

## Canada 3LN redfish

## Surveillance Report

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Fishery Client	Atlantic Groundfish Council
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## 4 Glossary

AGC	Atlantic Groundfish Council
AOI	Area of Interest
B <sub>MSY</sub>	Biomass calculated for Maximum Sustainable Yield
C&P	Conservation and Protection Branch (DFO)
CAB	Conformity Assessment Body
CHP	Conservation Harvest Plan
COSEWIC	Committee of the Status of Endangered Wildlife in Canada
CSAS	Canadian Science Advisory Secretariat
DFO	Fisheries and Oceans Canada
EA	Enterprise Allocation
EAM	Ecosystem Approach to Management
eNGO	environmental Non-Governmental Organization
F	Fishing Mortality
FCP	Fisheries Certification Process
FG	Fixed Gear
F <sub>LIM</sub>	Limit Reference Point for Fishing Mortality
F <sub>REF</sub>	Fishing Mortality Reference Point
GN	Gillnet
HL	Handline
IFMP	Integrated Fisheries Management Plan
ITQ	Individual Transferable Quota
LRP	Limit Reference Point
LL	Longline
MG	Mobile Gear
MSC	Marine Stewardship Council
NAFO	North Atlantic Fisheries Organization
NMFS	National Marine Fisheries Service
OT	Otter Trawl, Bottom
P1, P2, P3	MSC's Guiding Principles
PA	Precautionary Approach
PI	Performance Indicator
RDG	Regional Director General of DFO
RAP	Regional Advisory Process
RV	Research Vessel
SARA	Species-at-Risk Act
SFF	Sustainable Fisheries Framework
SSB	Spawning Stock Biomass
SSB <sub>MSY</sub>	SSB for Maximum Sustainable Yield
SSR	Special Science Response
TAC	Total Allowable Catch
USR	Upper Stock Reference
VPA	Virtual Population Analysis
VMS	Vessel Monitoring System

## 5 Executive summary

The name of the Client Group (Certificate Holder) has changed from Groundfish Enterprise Allocation Council (GEAC) to Atlantic Groundfish Council (AGC).

This report contains the findings of the 2nd surveillance audit in relation to the Atlantic Groundfish Council's certificate of the Canada 3LN redfish.

The objectives of the surveillance audit are:

1. To review any changes in the management of the fishery, including policies and regulations, personnel changes, scientific assessments of the target stock and associated bycatch species.
2. To evaluate the progress of the fishery against the Conditions of Certification raised during the Reassessment.
3. To review any developments or changes within the fishery which impact traceability and the ability to segregate MSC from non-MSC products.
4. To review any other significant changes in the fishery.

This audit is undertaken in accordance with MSC Fisheries Certification Process (FCP) v.2.1. which became effective on 28<sup>th</sup> February 2019.

At the certification of the fishery in May 2017, two Performance Indicators (PIs) were identified as having scored below the unconditional passing score of 80: 2.1.3 Retained Catch Information Monitoring: and 3.2.1 Fishery Specific Objectives. Accordingly, a Client Action Plan for improving the performance of these PIs was put in place. The scoring status at the Principles level; the scores assigned to the Indicators with conditions at surveillance audits 1, 2 are shown in (Table 1).

Condition number	PI	Status at 2 <sup>nd</sup> surveillance audit	Original score	Surveillance 1	Surveillance 2	Principle revised score
1	2.1.3	Open- on target	75	75	75	P2 score not revised
2	3.2.1	Closed- on target	70	70	80	84.8

SAI Global determines that:

**The Canada 3LN Redfish Fishery continues to operate a well-managed and sustainable fishery and therefore, continued certification to the MSC Principles and Criteria for Sustainable Fishing is awarded.**

On behalf of the MSC client, the Atlantic Groundfish Council, SAI Global would like to extend thanks to the management organisations of the Canada 3LN redfish fishery who took part in this surveillance audit. In particular we would like to thank all the staff of the Department of Fisheries and Oceans (DFO) – Newfoundland Region and Northwest Atlantic Fisheries Organization (NAFO) who provided information that greatly facilitated the conduct of this surveillance audit.

The surveillance assessment team for the 2<sup>nd</sup> audit is different from the team for the 1<sup>st</sup> audit. Dr. Ivan Mateo is the Team Leader with responsibilities for P1, P2 and Traceability. Mr. Eric Dunne is the assessor with responsibilities for P3. Both individuals have extensive knowledge of the fishery, having participated in both the initial certification and subsequent recertification assessments. Skills and experience are summarized below.

**Dr. Ivan Mateo, responsible for Principles 1 and 2 and Traceability**

Dr. Ivan Mateo, lead assessor and primary responsible for Principles 1 and 2 and Traceability.

Dr Ivan Mateo is a fishery assessment officer for SAI Global. He has extensive experience with over 20 years in working with natural resources population dynamic modelling. His specialization is in fish and crustacean population dynamics, stock assessment, evaluation of management strategies for exploited populations, bioenergetics, ecosystem-based assessment, and ecological statistical analysis. He has extensive experience working with biology and population dynamic of gadoids and rockfish species. He also has extensive experience in evaluating habitat quality for temperate fishes and anthropogenic disturbances.

**Mr. Eric Dunne, responsible for Principle 3**

Eric Dunne, assessor, primary responsible for Principle 3.

Eric is a former senior executive with over 45 years' experience in fisheries management, strategic policy development and analysis and fisheries economics in Canada. Eric is fluent in English and is based in Newfoundland, Canada and has extensive fisheries work experience in Canada.

## 6 Report details

### 6.1 Surveillance information

**Table 2. Surveillance announcement.**

1	Fishery name	
	Canada 3LN redfish	
2	Surveillance level and type	
	Surveillance level 6 (Default surveillance level), on-site audit.  The surveillance program for this fishery has not changed from that previously indicated in the PCDR.	
3	Surveillance number	
	1 <sup>st</sup> Surveillance	
	2 <sup>nd</sup> Surveillance	X
	3 <sup>rd</sup> Surveillance	
	4 <sup>th</sup> Surveillance	
	Other (expedited etc)	
4	Proposed team leader	
	<p><b>Dr. Ivan Mateo, primary responsible for Principles 1 and 2 and Traceability</b></p> <p>Ivan meets Fishery Team Leader Qualification and Competency Criteria outlined in MSC FCP Annex PC, Table PC1.</p> <ul style="list-style-type: none"> <li>• A degree in a relevant subject.</li> <li>• Well in excess of 3 years' fisheries experience.</li> <li>• Passed MSC's fishery team leader training within the last 3 years.</li> <li>• Pass the Lead Auditor ISO 19011 course.</li> <li>• Extensive experience leading MSC assessments.</li> <li>• Experience in applying different types of interviewing and facilitation techniques.</li> </ul> <p>Ivan has a PhD in Environmental Science with Fisheries specialization. He completed MSC's Fishery Team Leader training for MSC CRv.1.3, FCR v.2.0 and FCP v.2.1. Ivan led numerous MSC assessments in the last 5 years in Atlantic Canada. He is fluent in English which is the language of the fishery client and stakeholders.</p> <p>Ivan will be in charge of coordinating the Assessment Team's work and be responsible for the completion of the audit in accordance with FCP v.2.1.</p> <p>In addition to leading the Assessment Team, Ivan will be the team's expert on Principles 1 and 2 and Traceability. He meets Principles 1 and 2 and Traceability components of the Fishery Team Qualification and Competency Criteria in Table PC3:</p> <ul style="list-style-type: none"> <li>• 3 years more experience applying relevant stock assessment techniques being used by the fishery under assessment.</li> <li>• 3 years' experience working with the biology and population dynamics of the target or species with similar biology.</li> </ul>	

	<ul style="list-style-type: none"> <li>• 3 years' experience in research into, policy analysis for, or management of, fisheries impacts on aquatic ecosystems.</li> <li>• Pass MSC's Traceability training module.</li> </ul> <p>He has extensive experience in working with natural resources population dynamic modelling and his specialisation is in fish and crustacean population dynamics, stock assessment, evaluation of management strategies for exploited populations, bioenergetics, ecosystem-based assessment, and ecological statistical analysis. He was extensive experience working with biology and population dynamic of gadoids and rockfish species. He also has extensive experience in evaluating habitat quality for temperate fishes and anthropogenic disturbances.</p> <p>He passed the MSC's traceability training and he has worked as lead assessor in other MSC fisheries being responsible for traceability sections.</p> <p>In addition, Ivan has:</p> <ul style="list-style-type: none"> <li>▪ Two assignments in the country or region in which the fishery under assessment is based in the last 10 years.</li> <li>▪ Current knowledge of the country, language and local fishery context.</li> </ul> <p>Ivan does not have any conflicts of interest in relation to the fishery.</p>
5	Proposed team members
	<p><b>Eric Dunne, primary responsible for Principle 3.</b></p> <p>Eric meets the Fishery Team Member Qualification and Competency Criteria outlined in MSC FCP Annex PC and Tables PC2 and PC3.</p> <ul style="list-style-type: none"> <li>• A degree in a relevant subject.</li> <li>• 3 years more experience as a practicing fishery manager and/or fishery/ policy analyst.</li> <li>• Passed MSC's fishery team member training within the last 3 years.</li> <li>• Review of updates to MSC Fisheries Program Documents.</li> <li>• Two assignments in the country or region in which the fishery under assessment is based in the last 10 years.</li> <li>• Current knowledge of the country, language and local fishery context.</li> </ul> <p>Eric is a former senior executive with over 45 years' experience in fisheries management, strategic policy development and analysis and fisheries economics in Canada. Eric is fluent in English and is based in Newfoundland, Canada and has extensive fisheries work experience in Canada.</p> <p>Eric does not have any conflicts of interest in relation to the fishery.</p>
6	Audit/review time and location
	<p>The on-site audit was conducted on 21<sup>st</sup> May 2019 in St Johns, Newfoundland, Canada with meetings involving representatives of the Fishery Client, DFO Newfoundland Region and conference calls with staff from NAFO</p>
7	Assessment and review activities
	<p>The objectives of the surveillance audit are:</p> <ol style="list-style-type: none"> <li>1. To review any changes in the management of the fishery, including policies and regulations, personnel changes, scientific assessments of the target stock and associated bycatch species.</li> <li>2. To evaluate the progress of the fishery against the Conditions of Certification raised during the Reassessment.</li> </ol>

