological diversity and to the principle that, if there are threats of serious or irreversible damage to a wildlife species, cost effective measures to prevent the reduction or loss of the species should not be postponed for a lack of full scientific uncertainty.</i>”. Furthermore, DFO stated that SARAs permitting regime was written to require that in order for activities to be permitted under SARA, all feasible measures must be taken to minimise the impact of the activity on the species even when the activity would not jeopardise the survival or recovery of the species. As such, this is being applied in the management</p> |

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|                            | <p>decisions and measures, with respect to loggerhead and leatherback turtles, i.e. swordfish longline licence conditions (DFO 2017a) require:</p> <ul style="list-style-type: none"> <li>• that at least one member of the on-board crew must hold a valid certificate identifying that they have successfully completed a DFO approved dehooking/disentanglement course. A copy of the valid certificate must be on board the vessel and be provided to a fisheries officer upon request.</li> <li>• that any incidentally caught loggerhead turtle is brought aboard using a dip net (as long as this does not jeopardize the safety of the crew); that fishing gear must be removed according to protocols prescribed in the required dehooking/disentanglement course; that the turtle is released to the water and, if it is alive, in the manner that causes the least harm; and that if it is not possible to board the turtle without jeopardizing the safety of the crew, the loggerhead turtle must be released by cutting the fishing line as close as possible to the hook.</li> <li>• dehooking/disentanglement equipment to be on board the vessel and accessible at all times when fishing using longline gear. This equipment is to be used in the safe handling and release of sea turtles, and must include mono-cutters, bolt cutters, a minimum 8' extendable line cutter, and a dip net with a 32-34" diameter net frame.</li> <li>• that leatherback turtles are released to the water and, if it is alive, in the manner that causes the least harm.</li> <li>• the use of corrodible circle hooks.</li> <li>• the reporting of any interactions in the species at risk monitoring document, and to provide a completed document (including nil reports) at the end of each fishing trip.</li> </ul> <p><b><u>Audit Team Observations</u></b></p> <p>DFO have provided examples and explanation as to how a precautionary approach has been used in decision making to mitigate the interactions of the longline swordfish fishery with turtles. This fulfills the condition. A revised score and scoring rationale for PI 3.2.2 80 (c) is provided in Appendix 1.</p> <p>As noted in the scoring rationale for this PI, the Atlantic swordfish and other tunas IFMP (DFO, 2013) includes a section on how the precautionary approach is used in the management of fisheries resources, i.e. swordfish, tuna and shark species. It is recommended that the precautionary approach section within an updated IFMP includes an explanation of how the precautionary approach is applied in managing fisheries resources as well as other animal and habitat resources.</p> |
| <b>Status of condition</b> | The condition has been met and is closed ahead of target.  |

#### 4.2 Condition 2

| Performance Indicator(s) & Score(s) | PI  | Scoring Issue text  | Score |
|-------------------------------------|---|---|-------|
|                                     | 3.2.5   | <b>SG 80, SI (b):</b> The fishery-specific management system is subject to regular internal and occasional external review. | 75    |
| <b>Rationale</b>                    | <p><b>Canada</b></p> <p>Annual meetings of ALPAC and SFLPAC provide an opportunity to internally review and evaluate key parts of the management system. Both committees may also establish ad-hoc sub-committees or working groups to review and assess specific policy and management measures (DFO, 2002 and DFO 2014). DFO also reviews and evaluates compliance and monitoring on a regular basis.</p> |   |       |