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|--|---|
|  | <ol style="list-style-type: none"><li>3. To review any developments or changes within the fishery which impact traceability and the ability to segregate MSC from non-MSC products.</li><li>4. To review any other significant changes in the fishery</li></ol> |
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## 6.2 Background

The following sections report on DFO announcements and changes to the fishery's overall management system since the 1st surveillance audit. The information is sourced from the Fishery Client, the Department of Fisheries and Oceans - Newfoundland Region, NAFO and the Assessment team's own research.

No mid-water trawl fishery for 3LN redfish has occurred nor is one planned in 3LN. The gear is not currently used to target redfish because of the high levels of juvenile redfish in the catch (Kris Vascotto, AGC, surveillance site visit). There are indications that vessels in the client group very occasionally undertake what are presumably test hauls with mid-water gear: in the last three years (2015-2017) only two hauls with mid-water gear were recorded by observers. There was no catch on these hauls.

### 6.2.1 Management systems

#### a. Consultation and Engagement – Update

At the Canadian domestic level, the arrangements for consultation and engagement on 3LN Redfish have expanded and become more formalized since the 1<sup>st</sup> Audit. The main consultative body for groundfish in 2+3KLMNO remains the DFO Newfoundland Region's Groundfish Advisory Committee for species in those stock areas. This Committee consists of various processing, harvesting and provincial and indigenous government interests. A mechanism exists whereby non-industry members (NGO's) are permitted to participate. This committee now usually meets in the fall to discuss any management issues that exist for groundfish stocks in 2+3KLMNO, while a spring advisory meeting is held to consult on cod fishery issues. A new IFMP for groundfish stocks in the area was approved and published since the 1<sup>st</sup> Audit<sup>1</sup>.

In addition to the annual advisory committee process, all harvesting fleets continue to be required to maintain up-to-date Conservation Harvesting Plans (CHPs) for all stocks in which they possess a quota allocation. The Atlantic Groundfish Council (AGC) (formerly the Groundfish Enterprise Allocation Council (GEAC)) maintains an "evergreen CHP" for all Atlantic Coast groundfish allocations held by its members. This creates an ongoing bi-lateral consultation process with DFO in respect of AGC's groundfish fishing operations.

Domestic Canadian consultations on annual NAFO issues continue to be held several times a year by the Head of the Canadian Delegation to NAFO. The first such consultative session continues to be held in the first half of the year, the second after the June Scientific Council (SC) meeting and a third prior to the annual NAFO meeting in September. At the annual NAFO meeting Canadian delegation meetings are held as often as deemed necessary. The Canadian NAFO Commissioners consist of a senior National HQ official and two industry representatives, usually from the NL fishing industry.

NAFO remains a highly structured regional fishery management organization (RFMO) that serves as a forum for consultation and decision-making on harvest levels and other management measures for stocks under its purview. Consultation among Contracting Parties takes place under a formal set of rules and procedures within NAFO's various constituent bodies. The Commission (formerly the Fisheries Commission, see footnote below) remains the major consultative and decision-making forum for management and conservation decisions on the fisheries resources managed by NAFO. It is composed of a maximum of 3 representatives of each contracting party (in Canada's case these are the Delegation Head and the two Commissioners) as well as alternates, experts and advisors. Decisions on management issues are taken in the Commission by formal vote in the continuing infrequent cases where consensus cannot be reached.

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<sup>1</sup> DFO NL Region. "IFMP Groundfish 2+3KLMNO" available @[http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/groundfish-poisson-fond/2019/groundfish-poisson-fond-2\\_3klmno-eng.htm](http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/groundfish-poisson-fond/2019/groundfish-poisson-fond-2_3klmno-eng.htm)

The NAFO Rules of Procedure continue to enable the Executive Secretary to invite to the annual meetings of the General Council, Fisheries Commission<sup>2</sup> and Scientific Council any intergovernmental organizations that have regular contacts with NAFO on fisheries matters or whose work is of interest to NAFO as well as any non-Contracting Parties identified as harvesting fishery resources in the Regulatory Area. Non-government organizations (NGO) may attend unrestricted sessions of the annual meeting as observers upon application to the Secretariat 100 days in advance of the meeting. Such NGOs must support the general objectives of NAFO and have a demonstrated interest in the species under the purview of NAFO. If one or more contracting parties object to an applicant, the matter will be put to a written vote. There are also restrictions on the activities such observers can conduct at the annual meeting. Accreditation is good for a five-year period.

In accordance with the NAFO Rules for Observers and in advance of the meeting, the Executive Secretary formally invited the following States and intergovernmental organizations (IGOs) to attend the 2018 annual meeting<sup>3</sup>:

- Government of Bermuda
- Convention on Biological Diversity (CBD) Secretariat
- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)
- Permanent Commission for the South Pacific (CPPS)
- Food and Agriculture Organization of the United Nations (FAO)
- General Fisheries Commission for the Mediterranean (GFCM)
- International Commission for the Conservation of Atlantic Tunas (ICCAT)
- International Council for the Exploration of the Seas (ICES)
- International Monitoring, Control and Surveillance (IMCS) Network
- North Atlantic Marine Mammal Commission (NAMMCO)
- North Atlantic Salmon Conservation Organization (NASCO)
- North East Atlantic Fisheries Commission (NEAFC)
- North Pacific Anadromous Fish Commission (NPAFC)
- North Pacific Fisheries Commission (NPFC)
- North Pacific Marine Science Organization (PICES)

#### **b. Fishery-specific objectives**

A new IFMP for all groundfish in 2+3KLMNO was approved and implemented since the 1<sup>st</sup> Audit. This new IFMP indicates how the NL Region will manage groundfish stocks in those areas (and the fisheries based on them, including 3LN Redfish). This new IFMP in Section 5 contains broad objectives for groundfish management under the headings of Stock Conservation and Sustainable Harvesting, Ecosystem Health and Sustainability, Stewardship and stock specific objectives where rebuilding plans are in place (this includes 3LN Redfish). Specifically, “DFO strives to manage groundfish stocks based on the principles of stock conservation and sustainable harvest, as well as ecosystem health and sustainability. The following objectives are used to guide the development of management measures that are designed to maximize the benefit of this resource for all stakeholders:

#### **Stock Conservation and Sustainable Harvest**

Sustainable fisheries mean harvesting and farming fish stocks in a way that meets Canada’s present needs without compromising the ability to meet future needs. Conservation and the long-term sustainability of groundfish stocks are important objectives for DFO. DFO will work with all stakeholders to ensure these objectives are achieved and that groundfish stocks support an economically viable and self-reliant fishery.

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<sup>2</sup> The General Council and Fisheries Commission are now combined as the Commission since May 18, 2017.

<sup>3</sup> NAFO Meetings available @ <https://www.nafo.int/Meetings/Past-Meetings/2018>

### **Ecosystem Health and Sustainability**

The consideration of ecosystem health and sustainability is an essential component of groundfish fisheries management. The role of groundfish species in the food web, as well as the impact of fisheries on non-target species and habitat are examples of important considerations for the long-term health of the ecosystem. Ongoing ecosystem-based research and science advice helps to inform the sustainable management of groundfish stocks.

### **Stewardship**

The shared stewardship management objective recognizes that industry participants and all stakeholders are an important component of fisheries management policy development and the decision-making process. It also recognizes that achievement of the conservation objective requires that governments, resource users and other stakeholders share responsibility for the implementation of fisheries management decisions and for their outcomes. The mandate of the 2+3KLMNO Groundfish Advisory Committee recognizes this objective and meets twice annually to provide recommendations to the Department in support of the development of management measures that address conservation and sustainable use of groundfish resources.

A successful model for sustainable fisheries management relies on five components, including: planning; making science-based decisions; managing environmental impacts; enforcing the rules; and monitoring results.” The NAFO Conservation Plan and Harvest control Rule for 3LN Redfish is formally and specifically included in Appendix 5.

NAFO’s 3LN redfish management plan already contained short and long term objectives for stock rebuilding as well as a harvest control rule for TAC increases. These are outlined in “Development of a Risk-Based Management Strategy for 3LN Redfish (FC-SC RBMS WP 14/4 Rev 3)” which has been adopted by NAFO’s FC at the 2014 Annual Meeting (NAFO 2014a). They include stepwise TAC increases out to 2020 which will be monitored and fully assessed every 2/3 years with a full evaluation taking place after seven years.

The long-term objective of the 3LN redfish Conservation Plan is to maintain the biomass in the ‘safe zone’, as defined by the NAFO Precautionary Approach framework, and at or near  $B_{msy}$

### **c. Enforcement – Update**

Enforcement measures that continue to be employed in the Canadian 3LN Redfish fishery (which takes place almost exclusively inside 200 miles) include:

- Air surveillance.
- Operational inspections by fishery patrol vessels of gear and vessel licence authorizations, catch on board.
- Random checks on landings by land-based DFO fisheries officers.
- Comprehensive Fishery Officer audit of data from all sources.
- Dockside monitoring of all landings.
- At-sea observers.
- Electronic Vessel Monitoring System (VMS).
- Daily reporting of position, catch and other information.
- Hail-in/out is a requirement for the start and ending of a fishing trip.

These various licensing, conservation, protection and compliance measures are contained in license conditions attached to the groundfish license issued to eligible operators. This license must be on board the fishing vessel at all times.

The following table shows the amount of Total Hours of Enforcement Effort, Total Fishery Officer Patrol Hours and number of Vessel Inspections for the years 2015, 2016 and 2017 from the Fisheries Enforcement Tracking System in NL Region. It shows all hours reported for Redfish enforcement because the system tracks by species, but not by stock area (Table 3).

**Table 3.** Selected Enforcement Data, NL Region Redfish, 2015 to 2018.

Year	Total Hrs. Effort	Total FO Patrol Hrs.	Vessel checks
2015	919	596	59
2016	732	415.5	65
2017	1043	658.5	84
2018	1781	522	57

Source: DFO, NL Region

The data show a slight reduction in 2018 from an upward trend in redfish enforcement effort since 2015, likely a result of fewer fishing trips in 2018 from the previous year.

The following table outlines the Canadian At Sea Observer trip data by Division for the 3LMNO Redfish fishery for the years 2015, 2016, 2017 and 2018. Since 2017, most of the redfish trips are taking place in 3L where almost all of the fishing effort by the Canadian fleet is expended inside the 200-mile limit (Table 4).

**Table 4.** - Observer Coverage of Fishing Trips in the Canada 3LN Redfish Fishery, 2015 to 2018.

Area	2015	2016	2017	2018	3 Year Totals
3L	0	3	9	3	12
Total 3N	0	0	0	0	0
Total 3LMNO	7	4	2	0	16
Totals	7	7	11	3	28

Source: DFO, NL Region

In 2015, 2 redfish trips in the overall 3LMNO area did not carry an observer. In 2017, 1 trip in 3L did not have an observer. These are in addition to the number of observed trips shown in the above table. In 2015, overall observer coverage of the Grand Banks Redfish fishery was at 77.8%; in 2016 it was 100 percent and in 2017 coverage it was 91.7%. In 2018 the level of observer coverage was 43% with 3 of 7 trips being observed. Enforcement of NAFO's annual Conservation and Enforcement Measures (CEM)<sup>4</sup> are the responsibility of each Contracting Party in respect of their vessels authorized to fish in the NAFO Convention Area (NRA). These annual voluminous CEMs details the regulations, reporting and enforcement procedures etc that Contracting

<sup>4</sup> <https://www.nafo.int/Fisheries/Conservation>

Parties, Flag States and Port States are required to observe. The main changes for 2019 centre on the NAFO observer program. The formal avenue for enforcement in the NRA is through the Joint Inspection and Surveillance Scheme. This permits NAFO Inspectors from contracting parties to board and inspect vessels under the protocols contained in the Conservation and Enforcement Measures. Only two contracting parties, Canada and the European Union (EU), continue to deploy enforcement platforms in the NRA. Canada utilizes surface patrol vessels and surveillance aircraft continuously on a 12-month basis. The EU usually deploys one vessel for a part of each fishing year.

NAFO's latest Annual Compliance Review (of all NRA fisheries) in 2018<sup>5</sup> noted: "Overall compliance with reporting obligations is high and has continued to improve in recent years. While Contracting Parties are to be commended for their engagement in the compliance review process and their continued promotion of compliance with all aspects of the NAFO Conservation and Enforcement Measures (CEM), there is still work to be done".

Port State Inspections when Greenland halibut are landed are below the mandatory 100% inspection rate as required in Article 10. The submission of haul by haul logbook data in accordance with NAFO CEM Article 28.8 has reached 83.3% compliance. The submission of observer reports in accordance with the Article 30.A of the NAFO CEM is 87%. To address the above-noted reporting deficiencies, STACTIC is undertaking review of the reasons for these deficiencies and researching short-term and long-term solutions.

The port inspection provisions outlined in Chapter VII of the NAFO CEM require that Contracting Parties inspect 15% of the landings of vessels entitled to fly the flag of another Contracting Party. Contracting Parties have exceeded the 15% requirement in 2017.

New compliance review format implemented by STACTIC this year appears to be working well and continues to reassess the compliance review process and looks for opportunities to add relevant information to guide the decision-making process. In 2017, STACTIC detected fewer infringements. STACTIC remains committed to developing measures to address apparent infringements, particularly misreporting of catch and division areas and repeat non-compliance

### **6.2.2 Relevant Changes legislation and regulations**

No substantial changes in domestic legislation or regulations pertaining to 3LN redfish since the 1st Surveillance Audit were identified by DFO or the client at the site visit or in the client submission. There are general new requirements for reporting all marine mammal interactions and for reporting any personal retrieval of previously reported lost fishing gear. There are also general updated SARA requirements regarding white shark. Some minor changes in the domestic CHP requirements have occurred but have no adverse effect on management of the certified fishery.

At the NAFO level, a HCR was in place at the time of the 1st audit and the 3LN Conservation Plan continues as per the Plan adopted a few years ago. The fishery is on track to achieve the final target TAC of 18,100 mt which is the catch level set by NAFO for 2019.

### **6.2.3 Personnel involved in science, management or industry**

There were no reported staffing changes that could potentially affect the ability of DFO to continue to effectively manage the fishery, contribute to stock assessment or affect the relationship with the fishing industry. Several senior executive acting appointments that were in effect at the 1st audit have been converted to full time status, including those of the Regional Director-General and the Regional Director of

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<sup>5</sup> <https://www.nafo.int/Fisheries/Compliance>

Resource Management. There are two new acting appointments as Senior Resource Manager Groundfish 2+3KLMNO and as Senior Resource Manager Groundfish 4R3Pn/s.

Likewise, at the NAFO Commission there are no reported staffing changes that could potentially affect the ability of the Commission to continue to effectively manage the 3LN Redfish fishery.

#### **6.2.4 Scientific base of information, including stock assessments**

##### **a. Stock assessment**

The Northwest Atlantic Organization Scientific Committee assessed the redfish as complex species in 2018 (Avila de Melo, 2018). A summary of the stock assessment and the stock status was presented in the 1st Audit report and is not repeated here (Mateo, Donnelly, and Dunne, 2018). A new stock assessment is expected in 2020.

The Atlantic Groundfish Council (AHC), Department of Fisheries and Oceans (DFO), Newfoundland and Labrador Region provided a number of documents in support of this audit. The following is a summary of relevant documentation related to this audit.

Included with the client's submission was a letter dated 14th May, 2019, from the Regional Director General of DFO's Newfoundland and Labrador Region (see Appendix 3 of this report). The letter highlights the following:

- No material changes to data collection, the regulatory compliance regime, governance arrangements and consultative processes.

##### **b. Harvest strategy and harvest control rules**

The Fisheries Commission adopted in 2014 an MSE approach for Redfish in Division 3LN (FC Doc. 14/24). This approach uses a Harvest Control Rule (HCR) designed to reach 18 100 t of annual catch by 2019-2020 through a stepwise biannual catch increase, with the same amount of increase every two years<sup>6</sup>.

SC conducted the 2018 full assessment of Redfish in Division 3LN and evaluated the impact of the implementation of the adopted MS on the state of the stock. At the beginning of 2018 the stock was still in the safe zone, with a probability of biomass being above Bmsy > 90%. The probability of biomass being below Blim and fishing mortality being above Fmsy is < 1%.

A short term catch projection followed the assessment, in order quantify the likelihood of the stock sustain the approved 2019-2020 MS catches (18 100 t in both years). There is > 90% probability that TACs agreed within the adopted management strategy for 2019 to 2020 will maintain biomass at the beginning of 2021 above Bmsy, while the probability of biomass being below Blim is <1%. The probability that biomass will grow from the beginning of 2018 to the beginning of 2021 is low (38.5%). The probability of fishing mortality by the end of 2020 being above Fmsy is 1.6%.

##### **c. Research update**

No updates at this time.

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<sup>6</sup> <https://www.nafo.int/Portals/0/PDFs/fc/2014/fcdoc14-29.pdf>

### 6.2.5 Updates on the Ecosystem Interactions

Most of the Canada 3LN redfish catch still occurs in the same areas in 3L, mostly within 200 nm. The footprint of the fishery has not changed significantly.