|                                  |  |
|----------------------------------|--|
|                                  | <p>With respect to external review, Canadian fisheries are reviewed by a number of institutions, e.g. The House of Commons and the Senate's Standing Committees on Fisheries and Oceans. Also, the Canadian Auditor General has, on an ad-hoc basis, reviewed fisheries related issues, although this has not happened since 2009 when the protection of fish habitat was reviewed (OAGC 2009). However, the Canadian swordfish longline fishery has never been subject to an external review by either these Committees or the OAGC.</p> <p>The fishery-specific management system is therefore subject to regular internal review, thereby meeting the SG 60, however, while there are a number of institutions that undertake external reviews of Canadian fisheries, the swordfish longline fishery has never been subject to their, or any other, external review. Therefore, it cannot be said the fishery-specific management system is subject to occasional external review and so the SG 80 is not met.</p>  |
| <p><b>Condition</b></p>          | <p>By the third annual audit the client shall provide evidence that the longline swordfish fishery management system is subject to regular internal and occasional external review.</p>  |
| <p><b>Milestones</b></p>         | <p><b>At the first audit</b> the client will provide evidence in the form of minutes and/or meeting reports showing discussion on how it will to initiate and adopt an occasional external review of the longline swordfish fishery management system.</p> <p>This milestone is an incremental step toward fulfilling the condition. Its successful completion will not result in a change of score to the PI; the score will remain at 75.</p> <p><b>At the second audit</b> the client shall provide evidence in the form of minutes and/or meeting reports showing how an occasional external review of the longline swordfish fishery management system will be adopted.</p> <p>This milestone is an incremental step toward fulfilling the condition. Its successful completion will not result in a change of score to the PI; the score will remain at 75.</p> <p><b>At the third audit</b> the client shall provide evidence that the longline swordfish fishery management system is subject to occasional external review and the review has or will be initiated and completed within four years of the re-certification date of the fishery.</p> <p>Successful completion of this and the previous milestones will demonstrate that the Canadian longline swordfish fishery management system is subject to regular internal and occasional external review This will result in the rescoring of this PI to at least 80.</p> |
| <p><b>Client action plan</b></p> | <p>The MSC team concluded that Canadian fisheries are reviewed by a number of national institutions, e.g. The House of Commons and Senate's Standing Committee on Fisheries and Oceans, and also by the Canadian Auditor General on an ad-hoc basis. However, the MSC assessment team also concluded that the Canadian longline swordfish fishery has never been subject to an external review by either of the Committees or the Auditor General.</p> <p><b>At the first audit</b> the client will provide evidence that during the first year of certification they have worked with DFO to ensure that the longline swordfish fishery management system is subject to regular internal and occasional external review.</p> <p>During this time period the client will undertake the following:</p> <ul style="list-style-type: none"> <li>• Advocate, through correspondence with the Regional Director of Fisheries for the Maritimes Region, that there be an occasional external review (at least every 5-years, i.e. within the life of an MSC certification) by recognised experts, of the management system.</li> <li>• Request, through the annual meetings of SFLPAC and ALPAC that DFO consider the occasional external review (at least every 5-years, i.e. within</li> </ul>   |

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|--|--|
|  | <p>the life of an MSC certification) by recognised experts, of the management system.</p> <ul style="list-style-type: none"> <li>• If DFO do not agree to undertake a review of the management system, the client will initiate their own review by identifying and approaching an appropriately qualified specialist to undertake the review.</li> <li>• The client's intent will be to present the outcome of the review to DFO, SFLPAC, and ALPAC processes.</li> </ul> <p>At the first surveillance, audit the client will provide minutes / meeting reports and any correspondence with DFO, SFPLAC, and ALPAC showing the above actions and outcomes.</p> <p>If the client is not successful in gaining DFO support for an external review the client will provide evidence of identifying and approaching an appropriately qualified specialist and the terms of reference for their review.</p> <p>This will demonstrate the client's active participation and advocacy in establishing an occasional review of the fishery's management system.</p> <p><b>At the second audit</b> the client shall provide evidence that it has undertaken the following actions in the second year of certification:</p> <ul style="list-style-type: none"> <li>• Continue to work with DFO in establishing an occasional review of the fishery's management system.</li> <li>• If DFO do not agree to undertake an external review of the management system, the client will provide evidence of the contractual arrangements they have in place with an appropriately qualified specialist to undertake the review.</li> </ul> <p>The client will provide minutes / meeting reports and any correspondence with DFO, SFLPAC and ALPAC showing the above actions and outcomes.</p> <p>If the client has not been successful in gaining DFO support for an external review the client will provide evidence of a contract with an appropriately qualified specialist and an agreed plan of work.</p> <p><b>At the third audit</b> the client shall provide evidence that through the advocacy and promotion in years 1 and 2 or through the establishment of a contract with an appropriately qualified specialist, the client will provide documentary evidence that an external review of the management system has taken place and that the results have been presented to DFO, SFLPAC, and ALPAC and that comments and reactions have been sought.</p> |
| <p><b>Progress on Condition</b><br/>[Year 1]</p> | <p><b><u>Client Evidence</u></b></p> <p>The following information is a summary of the evidence and information provided by the client prior to and during the on-site audit.</p> <p>The client provided a letter, dated 7<sup>th</sup> November 2017, to the DFO, Regional Director General (RGD), Maritimes Region, requesting assistance to: 1. Help demonstrate that there is a regular internal review of the management of the swordfish longline fishery and that the results of this review are available upon request; 2. Assist in facilitating an occasional external review of the management of the Canadian swordfish fishery.</p> <p>The letter also requested that, in the absence of documentation, these issues to be added as an agenda item for the Scotia Fundy Large Pelagic Advisory Committee (SFLPAC) and the Atlantic Large Pelagics Advisory Committee (ALPAC).</p> <p>The client provided a response from the RGD which, in summary stated it was DFO's view that the annual SFLPAC and ALPAC meetings provide opportunity for internal and external review of key parts of the science, compliance and monitoring and management system for the swordfish fishery. DFO's Sustainability Survey for Fisheries was also considered a means of internal review. Records of the Advisory Committee meetings are available on request as</p>  |