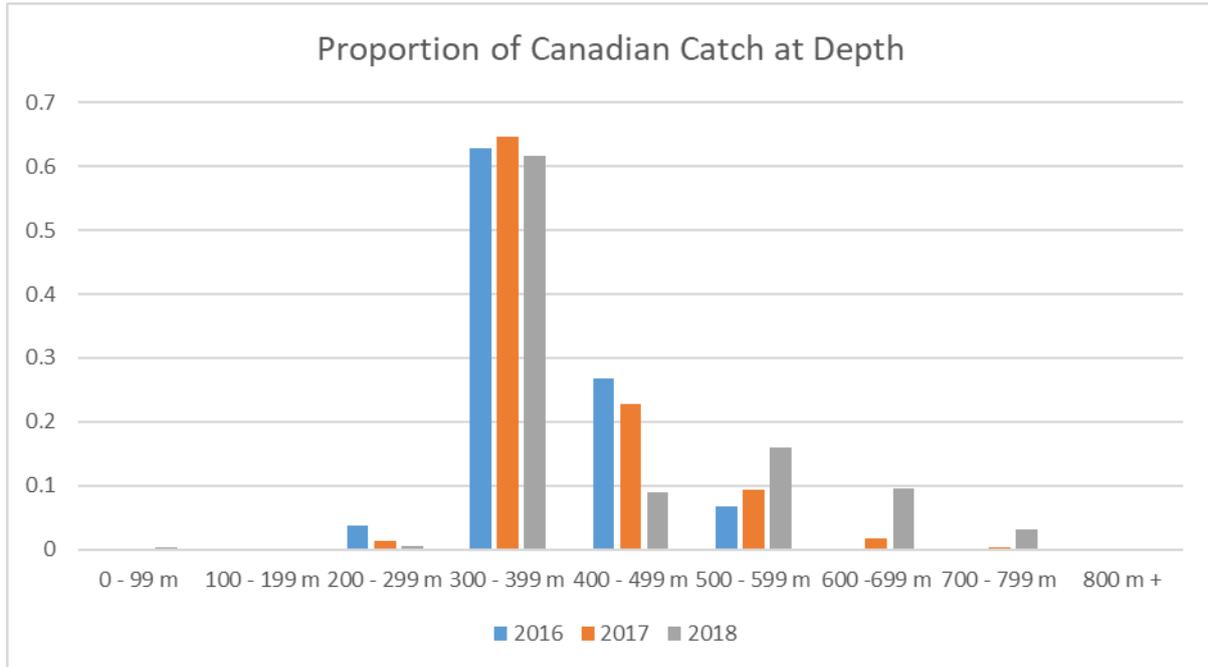
#### a. Continuing eligibility to enter further chains of custody (MSC FCP v.2.1 7.5.8.1)

Deepwater redfish *Sebastes mentella* continue to fulfil the requirements of MSC FCP v.2.1 7.5.8.1 and Annex PA 4.2:

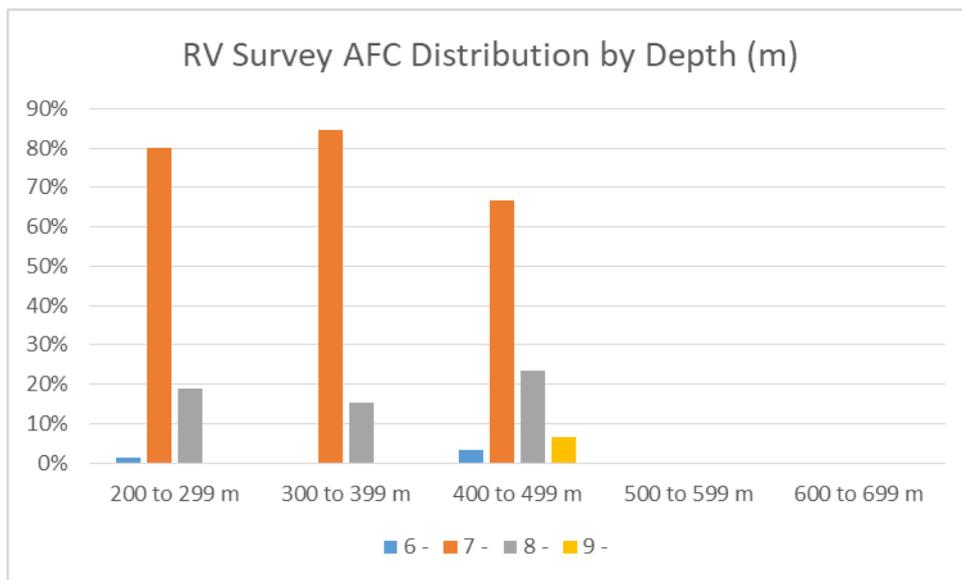
- a. The retained catch is practicably indistinguishable during normal fishing operations: The two redfish species Acadian redfish *Sebastes fasciatus* and deepwater redfish *S. mentella* have very similar external characteristics making them extremely difficult to distinguish.
- c. The total catches of *S. mentella* do not exceed 15% by weight of the total combined catches of redfish within the unit of certification in the most recent annual fishing year: The results of on-going species identification work on the species structure of both the commercial fishery and survey catches of both *S. mentella* and *S. fasciatus* in 3LN are consistent with the findings of the fall 2015 DFO survey used to inform the full assessment. Anal Fin Counts (AFC) are used to distinguish the two species; individual redfish with AFC less than 8 are assigned as *S. fasciatus* and samples with AFC > 8 are *S. mentella*. Previous work undertaken by GEAC (2011) suggests that where the samples are dominated (over two thirds) by either AFC of < 8 or > 8, the ambiguous samples (AFC = 8) generally follow the dominant species in the sample. In the 2016 and 2017 3LN redfish fishery nearly 90% of effort occurred at depths between 300 and 500m (Figure 1). Analysis of AFC from DFO research vessel and commercial samples in 2017 indicates *S. fasciatus* dominates the catch with *S. mentella* comprising less than 10% of the samples in the depths where virtually all the fishing occurs (Figure 2 and Figure 3 **Error! Reference source not found.**) (AGC update, 2019; unpublished paper provided to assessment team for 2nd surveillance, outputs of which verified with DFO staff on site visit).
- d. Redfish are not Endangered, Threatened or Protected (ETP) species.
- e. *S. mentella* is not certified separately.

*S. mentella* continues to meet the requirements of FCP v.2.1 PA1.4.2.

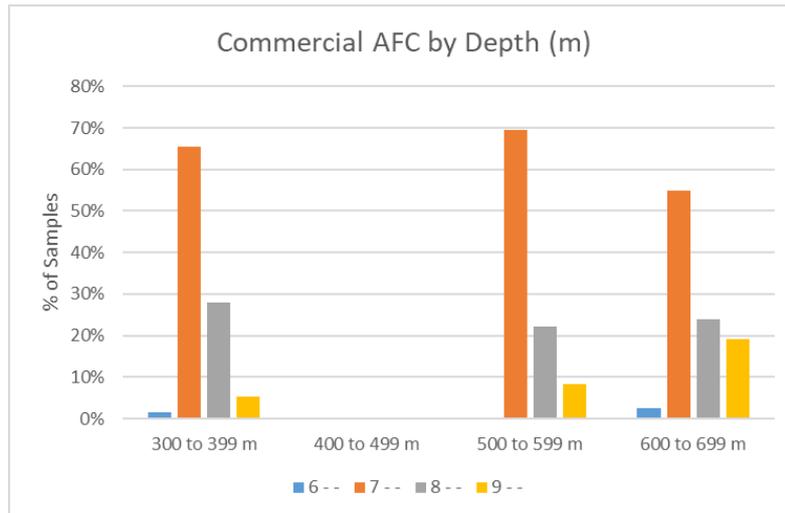
- The status of *S. mentella* relative to its Point of Recruitment Impairment (PRI) is currently unknown, however data is being collected to examine this issue (as referred to above and for further information see update on Condition 1).
- While there is no *S. mentella* specific harvest strategy in place, there is a partial strategy in place to ensure that the fishery does not hinder the recovery of deep-water redfish. The current harvest strategy for the Div. 3LN redfish complex includes a comprehensive combination of strategic elements including a precautionary harvest policy, catch and abundance monitoring (five current annual surveys), biennial stock assessments, harvest control rules and management actions that includes an explicit management plan tested by a management strategy evaluation.
- Previous harvest strategies have shown to be responsive to stock complex abundance by imposing a moratorium on targeted fishing from 1998-2008 until the fishery showed signs of recovery.



**Figure 1.** Proportion of Canadian landings by depth (Source: AGC update, 2019).



**Figure 2.** AFC distribution by DFO research vessel survey depth in 2017. Samples were not taken by DFO in 2016 and 2018 and the lack of data below 500m depth is due to logistic constraints (vessel issues) that prevented complete sampling of deep-water stratum of 3L in 2017 (source: AGC update, 2019).



**Figure 3.** Proportion of specimens by AFC by depth of commercial samples collected in the 2018 fishery (Source: AGC update, 2019).

### b. Retained species

The species composition and relative proportions of the retained catch have not changed substantially since last year (Table 5 **Error! Reference source not found.**). No other individual species except for American Plaice made up more than 5% of total catch with most retained species catches accounting less than 2% of the total catch (Table 5). However, although catches are less than 5% cod, American plaice, and witch flounder (2J+3KL) are considered as main retained species given their vulnerability.

**Table 5.** Species composition of retained catch against total volume of the catch (landing and discards) for Canada 3LN Redfish Bottom Trawl in 2018. Total Volume of the Catch=1677.03(t)

Species	Landings (t)	Total Catch (t)	%Total Catch
<b>Redfish</b>	1488.78	1509.29	88.77
<b>American Plaice</b>	92.90	93.15	5.54
<b>Greenland Halibut</b>	20.58	20.58	1.23
<b>Shark, Greenland</b>	0.00	16.29	0.00
<b>Atlantic Halibut</b>	13.62	13.72	0.81
<b>Witch Flounder</b>	12.85	12.85	0.77
<b>Cod</b>	7.41	7.41	0.44
<b>Total</b>	<b>1636.13</b>	<b>1677.03</b>	<b>100</b>

As noted in the full assessment redfish is assessed as a stock complex and the status of *S. mentella* relative to its Point of Recruitment Impairment (PRI) is currently unknown. Species-specific monitoring is now being undertaken and interim findings of this work are reported in section 6.

There are several new stock assessments available for the retained species including Atlantic cod, American plaice and witch flounder (NAFO, 2018; Fisheries and Oceans Canada, 2018a; NAFO 2017c). There are no significant changes in the status of the stocks since the full assessment. Key points from the assessments are as follows:

**Atlantic cod in NAFO Divisions 3NO:** The stock has been under moratorium to directed fishing since February 1994. Stock size has decreased and remains below Blim (2018 estimate of 31% of Blim). As noted in the full assessment the year classes following the strong 2006 year class have been weaker suggesting medium term prospects for the stock are not good. Fishing mortality continues to be low and well below Flim (NAFO, 2018). The 3LN redfish bottom trawl fishery currently occurs within 3L so is not interacting with the stocks in NAFO division 3N at present.

**Atlantic cod in NAFO divisions 2J3KL:** A moratorium on directed fishing in the offshore stock has been in place since 1992. A limited entry Stewardship fishery restricted to fixed gear in the inshore area and also a recreational fishery were opened in 2006 and continue to the present. The estimated SSB has been well below the Limit Reference Point (LRP) since the early 1990s. The status of the stock is improving but 2018 SSB is estimated at 37% of Blim. The stock is considered to have suffered serious harm and the ability to produce good recruitment is seriously impaired. For example, an increase in estimated natural mortality rate have been documented for later years from 0.39 in 2016 to 0.74 (48% annual survival) in 2017 (averaged over ages 5-14). Fishing mortality is low but has increased in recent years (0.014 in 2015 to 0.021 in 2016 and 0.025 in 2017) (Fisheries and Oceans Canada, 2018a).

**Atlantic Halibut 3NOPS4VWX5ZC.** The Atlantic Halibut fishery was unregulated until a Total Allowable Catch (TAC) was implemented in 1988 and a legal size limit ( $\geq 81$  cm total length) was established in 1994. A new assessment model and assessment procedures were adopted in November 2014 (Cox et al. 2016) to inform Resource Management of the status of the Halibut resource and to provide harvest level advice based on standardized catch rates from the Halibut Survey and stratified mean numbers-per-tow from the DFO Summer RV Survey. The assessment model indicates that the stock has increased from the depleted state observed in the early 1990s. The updated 3NOPS4VWX5Zc Halibut Survey index shows that abundance of exploitable ( $>81$  cm) Halibut continues to increase with 2017 being the highest in the 20-year time series. The 2017 DFO Summer RV (NAFO Divs. 4VWX) index remains above the long-term mean, and the 2017 mean numbers per tow were the fifth highest in the last 10 years.

**American plaice in NAFO Divisions 3LNO:** The stock has been under moratorium to directed fishing since 1995. Stock size remains low compared to historic levels and is presently at 34% of the Blim level. Recruitment has been low since the late 1980s, but Canadian surveys indicate a large number of pre-recruits in Division 3L in recent years. Current estimates of fishing mortality are low (NAFO, 2018).

**Witch flounder in Divisions 3NO:** The stock mainly occurs in Div. 3O along the southwestern slopes of the Grand Bank. This stock was under moratorium from directed fishing from 1995 to 2014. Prior to the reopening, witch flounder were caught primarily as bycatch in bottom otter trawl fisheries for yellowtail flounder, redfish, skate and Greenland halibut. The fishery was reopened to directed fishing in 2015 and is exploited by otter trawl. A stock assessment based on a surplus production model was conducted in 2017 and 2018. The stock assessment results showed that the stock size is now at 37% Bmsy. (Bmsy = 60 000 t). There is presently a 29% risk of the stock being below Blim and a 4% risk of F being above Flim. SC recommends that there be no directed fishing in 2019 and 2020. As noted previously, the 3LN redfish bottom trawl fishery currently occurs within 3L so is not interacting with the stocks in NAFO division 3N at present.

There has been no change to the management measures and partial strategies in place for the retained species except for an update to the groundfish license conditions that require fishers to report lost gear and interaction with marine mammals including a specific requirement to report North Atlantic right whale sightings (Kris Vascotto, AGC, site surveillance meeting). These provisions are being implemented in 2018 and 2019.

### c. Bycatch species

The 3<sup>rd</sup> surveillance noted that bycatches are very low in the 3LN redfish bottom trawl fishery with all of the species except redfish (1.22% in 2018) accounting for less than 1% of the total catch in weight. The species composition of the bycatch remains similar comprising low proportions of a wide range of different species including sharks, dogfish and rays, flatfish, grenadiers, cod, and capelin (Table 6).

**Table 6.** Species composition of bycatch against total volume of the catch (landings +discards) for Canada 3LN redfish fishery Bottom Trawl. Total Volume of the Catch =1677.03

Species	Discards(t)	Total Catch (t)	%Total Catch
Redfish	20.51	1509.29	1.22
American Plaice	0.25	93.15	0.01
Greenland Halibut	0.00	20.58	0.00
Shark,Greenland	16.29	16.29	0.97
Atlantic Halibut	0.10	13.72	0.01
Witch Flounder	0.00	12.85	0.00
Cod	0.00	7.41	0.00
Skate	1.48	1.48	0.09
Grenadier,Roughhead	0.31	0.31	0.02
Grenadier,Roundnose	0.29	0.29	0.02
Sea Anemone	0.25	0.25	0.01
Grenadiers (NS)	0.04	0.04	0.00
Jellyfish	0.03	0.03	0.00
<b>Total</b>	<b>39.55</b>	<b>1677.03</b>	<b>2.44</b>

#### Greenland shark

Greenland shark *Somniosus microcephalus* is the main shark bycatch in 2016 and 2017. Catches are very low at less than 0.5% of the total catch. However, due to its low productivity and vulnerability to fishing impacts (i.e. slow growing, long- lived species), this species is considered a main bycatch species. Greenland shark has not been assessed by COSEWIC nor is it listed under SARA or Appendix 1 of the Convention on International Trade in Endangered Species (CITES), hence it is not considered an Endangered, Threatened or Protected Species (ETP).

Greenland shark appear to be widely distributed in the Arctic and North Atlantic and can be very abundant in some areas (Campana *et al.*, 2013). There are no targeted fisheries for Greenland shark in Canada (small-scale targeted fisheries exist in Greenland and Iceland) so the main fishery interaction is as incidental catch. Recent NAFO observer data (2014-2017) has been analyzed and, without accounting for variable fishing effort, found most bycatch was associated with the Greenland halibut bottom trawl fishery mainly in Division 3L (43% of numbers and 53% of weight), followed by the Atlantic halibut longline fishery (26% of numbers, 27% of weight), mainly in Division 3N, then the redfish bottom trawl fishery (19% of numbers and 8% of weight) mainly in Divisions 3N and M. Bottom trawl catches of Greenland sharks were mainly concentrated in 3L and 3M at depths of 400-1,400 m and 300-1,000 m, respectively (NAFO, 2018).

No stock assessment has been conducted for this species. The IUCN Red List Shark Specialist Group assessed this species as “Near Threatened” based primarily on the biological vulnerability associated with its life history characteristics (NAFO, 2017a).

Following a request for advice from its Fisheries Commission, and recognizing the sensitive life history characteristics of the Greenland shark, NAFO's Scientific Council have recently made a number of recommendations to minimize the impact of fishing on the species (NAFO, 2018):

- Retention and landing should be prohibited
- A requirement to release captured sharks alive with safe handling practices promoted amongst fishers
- Where appropriate, gear restrictions and modifications, and/or spatial and temporal closures of areas of high bycatch, be implemented to reduce the incidence of Greenland shark bycatch.
- Improving the reporting of all sharks by species within the NAFO Convention Area, including shark numbers, measurements (when feasible without causing undue harm) and recording of sex data and discard disposition (i.e., dead or alive) by fishery observers in all fisheries in the NAFO Convention Area.
- Due to the unknown status of the stock relative to Blim, and the conservative life history traits, management actions should keep fishing mortality as close to zero as possible to ensure that there will be a very low probability biomass will decline within the foreseeable future.

Although the bycatch is small the low productivity of the species means they are vulnerable to incidental mortality from fishing. The current understanding of population status is poor, however catch rates are very low and the fishing operation and characteristics of the fishery act as a partial strategy that does not hinder the recovery of Greenland Shark. NAFO are in the process of considering management measures to minimize the impact of fishing on the species. Taking this into account, consideration of Greenland shark as a new main bycatch species is not considered to change the scoring of the bycatch species performance indicators.