|                                   |  |
|-----------------------------------|--|
|                                   | <p>are management plans and data from the Canadian portion of the swordfish fishery (subject to privacy laws).</p> <p>In anticipation that DFO would not initiate an external review in the form required by MSC (see below), the client confirmed that they have identified two potential external reviewers (Jean-Jacques Maguire and John Angel) and made initial enquiries as to their interest and availability to conduct a review of the swordfish longline and harpoon fishery management system. The client provided bios of the potential external reviewers.</p> <p>In the absence of clear requirements set by MSC on what an external review should entail, the client indicated at the site visit that the review would follow a similar focus as that used in the Commissioner of the Environment and Sustainable Development 2016 review, "<a href="#">Sustaining Canada's Major Fish Stocks – Fisheries and Oceans Canada</a>".</p> <p><b><u>Audit Team Observations.</u></b></p> <p>The milestone for this first-year audit is for the client to provide evidence in the form of minutes and/or meeting reports showing discussion on how it will initiate and adopt an occasional external review of the longline and harpoon swordfish fishery management system.</p> <p>The client provided evidence to show they have asked DFO to help facilitate an occasional external review of the fisheries and that DFO responded by saying, in their view, the existing advisory committee process provides an internal <u>and</u> external review of key parts of the management system.</p> <p>The audit team note that the MSC Guidance on "external review" (MSC GCR v1.3 GCB4.11.1) states that, depending on the scale and intensity of the fishery, the external review for SG80 and SG100 could be by:</p> <ul style="list-style-type: none"> <li>• Another department within an agency;</li> <li>• Another agency or organisation within the country;</li> <li>• A government audit that is external to the fisheries management agency;</li> <li>• A peer organisation nationally or internationally; and,</li> <li>• External expert reviewers.</li> </ul> <p>With the above guidance in mind, the approach taken by the client to contact two experienced fisheries consultants with the intent of initiating an independent review of the swordfish fisheries management systems is considered to be appropriate.</p> <p>The audit team concludes that the client has demonstrated active participation in establishing an occasional review of the fishery's management system, thereby meeting the year 1 milestone.</p> <p>Correspondence between the client and DFO in relation to this condition is included in Appendix 4</p> |
| <p><b>Status of condition</b></p> | <p>The condition is on-target.</p>   |

## 5. Recommendations

At the reassessment six recommendations were made. It should be noted that recommendations are not the result of a failure to meet the unconditional pass mark, they are non-binding; however, in the opinion of the assessment team, action taken to support them would make a positive contribution to ongoing efforts to ensure the long-term sustainability of the fishery. Where appropriate, an update is provided against each:

- 1) PI 2.2.1, SIc: Noting the recent change in understanding of the status of the North Atlantic shortfin mako shark stock, it is recommended that the client proactively engages in discussions with DFO to quickly review any findings from ICCAT on rebuilding the stock, and to implement appropriate changes to Canadian management as they may be developed over the course of the certification period.

### Update

It is now required by condition of licence for licence holders/operators to promptly release all live shortfin mako sharks in the manner which causes the least amount of harm to the shark. The number of sharks discarded and released shall be recorded in the logbook, indicating the shark's status (dead or alive). Landings of shortfin mako by the fleet did decrease in 2018. Additionally, Heather Bowlby (DFO shark scientist) conducted a basic analysis, as requested by Fisheries Management, to compare the average catch of shortfin mako on observed trips and on non-observed trips. The thought was that if average catches on non-observed trips were a lot higher than on observed, there would be circumstantial evidence that live shortfin mako were being landed rather than released. On the basis of 19 observed trips (11 of which landed mako), there was no evidence of systematically higher landings. The trips were split by month so that the data were comparable. The observer data that gave the condition of landed fish was also considered. There were 16 animals that were said to have been alive when landed, out of 108 observed. This analysis was presented at the January SFLPAC.

ICCAT plans to reassess shortfin mako in 2020, largely to evaluate the effect of the new recommendation on live release (a new stock assessment was originally planned for 2019, but this was pushed to 2020).

- 2) PI 2.2.3, SIc: It is recommended that options to improve the quality and consistency of discard reporting are investigated, and that any feasible approaches are implemented.

### Update

A requirement to record all fish caught, including those discarded/released as well as those kept, in a supplementary bycatch logbook was introduced mid-way through the 2017/18 season. The effectiveness of this requirement and/or compliance with it has not been assessed, but the intent is consistent with the recommendation.

- 3) PI 2.3.3, SIa: It is recommended that the client support and pursue a re-running of the Regional Peer Review assessment of incidental catch in the Atlantic Canadian swordfish/other tuna longline fishery (i.e., DFO 2016k), or a similar process, to review the approach to incidental catch monitoring in the longline swordfish fishery. A key aim should be to determine what, if any, changes are needed to the observer programme to ensure that the data collected are adequately representative of the fishery.

### Update

There are no current plans to re-run the Regional Peer Review. DFO is currently consulting on a draft Fishery Monitoring Policy which will guide decision making on fishery monitoring requirements for individual fisheries. A draft policy statement is available online: <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/comm/policy-politique-eng.htm>

- 4) PI 2.3.3, SIb: A non-binding Recommendation was set in the Year 4 audit report for the last certification period (Knapman et al. 2017). This was that the client provide DFO with clear and well publicised support for the timely completion of the loggerhead sea turtle tagging study through advocating to the swordfish longline fishermen of the need to identify and fulfil suitable opportunities to take DFO tagging staff on swordfish and combined swordfish and tuna longline trips in 2017. This non-binding Recommendation is repeated here and will be reiterated annually until such time as the study is completed.

#### Update

Two sampling trips aboard swordfish longline vessels were undertaken in 2017 and a further two in 2018, with three of the four trips having been facilitated by the NSSA. Fishing in the longline fishery started later than normal in the 2018 season, with relatively less effort focused on fishing warmer waters approaching the southern limits of the EEZ than is normally the case. As a result, this limited the opportunities for tagging loggerhead sea turtles. It was reported to the audit team that there will be no further dedicated effort to tag loggerhead sea turtles within the existing project (i.e., to assess post-release survivorship, explicitly), and so corresponding analyses will be carried out based on the tagging data that has been collected to date. Project results will likely be reviewed in early 2020.

- 5) PI 2.4.3, Slb: It is recommended that information on the amounts and locations of any lost gear (i.e., number of hooks and floats, length of mainline, etc.) are recorded centrally and reported annually.

#### Update

Lost gear reporting is required by condition of licence. Information is collected by DFO, including name of the fisher, date last fished, date reported, licence number, last known location, and the amount of traps/buoys/rope lost. It is thought likely that in the future fishermen will be asked to report instances where gear is recovered. No reports of lost gear were provided at this audit, however, and the client did comment that the use of AIS beacons on most buoys now helps to mitigate risk of losing gear.

- 6) PI 3.2.2., Sla: It is noted that the IFMP is out of date. It is recommended that the IFMP is updated annually and, in so doing, a record of amendment is maintained in order to show changes.

#### Update

No updates have been made to the swordfish IFMP since it was updated in 2013, and none are currently planned. DFO reported that the IFMP is an evergreen document, meant to set out the overarching management approach, objectives, etc. for the fishery. Year to year adjustments would be captured in the records of discussion from advisory committee meetings, the fleets' Conservation Harvesting Plans, and in the material change letters provided by DFO for the purposes of MSC audits. A new IFMP template is being developed and it is not anticipated that the Swordfish IFMP will be updated until the new template is complete.

A new recommendation, resulting from this audit, and related to the closed Condition 1 has also been made by the audit team, i.e., PI 3.2.2, it is recommended that the precautionary approach section within an updated IFMP includes an explanation of how the precautionary approach is applied in managing fisheries resources as well as other animal and habitat resources.

## 5 Conclusion

### 5.1 Summary of findings

With respect to MSC Principle 1, new stock assessments were conducted by ICCAT for North Atlantic swordfish in 2017. Nothing in the status advice suggests scoring at MSC PI 1.1.1 needs to be adjusted. The ICCAT assessments use the same data flows and assessments are carefully considered and well-reported. There are no implications for scoring at PIs 1.2.3 and 1.2.4.

With respect to Principle 2, as of 2018 the release of live shortfin mako became a requirement, following on from the same requirement for porbeagle sharks introduced in 2017. In April 2017, the loggerhead sea turtle was listed as endangered under schedule 1 of the Species at Risk Act (SARA). Since 2017, the swordfish longline fishery has been required to report any interactions with these species.

A new MPA has been designated – St Anns Bank – a number of management zones with varying degrees of restrictions on human activities has been adopted. The swordfish pelagic longline fishery is prohibited in all of the management zones.

There have been limited changes with respect to the Principle 3 aspects of the fishery. Any management changes are set out in the longline swordfish licence conditions. No significant non-compliance issues were reported.

Condition 1 has been rescored and closed ahead of target, with the provision of evidence of how the precautionary approach is used in the decision making to mitigate interactions of the longline swordfish fishery with turtles. The audit team have made a new recommendation that the precautionary approach section within an updated IFMP includes an explanation of how the precautionary approach is applied in managing fisheries resources and other animal and habitat resources.

With respect to condition 2, the client has not been able to secure DFOs support in having them adopt an external review of the fishery that meets MSC requirements and so is pursuing their own review by identifying independent specialists who will conduct the review by year 3 of the certification.

The audit team recommends that continued certification of the fishery.

## 6 References

DFO 2013. Integrated Fisheries Management Plans (IFMPs) for swordfish and other tuna species (albacore, bigeye and yellowfin tuna) <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/swordfish-espardon/NEW-swordfish-2013-espado-eng.htm>

DFO 2014. Guidance for the Completion of Recovery Potential Assessments (RPA) for Aquatic Species at Risk. [http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2014/2014\\_013-eng.html](http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2014/2014_013-eng.html)

DFO 2017. Canadian Science Advisory Secretariat (CSAS) Science Response Threat Assessment for Loggerhead Sea Turtle (DFO, 2017). [http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScRS/2017/2017\\_014-eng.html](http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScRS/2017/2017_014-eng.html)

DFO (2017a) Longline Swordfish Licence Conditions

ICCAT 2017a. Summary report of the ICCAT stock assessment for North Atlantic Swordfish : [https://www.iccat.int/Documents/SCRS/ExecSum/SWO\\_ATL\\_ENG.pdf](https://www.iccat.int/Documents/SCRS/ExecSum/SWO_ATL_ENG.pdf).