### Skates

The full assessment noted that the most recent information available on the status of skate species that are likely to be taken by the 3LN redfish bottom trawl fishery indicates that populations are relatively healthy. This situation has not changed. A stock assessment for thorny skate *Amblyraja radiata* in Divisions 3LNOPS, which is the main skate bycatch in the redfish fishery has just been published (NAFO, 2018). The assessment found survey biomass has remained stable since 2007 and concludes that the stock is currently above Blim (with >95% probability). Recruitment in 2017 was above average and fishing mortality is currently low.

#### d. ETP species

There has been no change to the ETP legislation namely the Species at Risk Act (SARA, 2002) and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) listings. There is no significant change in interaction with protected species. Wolfish catches are still low (less than 0.1% of catch, Table 7) and as noted in the full assessment SARA listing requires that northern and spotted wolffish are released. The Recovery Strategy for the Northern wolffish and spotted wolffish has been updated in 2018 and the proposed amended version was published<sup>7</sup>. The most significant amendment is the identification of critical habitat for these species. Critical habitat is defined in SARA (2002) section 2(1) as "...the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species' critical habitat in a recovery strategy or in an action plan for the species." Potential critical habitat has been identified for both species in the Newfoundland Region on the edge of the Grand Banks and Labrador Shelf (Figure 4 and Figure 5). Important attributes of these areas are depths of 118-636m and a temperature range of 2.3-5.1°C for northern wolffish and depths of 82-346m and a temperature range of 0.1-4.2°C for spotted wolffish.

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<sup>7</sup> [http://www.sararegistry.gc.ca/virtual\\_sara/files/plans/RsMpNthnSpottedAtlanticWolffish-v00-2018Jun-Eng.pdf](http://www.sararegistry.gc.ca/virtual_sara/files/plans/RsMpNthnSpottedAtlanticWolffish-v00-2018Jun-Eng.pdf)

**Table 7.** ETP species found on the total volume of the catch in the Canada 3LN Redfish Bottom Trawl.

Species	Discards(t)	Total Catch (t)	%Total Catch
<b>Wolffish,Spotted</b>	0.82	0.82	0.05
<b>Wolffish,Striped</b>	0.44	0.44	0.03
<b>Wolffish,Broadhead</b>	0.09	0.09	0.01
<b>Total</b>	<b>1.35</b>	<b>1677.031</b>	<b>0.08</b>

The proposed amended Recovery Strategy notes that further research is required to refine critical habitat features that are necessary to support recovery objectives, and to protect critical habitat from destruction. However, under SARA, critical habitat must be legally protected from destruction within 180 days of being identified in a recovery strategy or action plan. Protection is implemented through a SARA Critical Habitat Order which prohibits the destruction of the identified critical habitat. The Strategy identifies generic activities that are likely to destroy critical habitat. For these wolffish species in the Newfoundland Region examples provided are activities that i) impact the thermal habitat or ii) destroy habitat causing a change in depth that could result in alteration of thermal habitat.

No interactions with marine mammals or sea turtles have been recorded or reported. There has been no change in the impact of the fishery on these species since the full assessment. This includes in relation to North Atlantic right whale *Eubalaena glacialis*. Recent changes in the distribution of this species, classed as 'endangered' under SARA, has presented a greater risk of damaging interaction with human activity, such as ship strikes and entanglement in fixed fishing gears. This has led the DFO to introduce a range of temporary, dynamic and static closures to manage the risk posed to the whales within the Gulf of St. Lawrence, Quebec and Maritimes regions<sup>8</sup> ([DFO closures 2018](http://www.dfo-mpo.gc.ca/species-especes/mammals-mammiferes/narightwhale-baleinenoirean/index-eng.html)). However, the 3LN redfish fishery occurs some distance from this, is not a critical habitat for the species and does not use a gear associated with right whale entanglement so the risk posed by the fishery on this species is unchanged.

<sup>8</sup> <http://www.dfo-mpo.gc.ca/species-especes/mammals-mammiferes/narightwhale-baleinenoirean/index-eng.html>

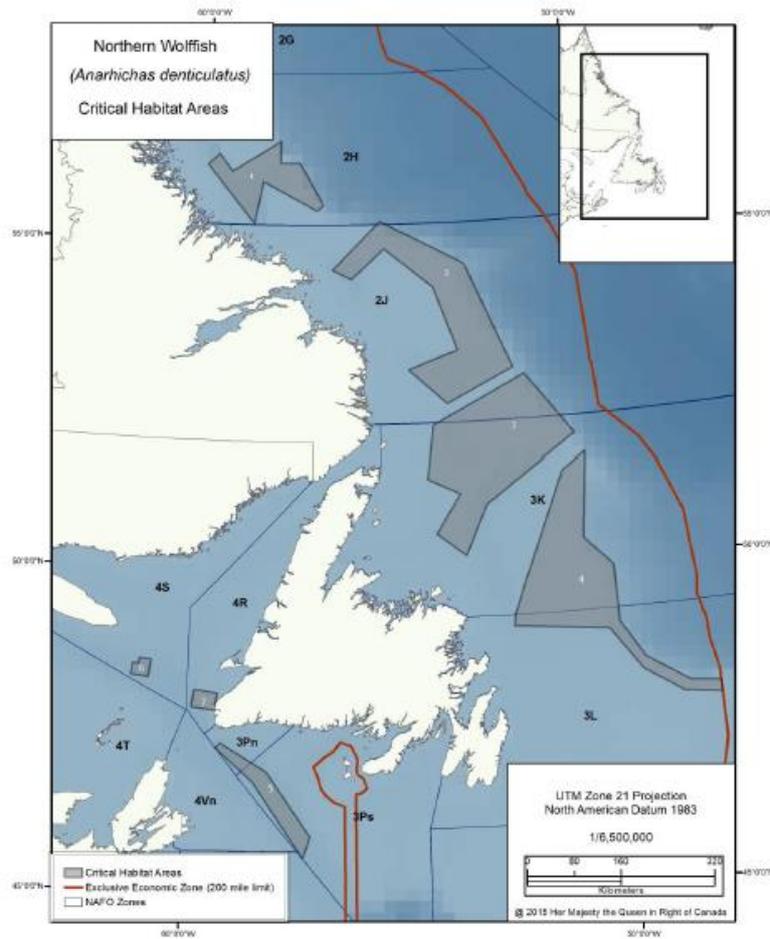
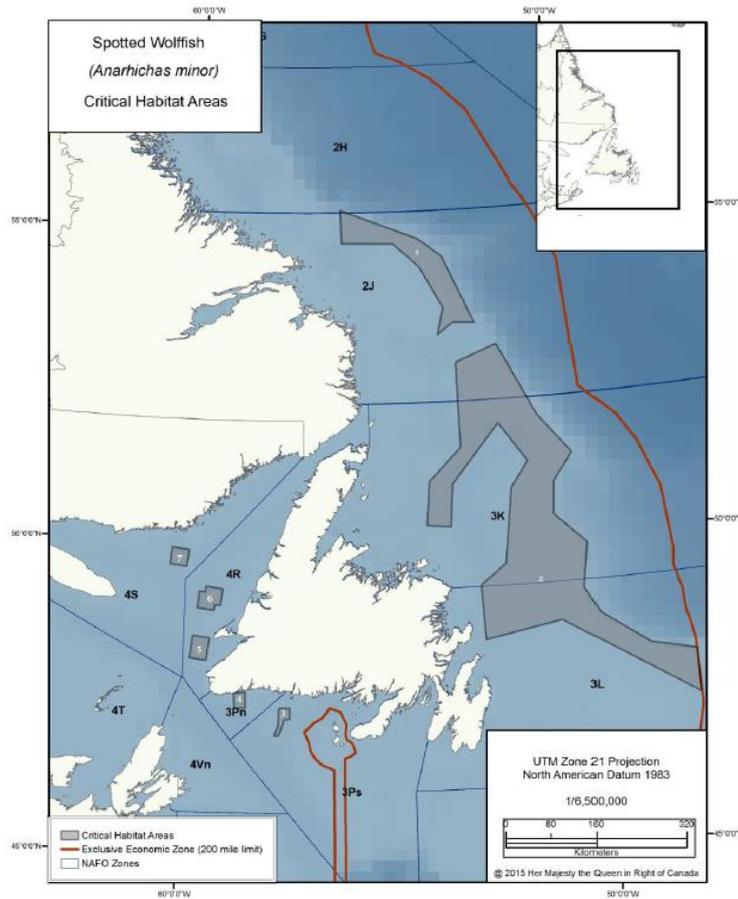


Figure 4. Map of Northern Wolffish critical habitat (Source: Fisheries and Oceans Canada, 2018b).