ICCAT 2017b. Full report of the ICCAT stock assessment for North Atlantic Swordfish : [https://www.iccat.int/Documents/Meetings/Docs/2017\\_ATL\\_SWO\\_ASS\\_REP\\_ENG.pdf](https://www.iccat.int/Documents/Meetings/Docs/2017_ATL_SWO_ASS_REP_ENG.pdf).

ICCAT 2017c. Recommendation by ICCAT (Rec) 17-02, amending the Recommendation for the Conservation of North Atlantic Swordfish, ICCAT Rec 16-03, <https://www.iccat.int/Documents/Recs/compendiopdf-e/2017-02-e.pdf>

Knapman, P., Blyth Skyrme, R., Stokes, K., 2017. North West Atlantic Canada Longline Swordfish Fishery. MSC Public Certification Report. [https://fisheries.msc.org/en/fisheries/north-west-atlantic-canada-longline-swordfish/@\\_assessments](https://fisheries.msc.org/en/fisheries/north-west-atlantic-canada-longline-swordfish/@_assessments)

## Appendix 1 – Re-scoring evaluation tables

When any specific PI is rescored audit teams are required to use the same scoring evaluation table used at the assessment and identify the changes made.

PI 3.2.2 80 (c) has been rescored at this audit, see below. The text from the original scoring rationale is in black. Where original text has been amended it is crossed out. New text is in blue.

### PI 3.2.2. 80 (c)

| c | Guidepost |   | Decision-making processes use the precautionary approach and are based on best available information |  |
|---|-----------|---|--|--|
|   | Met?      |   | N  |  |
|   |           | <p><u>ICCAT</u></p> <p>ICCAT's decisions are based on the best available scientific information. The Precautionary approach is also implicit in the scientific process. As indicated above in PI 3.1.3, ICCAT formally adopted the precautionary approach at its 2015 meeting. In addition, the rebuilding of the Atlantic swordfish stock adopted a precautionary approach in setting TACs, resulting in the stock rebounding within the planned recovery period.</p> <p>It is noted that Spencer et al, 2016 concludes that ICCAT has been inconsistent in applying the precautionary approach, particularly where scientific information is uncertain, unreliable or inadequate. This is not considered to be the case for North Atlantic swordfish.</p>   |  |  |
|   |           | <p><u>Canada</u></p> <p>The precautionary approach is required for all fisheries as a matter of policy as outlined in the “Sustainable Fisheries Framework” (DFO 2009a). The IFMP (DFO, 2013) includes a section on the precautionary approach and how it is adopted in fisheries management within Canada. The focus of the approach is on fisheries resources, i.e. swordfish, tuna and shark species, and is based on best available information.</p> <p>How the precautionary approach is used in decision-making processes for non-commercial species is not explicit within the management plan, <del>or any other document that the assessment team had access to. Given the fisheries interaction with turtle species, the lack of an explicit rationale for how the precautionary approach is, or is not necessarily, being used with respect to this issue means the SG 80 is not met.</del> however, the preamble to the <i>Species at Risk Act (SARA, 2002)</i> is consistent with the precautionary approach, i.e. “...the Government of Canada is committed to conserving biological diversity and to the principle that, if there are threats of serious or irreversible damage to a wildlife species, cost effective measures to prevent the reduction or loss of the species should not be postponed for a lack of full scientific uncertainty” and, in reality, the permitting regime is written to require that in order for activities to be permitted under SARA, all feasible measures must be taken to minimise the impact of the activity on the species even when the activity would not jeopardise the survival or recovery of the species. As such, this is being applied in the management decisions and measures, with respect to loggerhead and leatherback turtles, i.e. swordfish longline licence conditions (DFO, 2017) require:</p> <ul style="list-style-type: none"> <li>• that at least one member of the on-board crew must hold a valid certificate identifying that they have successfully completed a DFO approved dehooking/disentanglement course. A copy of the valid certificate must be on board the vessel and be provided to a fisheries officer upon request.</li> <li>• that any incidentally caught loggerhead turtle is brought aboard using a dip net (as long as this does not jeopardize the safety of the crew); that fishing gear must be removed according to protocols prescribed in the required dehooking/disentanglement course; that the turtle is released to the water and, if it is alive, in the manner that causes the least harm; and that if it is not possible</li> </ul> |  |  |

|   |  |   |
|---|--|---|
|   |  | <p>to board the turtle without jeopardizing the safety of the crew, the loggerhead turtle must be released by cutting the fishing line as close as possible to the hook.</p> <ul style="list-style-type: none"> <li>dehooking/disentanglement equipment to be carried on board the vessel and accessible at all times when fishing using longline gear. This equipment is to be used in the safe handling and release of sea turtles, and must include mono-cutters, bolt cutters, a minimum 8' extendable line cutter, and a dip net with a 32-34" diameter net frame.</li> <li>leatherback turtles must be released to the water and, if it is alive, in the manner that causes the least harm.</li> <li>The use of corrodible circle hooks.</li> <li>the reporting of any interactions in the species at risk monitoring document, and to provide a completed document (including nil reports) at the end of each fishing trip.</li> </ul> <p>Given the above evidence, the SG 80 is considered to be met.</p> <p><u>It is recommended that the precautionary approach section within an updated IFMP includes an explanation of how the precautionary approach is applied in managing fisheries resources and the other animal (including ETP) and habitat resources.</u></p> |
| <b>References</b>   |  | <p>DFO (2009a) Sustainable Fisheries Framework (2009) <a href="http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overview-cadre-eng.htm">http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overview-cadre-eng.htm</a></p> <p>DFO (2013) Swordfish and Other Tunas Integrated Fisheries Management Plan. <a href="http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/swordfish-espado/NEW-swordfish-2013-espado-eng.htm">http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/swordfish-espado/NEW-swordfish-2013-espado-eng.htm</a></p> <p>DFO (2017) Longline Swordfish Licence Conditions</p> <p>Species at Risk Act (SARA), 2002 <a href="https://laws-lois.justice.gc.ca/eng/acts/s-15.3/">https://laws-lois.justice.gc.ca/eng/acts/s-15.3/</a></p> <p>Spencer, J., Maguire, J.J., Molenaar, E., (2016) Report of the Independent Performance Review of ICCAT. <a href="http://www.iccat.es/Documents/Other/0-2nd_PERFORMANCE_REVIEW_TRI.pdf">http://www.iccat.es/Documents/Other/0-2nd_PERFORMANCE_REVIEW_TRI.pdf</a></p>  |
| <b>OVERALL PERFORMANCE INDICATOR SCORE:</b><br>SI a: 80; SI b:80; SI c: <del>60</del> 80; SI d:80; SI e:100 |  | 75 80   |
| <b>CONDITION NUMBER (if relevant):</b>  |  | 4   |
| <b>RECOMMENDATION NUMBER</b>  |  | 6 7   |

## Appendix 2 - Stakeholder submissions

Copy of a letter provided to the client from the DFO, Regional Director General, Maritimes Region describing the key changes in the fishery since the fishery re-certification in December 2017.



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

1 Challenger Drive  
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Dartmouth, NS  
B2Y 4A2

JAN 18 2019

Mr. Troy Atkinson  
President, Nova Scotia Swordfishermen's Association  
RR#3  
Shelburne, NS  
B0T 1W0

Re: North West Atlantic Canada Longline Swordfish Marine Stewardship Council  
Certification – First Annual Surveillance Audit

Dear Mr. Atkinson:

I am writing in response to your request for a material change letter, which is required for your upcoming first annual surveillance audit of the North West Atlantic Canada longline swordfish fishery for Marine Stewardship Council (MSC) certification. As the audit will examine if there have been any significant changes to the fishery or the way it has been managed over the past year, an update on Fisheries and Oceans Canada (DFO) activities related to this fishery since the recertification in December 2017 is provided below.

Regarding the assessment of the resource, the process has not changed. However, a Management Strategy Evaluation (MSE) process is being developed through the International Commission for the Conservation of Atlantic Tunas (ICCAT) to recommend harvest control rules in future assessments. The Atlantic swordfish stock was last assessed by ICCAT in 2017. The total allowable catch (TAC) was subsequently set at 13,200t for the years 2018, 2019, 2020, and 2021. This is a decrease from the previous TAC of 13,700t, though Canada's allocation has remained the same. The next population assessment of Atlantic swordfish is planned for 2021, and may use a MSE process. In 2018, DFO Science initiated a swordfish monitoring and research program that will refine the current understanding of stock boundaries and improve the biological information on the species to help reduce uncertainty in the assessment.

With respect to the management of the fishery, in addition to the same requirement for live release of porbeagle sharks that was added last year, it is now required by condition of licence for licence holders/operators to promptly release all live shortfin mako sharks in the manner which causes the least amount of harm to the shark. The number of sharks discarded and released shall be recorded in the logbook, indicating the shark's status (dead or alive). Additionally, there is a new prohibition in the 2018 licence conditions against the removal of shark fins from the carcass of any shark until the shark has been



offloaded from the vessel and the weight of the shark verified by a dockside monitor. There is also a new requirement to record all fish caught, including those discarded/released as well as those kept, in a supplementary bycatch logbook. A requirement to report any interactions with marine mammals, including sightings of entangled marine mammals, has also been added to licence conditions, as well as a requirement to report any lost gear. The St. Anns Bank Marine Protected Area (MPA) was designated in June 2017. Prohibitions to fishing were enacted through regulations that came into force at that time, and were also included in licence conditions in 2018. No longlining is permitted within the boundaries of the MPA, and no harpooning or trolling is permitted in Zone 1 of the MPA. And finally, loggerhead sea turtle was listed as endangered under Schedule 1 of the *Species at Risk Act* (SARA) in April 2017. The swordfish longline fishery has been required to release and report any interactions with loggerhead turtles since 2017, and starting in 2018, an updated version of the SARA logbook included specific loggerhead sea turtle reporting requirements.