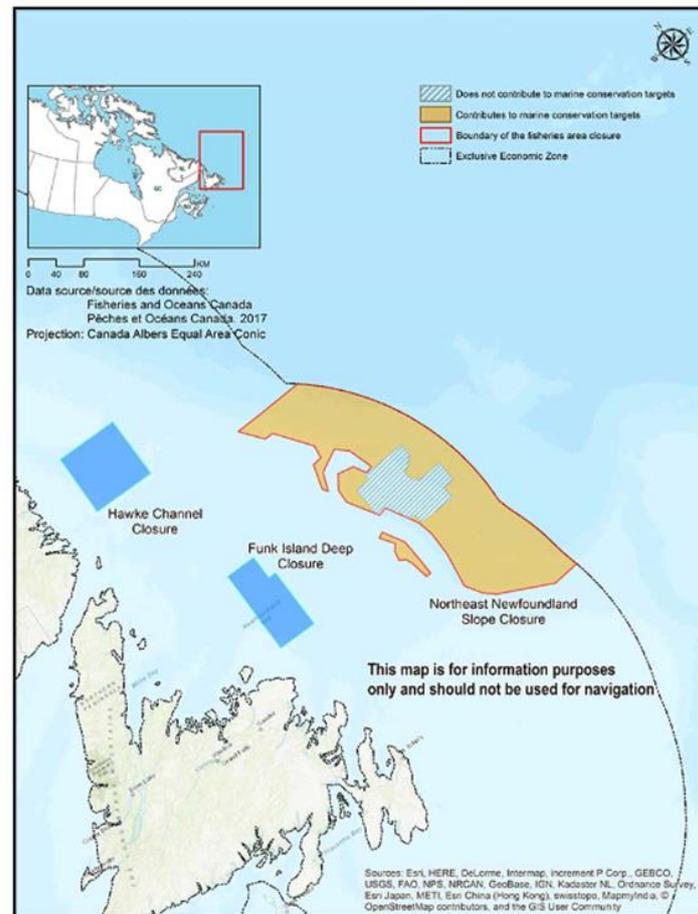
**Figure 5. Map of Spotted Wolffish critical habitat (Source: Fisheries and Oceans Canada, 2018b).**

### **e. Habitats & Ecosystem**

No new fishery footprint analysis has been undertaken since that which informed the full assessment (Spatial analysis 2015) but there has been no significant change in the footprint of the fishery, occurring in the same areas in 3L, mostly within 200nm. There have been no other changes in how the fishery is prosecuted that would alter its impact on ecosystem and habitat structure and function.

More detailed work to investigate the risk posed to these areas by fishing activity has been published earlier 2018 (Koen-Alonso *et al.* 2018). Guidelines have also been produced on the level of protection required to protect Significant Benthic Areas that have been identified as vulnerable to an on-going fishing activity ('Sensitive Benthic Areas' under the Ecological Risk Assessment Framework) (Fisheries and Oceans, Canada 2017a).

Canada has a policy target of closing 10% of its marine area to fishing by 2020. New closures to protect VMEs in Canadian waters in the Newfoundland and Labrador region were announced in December 2017. These do not overlap with the fishery. They include the Northeast Newfoundland Slope referred to in the PCR (Figure 6). The Northeast Newfoundland Slope marine refuge will protect corals and sponges and prohibits all bottom contacting fishing activity.



**Figure 6.** Northeast Newfoundland Slope marine refuge (Source: [Fisheries and Ocean Canada](#)).

No new closures have been identified in the NAFO Regulatory assessment since the full assessment. However, NAFO have been undertaking the following work, as reported at the last Scientific Council meeting (NAFO, 2018), which is relevant to understanding the impacts of fishing on habitats and ecosystem:

- Assessment of the overlap of NAFO fisheries with VME through an analysis of haul-by-haul log-book data in combination with VMS data. The analysis significantly improves the spatial definition of specific fishing areas within the NAFO footprint.
- Progress has been made in developing models and methodological approaches which assess the functional significance of VMEs and the estimation of recovery rates of different VME indicator species.
- Updated analysis (including new data) has been performed on non-coral and non-sponge VME indicator species (sea squirts and bryozoans) and further work is planned on defining non-coral and non-sponge VME ahead of the re-assessment of VME fishery closures in 2020.
- Developing approaches to implementation of an ecosystem approach and application of the Ecosystem Roadmap. Total Catch Ceilings (TCCs) aim to provide information for ecosystem-level strategic management advice that can complement stock-level tactical advice. In principle, once TCCs can be estimated with sufficient reliability and precision, these should provide an ecosystem context to evaluate the recommendations that emerge across stocks, and could serve to address questions not considered as part of single species assessments (e.g., trade-offs)

### 6.2.6 Any developments or changes within the fishery which impact traceability

There were no reported changes or developments within the fishery which impact traceability or the ability to segregate between fish from the UoCs and fish from outside the UoC (non-certified fish).

## 6.3 Version details

**Table 8.** Fisheries program documents versions.

Document	Version number
MSC Fisheries Certification Process	Version 2.1
MSC Fisheries Standard	Version 1.3
MSC General Certification Requirements	Version 2.3
MSC Reporting Template	Version 2.01

## 7 Results

### 7.1 Surveillance results overview

#### 7.1.1 Summary of conditions

**Table 9. Summary of conditions.**

Condition number	Condition	Performance Indicator (PI)	Status	PI original score	PI revised score
1	The client must provide evidence that sufficient data continue to be collected to detect any increase in risk level to deep-water redfish <i>S. mentella</i> .	2.1.3	Open - On target	75	Not revised.
2	The client must provide documented evidence that short and long-term objectives for the 3LN Redfish fishery have been adopted which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2 and are explicit within the fishery's management system	3.2.1	Closed – On target	70	80

#### 7.1.2 Total Allowable Catch (TAC) and catch data

##### TACs and Catches

Table detail the total TACs, and UoC shares of those TACs as well as total landings by the UoC 1 (i.e. the total certified catch) for the years 2017 and 2018 respectively. Midwater trawl (UoA 2/UoC 2) has not been used since 2010 (Table 10). Since the reopening of the 3LN redfish fishery in 2010, Canada, Russia and EU-Portugal are the main harvesters for this fishery (Table 11 and Table 12). Canada holds 42.6% of the redfish overall TAC for Div. 3LN. AGC represents licence holders who have 96.99% of Canada's allocation

**Table 10** Total Allowable Catch (TAC) and catch data for UoA 1 and UoC 1 – Bottom trawl

TAC	Year	2018	Amount	14200 t
	Year	2017	Amount	14200 t
Combined UoA 1 and UoA 2 share of TAC	Year	2018	Amount	5867 t
Combined UoC 1 and UoC 2 share of total TAC	Year	2018	Amount	5867 t
Total green weight catch by UoC 1	Year (most recent)	2018	Amount	4336 t
Total green weight catch by UoC 1	Year (second most recent)	2017	Amount	4106 t

**Table 11. Catch (t) of redfish in 3LN by nation, 2017. Source: NAFO-Statlant.**

<b>Nation</b>	<b>2017</b>
Canada	4175
Cuba	0
Estonia	812
Faroe Islands	0
France (St. Pierre and Miquelon)	0
Japan	125
Lithuania	0
Portugal	2677
Russia	3712
Spain	367
<b>Grand Total</b>	<b>11868</b>

**Table 12. 3LN redfish overall quota (t) and each nation's allocation (t). Source: NAFO.**

<b>Nation</b>	<b>2018</b>
Canada	6049
Cuba	1392
European Union	2589
Russian Federation	4085
Others	85
<b>Grand Total</b>	<b>14200</b>

### 7.1.3 Recommendations

#### Recommendation 1

“A species-specific sampling of redfish has been recently added in the DFO trawl surveys (Autumn 2015). The assessment team recommends that analytical effort now be directed to using these data to monitor trends of each redfish species to help ensure that managing to the level of complex does not place the individual redfish species at risk.”

1<sup>st</sup> surveillance audit: In progress - the monitoring work reported in condition 1 is providing the data that will enable this analysis to be undertaken.

2<sup>nd</sup> surveillance audit: In progress - the monitoring work reported in condition 1 is providing the data that will enable this analysis to be undertaken.

#### Recommendation 2

“The assessment team recommends that the client provides up-to-date target species, retained and bycatch species catches and ETP species information if the mid-water trawl starts to be used again”

1<sup>st</sup> surveillance audit: There has been no resumption of mid-water trawling so no need to address this recommendation at present.

2<sup>nd</sup> surveillance audit: There has been no resumption of mid-water trawling so no need to address this recommendation at present

## 7.2 Conditions

Table 13. Condition 1.	
Performance Indicator	2.13
Score	75
Justification	<p>Sufficient data continue to be collected to detect any increase in risk level to all main retained species except for deep-water redfish. Monitoring of retained species is conducted in sufficient detail to assess ongoing mortalities to all retained species except for deep-water redfish species.</p> <p>The redfish species-specific monitoring is now in place in the DFO fall survey and in sampling of commercial catches. However, given its recent implementation (autumn 2015) it cannot be said that sufficient data continue to be collected to detect any increase in risk level</p>
Condition	The client must provide evidence that sufficient data continue to be collected to detect any increase in risk level to deep-water redfish <i>S. mentella</i> .
Milestones	<p><b>By Year 1:</b> The Assessment team shall be provided with documentary evidence that redfish species-specific monitoring was carried out and results shall be presented. Meeting this milestone would likely not result in a change in score at this surveillance audit.</p> <p><b>By Year 2:</b> The Assessment team shall be provided with documentary evidence that redfish species-specific monitoring was carried out and results shall be presented. Meeting this milestone would likely not result in a change in score at this surveillance audit.</p> <p><b>By Year 3:</b> The Assessment team shall be provided with documentary evidence that redfish species-specific monitoring was carried out and results shall be presented. Meeting this milestone would likely not result in a change in score at this surveillance audit.</p> <p><b>By Year 4:</b> The client shall provide evidence that sufficient data continue to be collected to detect any increase in risk to the deep-water redfish. Meeting this milestone will demonstrate that all scoring issues of the SG 80 have been met and would result in a score of 80 for this performance indicator.</p>
Consultation on condition	<p>GEAC and DFO have agreed on methods to sample and test Anal Fin ray Counts (AFC) as a proxy for species identification of redfish caught in DFO's Fall Survey and the commercial fishery, and analysis of results for 2015 was provided to the Assessment Team.</p> <p><b>By Year 2:</b> The Assessment team shall be provided with documentary evidence that redfish species-specific monitoring was carried out and results shall be presented</p>
Progress on Condition (Year 1)	<p>The client produced a report (GEAC, 2018) updating on ongoing species identification work using AFC to distinguish the two species of redfish <i>S. fasciatus</i> and <i>S. mentella</i>.</p> <p>The work involves examination of samples collected from the fall DFO research vessel survey and also weekly samples from commercial vessels during the fishery. The samples comprise 30 individual fish, combined into a single sample, labelled and frozen before transport to the Eastern Shore Science Society. The Society</p>

undertakes the counts using DFO trained staff experienced in meristic assessments of redfish species and partitioned to 100m depth bin to support assessment of species structure and exposure to fishing activity.