Governance arrangements, consultative processes, and the regulatory compliance regime remain the same. There have been some changes in key DFO personnel associated with this fishery. Research Scientist (large pelagics assessment and ICCAT responsibilities), Gary Melvin, has retired. Kyle Gillespie has joined the DFO Science, Large Pelagics Unit and will be contributing to assessments and advice in this fishery.

Should you require anything further, please contact the Eco-certification Coordinator in the Maritimes Region, Laura Hussey-Bondt, either by phone: 902-426-6384 or by email: [Laura.Hussey-Bondt@dfo-mpo.gc.ca](mailto:Laura.Hussey-Bondt@dfo-mpo.gc.ca). I wish you all the best with your upcoming surveillance audit.

Yours sincerely,



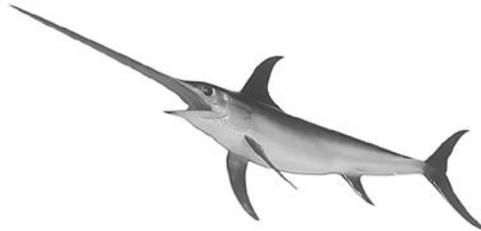
Mary-Ellen Valkenier  
Regional Director General  
Maritimes Region

### **Appendix 3 - Surveillance audit information**

Not applicable

## **Appendix 4 - Additional detail on conditions/ actions/ results**

Correspondence between Nova Scotia Swordfishermen's Association (NSSA) and the DFO, Regional Director General (RGD), Maritimes Region with respect to application of the precautionary approach related to turtles in the management of the longline swordfish fishery and external review of the management system for the Canadian swordfish fisheries.



***Nova Scotia Swordfishermen's Association***  
***R.R. # 3 Shelburne, NS, B0T 1W0***  
***Phone: (902) 457-4968      Fax: (902) 457-4990***

**November 7, 2017**

**Mary-Ellen Valkenier**  
**Regional Director General**  
**Maritimes Region**  
**Department of Fisheries and Oceans**  
**1 Challenger Drive, P.O. Box 1006,**  
**Dartmouth, NS**  
**B2Y 4A2**

**Reference: Canadian Swordfish Longline MSC Conditions**

Dear Ms. Valkenier,

I am writing to you with respect to the conditions identified in the recent MSC certification process for the North West Atlantic Canada Longline Swordfish fishery.

With respect to the first condition identified during the assessment process, we were unable to find clear documentation that the precautionary approach was being applied to the management of sea turtles, specifically loggerhead and leatherback sea turtles in the management of the swordfish longline fishery. We are seeking the assistance of the Department in an attempt to demonstrate that the precautionary approach to the management of sea turtles is clearly documented and is being applied in either the IFMP, Species at Risk Action Plans, Recovery Strategies for Loggerhead and Leatherback Sea Turtles, the DFO Sustainable Fisheries Framework (SSF) or the Department's policy on managing By-Catch by the pelagic longline (PLL) fleet.

With respect to the second condition identified during the assessment process, we are seeking the Departments assistance in adopting a means to demonstrate that there is a regular internal review of the management of the swordfish fishery and that the results of this review are

available upon request. We are also seeking the Departments assistance in facilitating an occasional external review of the management of this fishery, e.g. The House of Commons and Senate's Standing Committee on Fisheries and Oceans, or by the Canadian Auditor General on an ad-hoc basis, as has been the case for a number of other Canadian fisheries.

We would request that if documentation of how the precautionary approach is being used for the management of sea turtles with respect to this fishery is not available that this be added to the agenda for both the Scotia Fundy large Pelagic Advisory Committee (SFLPAC) and the Atlantic Large Pelagics Advisory Committee (ALPAC). This would similarly apply with respect to the review process for the management of this fishery.

If you have any questions or require anything further to consider our request, please do not hesitate to contact me.

Regards,

Troy Atkinson,  
President, Nova Scotia Swordfishermen's Association

cc. Adam Burns, Chair, Atlantic Large Pelagics Advisory Committee  
Carl MacDonald, Chair, Scotia Fundy Large Pelagics Advisory Committee  
Laura Hussey-Bondt, Eco-Certification Coordinator



1 Challenger Drive  
P.O. Box 1006  
Dartmouth, NS  
B2Y 4A2

**JAN 25 2018**

Mr. Troy Atkinson  
President, Nova Scotia Swordfishermen's Association  
R.R. # 3  
Shelburne, NS  
B0T 1W0

Re: Canadian Swordfish Longline MSC Conditions

Dear Mr. Atkinson,

Thank you for your letter of November 7, in which you are seeking information from the Department with respect to the conditions of your fleet's Marine Stewardship Council (MSC) certification. Please be assured that Fisheries and Oceans Canada (DFO) is committed to the sustainable management of Canada's fisheries, and will continue to collaborate with stakeholders on their third-party eco-certification, including MSC.

The first point you raise is about the application of a precautionary approach to the management of fishery impacts on leatherback and loggerhead sea turtles. DFO's Precautionary Approach (PA) Framework, including reference points and pre-agreed management strategies, is generally intended to be applied to target commercial species. There are no plans at this time to develop this particular type of framework to address interactions of the swordfish longline fishery with sea turtles. Rather, both the loggerhead sea turtle and the leatherback sea turtle are listed as endangered under Canada's *Species at Risk Act* (SARA), and so will be managed in accordance with the requirements of that legislation. Because of their status under the Act, these species are protected through its prohibitions. The Act also requires the development and implementation of recovery strategies and action plans, which identify management approaches to address threats to the species and meet population and distribution objectives. It is through these tools that a precautionary approach to the conservation of these species is incorporated into the management of the swordfish fishery.

Departmental recovery strategies and action plans are currently under development for these two species. For leatherback sea turtle, the publication of the amended Recovery Strategy and the Action Plan are anticipated in the 2018/19 fiscal year. A recovery strategy document is currently being prepared for the loggerhead sea turtle, and it is anticipated that this document will be available on the Species at Risk Public Registry in the 2018/19 fiscal year. An action



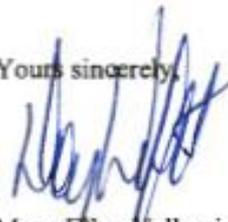
Canada

plan for loggerhead sea turtle is expected to follow within 2-3 years of the final recovery strategy being published. Implementation of these recovery documents will contribute to meeting population and distribution objectives by addressing threats and filling knowledge gaps. The status of these documents and the implementation of measures in the swordfish fishery will be shared at Advisory Committee meetings as well as documented in the meeting minutes.

Your second point addresses the condition identified by MSC for a requirement for regular internal review, and occasional external review, of the management of the swordfish longline fishery. It is the view of DFO that annual advisory committee meetings (Atlantic Large Pelagic Advisory Committee and Scotia Fundy Large Pelagics Advisory Committee) provide opportunity for external and internal review of key parts of the science, compliance and monitoring, and management system for the swordfish harpoon fishery. Records of discussion from these meetings are available upon request. DFO's annual Sustainability Survey for Fisheries also provides a means of internal review. Moreover, management plans and data from the Canadian portion of the swordfish fishery are available to external reviewers upon demand, subject to privacy laws.

Should you wish to further discuss these conditions or any other aspect of your fleet's certification, please contact the Eco-certification Coordinator, Laura Hussey-Bondt, at 902-426-6384 or by email: [Laura.Hussey-Bondt@dfo-mpo.gc.ca](mailto:Laura.Hussey-Bondt@dfo-mpo.gc.ca).

Yours sincerely,



FMH

Mary-ellen Valkenier  
Regional Director General  
Maritimes Region

## Appendix 5 - Revised Surveillance Program

**Table 2: Surveillance level rationale**

| Year | Surveillance activity | Number of auditors  | Rationale  |
|------|-----------------------|---------------------|--|
| 2    | Off-site              | 3 auditors off-site | <p>Over the coming year there are no changes expected with respect to stock status or management related issues. The client is on-target to meet their condition. Next year's milestone is a 'reporting on progress year'. Submission of a written report and telephone calls with the client and DFO are considered adequate.</p> <p>As indicated in section 3.7 Harmonisation, MSC have confirmed that for reasons of harmonisation, a number of fisheries involving swordfish that were assessed against v1.3 of the Fisheries Standard will need to have their Principle 1 re-assessed against v2.0 at their next audit or re-assessment (whichever comes first). This will be the case for this fishery at the next audit, therefore, three audit team members will need to be involved in the audit.</p> |

**Table 3: Timing of surveillance audit**

| Year | Anniversary date of certificate | Proposed date of surveillance audit | Rationale   |
|------|---------------------------------|-------------------------------------|---|
| 2    | December 2019                   | February 2019                       | The timing of this year's audit suited all parties. |

**Table 4: Fishery Surveillance Program Revised**

| Surveillance Level | Year 1                     | Year 2                      | Year 3                      | Year 4  |
|--------------------|----------------------------|-----------------------------|-----------------------------|---|
| Level 4            | On-site surveillance audit | Off-site surveillance audit | Off-site surveillance audit | On-site surveillance audit & re-certification site visit. |