It should be noted that some research vessel tows had slightly fewer redfish taken – averaging 28 per sample with a minimum of 25 and maximum of 30 individuals. Also samples were not taken by DFO in 2016 and logistic constraints (vessel issues) prevented complete sampling of deep water stratum of 3L in 2017 so that AFC data is absent below 500m depth. The deep water strata are expected to be full sampled in the 2018 survey.

In the commercial fishery, additional samples are taken if fishing location or depth changes significantly over the course of the week and the sampling protocol has recently been revised such that there has been an increase in sampling to 2 per week (Kris Vascotto, GEAC, surveillance site visit).

AFC are used to distinguish the two species. Individual redfish with AFC less than 8 are assigned as *S. fasciatus* and samples with AFC > 8 are *S. mentella*. Previous work undertaken by GEAC (2011) suggests that where the samples are dominated (over two thirds) by either AFC of < 8 or > 8, the ambiguous samples (AFC = 8) generally follow the dominant species in the sample

The results of this sampling programme to date have been discussed in section 4. Findings are consistent with those of the fall 2015 DFO survey used to inform the full assessment. In the 2016 and 2017 3LN redfish fishery nearly 90% of effort occurred at depths between 300 and 500m (figure 1). Analysis of AFC from DFO research vessel and commercial samples in 2017 indicates *S. fasciatus* dominates the catch with *S. mentella* comprising less than 10% of the samples in the depths where virtually all the fishing occurs (figure 2 and 3).

It should be noted that some of the NAFO scientific reports appear to suggest separate species-specific monitoring of 3LN redfish has already been occurring. For example, the Portuguese research report for 2016 (NAFO, 2017b) refers specifically to ‘redfish (*S. mentella*)’ in its reporting of their biological sampling from two trawlers fishing in 3LMNO. However, where this occurs no further explanation is provided as to how this species identification is undertaken - in the Portuguese report the only information gathered seems to be length and weight measurements and no species differentiation is described or referred to. The client has followed this up with the NAFO redfish stock assessment lead who confirmed that no species-specific monitoring is currently undertaken by the research surveys or in any of the commercial catch from any NAFO contracting party (Appendix 3). It would seem likely that these reports are relying on the historic work describing depth distribution of the two redfish species (Ni, 1982, discussed in the PCR) which has been used by stock assessment biologists since to provide an assessment of the relative status of the two stocks. The current AFC work is updating this understanding.

On-going species-specific monitoring is collecting data that can detect any increase in risk level to *S. mentella* and an update report on that monitoring has been produced. The year 1 milestone has been met.

	<p>The results of the monitoring to date support the supposition that the fishery is focused on <i>S. fasciatus</i> with catches of <i>S. mentella</i> comprising less than 10% of total catch. There are gaps in research vessel sampling (no data collected in 2016 and deeper water strata not sampled in 2017) but full sampling is expected in 2018. Progress in delivering the condition is on target. As noted above it is not possible to change the score at this surveillance as the time series of data is still short</p>
<b>Status on Year 1</b>	<b>Open – On target</b>
<b>Progress on Condition (Year 2)</b>	<p>AGC provided an update of the ongoing species identification work on the species structure of both the commercial fishery and survey catches of both <i>Sebastes mentella</i> and <i>Sebastes fasciatus</i> in 3LN for year 2018. The work involves examination of samples collected from the fall DFO research vessel survey and also weekly samples from commercial vessels during the fishery. Anal fin counts are used to distinguish the two species. Individual redfish with AFC less than 8 are assigned as <i>S. fasciatus</i> and samples with AFC &gt; 8 are <i>S. mentella</i>. Previous work undertaken by GEAC (2011) suggests that where the samples are dominated (over two thirds) by either AFC of &lt; 8 or &gt; 8, the ambiguous samples (AFC = 8) generally follow the dominant species in the sample</p> <p>The results of this sampling programme to date have been discussed in section 4. Findings are consistent with the results of years 2015-2017. 3LN redfish fishery nearly 90% of effort occurred at depths between 300 and 500m (figure 1). Analysis of AFC from commercial samples in 2018 indicates <i>S. fasciatus</i> dominates the catch with <i>S. mentella</i> comprising less than 1% of the samples in the depths where virtually all the fishing occurs (figure 2 and 3).</p> <p>It should be noted that some of the NAFO scientific reports appear to suggest separate species-specific monitoring of 3LN redfish has already been occurring. For example, the Portuguese research report for 2016 (NAFO, 2017b) refers specifically to ‘redfish (<i>S. mentella</i>)’ in its reporting of their biological sampling from two trawlers fishing in 3LMNO. However, where this occurs no further explanation is provided as to how this species identification is undertaken - in the Portuguese report the only information gathered seems to be length and weight measurements and no species differentiation is described or referred to. The client has followed this up with the NAFO redfish stock assessment lead who confirmed that no species-specific monitoring is currently undertaken by the research surveys or in any of the commercial catch from any NAFO contracting party (Appendix 3). It would seem likely that these reports are relying on the historic work describing depth distribution of the two redfish species (Ni, 1982, discussed in the PCR) which has been used by stock assessment biologists since to provide an assessment of the relative status of the two stocks. The current AFC work is updating this understanding.</p> <p>On-going species-specific monitoring is collecting data that can detect any increase in risk level to <i>S. mentella</i> and an update report on that monitoring has been produced. The year 2 milestone has been met.</p> <p>The results of the monitoring to date support the supposition that the fishery is focused on <i>S. fasciatus</i> with catches of <i>S. mentella</i> comprising less than 10% of total catch. There are gaps in research vessel sampling (no data collected in 2016 and 2018 and deeper water strata not sampled in 2017) but full sampling is expected in</p>

	2019. Progress in delivering the condition is on target. As noted above it is not possible to change the score at this surveillance as the time series of data is still short.
Status on Year 2	<b>Open - on target</b>

<b>Table 14. Condition 2</b>	
Performance Indicator	3.2.1
Score	70
Justification	<p>From the original PCR: There is currently no IFMP for the 3LN redfish. However, the NL Region’s Groundfish IFMP for 2+3KL indicates it strives to manage groundfish stocks (and the fisheries on them) based on the following principles or long term objectives:</p> <ul style="list-style-type: none"> <li>Conservation and Ecosystem Considerations;</li> <li>Stewardship;</li> <li>Social, Cultural and Economic Benefits to Stakeholders; and</li> <li>Fisheries Compliance.</li> </ul> <p>The IFMP then sets out a series of short-term objectives in the form of various strategies and management measures that are in place, or are in the process of being developed, “to maximize the benefit of this resource for all Canadians.” The NL Region advised the Assessment Team that these strategies and management measures would also apply to the 3LN Redfish fishery.</p> <p>Based on the evidence provided above, a partial score is assigned.</p> <p>The assessment team has been informed that DFO Newfoundland and Labrador Region is in the process of updating the IFMP for groundfish fisheries. The plan is to incorporate the 3LN redfish fishery in a revised IFMP that will be applicable to all groundfish fisheries in 2 + 3KLMNO. The target is to circulate the draft revised IFMP by the end of March 2017.</p> <p>Therefore, the fishery fully meets SG60 and partially meets SG80</p>
Condition	The client must provide documented evidence that short and long-term objectives for the 3LN Redfish fishery have been adopted which are consistent with achieving the outcomes expressed by MSC’s Principles 1 and 2 and are explicit within the fishery’s management system
Milestones	<p><b>By Year 1:</b> The client is required to provide evidence of progress toward a commitment by the management agencies to incorporate short- and long-term objectives, which are consistent with achieving the outcomes expressed by MSC’s Principles 1 and 2, within the fishery’s management system. Meeting this milestone would likely not result in a change in score at this surveillance audit.</p> <p><b>By Year 2:</b> The client will provide evidence that short- and long-term objectives, which are consistent with achieving the outcomes expressed by MSC’s Principles 1 and 2, are explicit within the fishery’s management system. Meeting this milestone will demonstrate that all scoring issues of the SG 80 have been met and would result in a score of 80 for this performance indicator.</p>
Consultation on condition	DFO Newfoundland & Labrador

<p>Progress on Condition (Year 1)</p>	<p>DFO advised the Client in a letter dated June 26, 2018 that it had intended to have an Integrated Fisheries Management Plan (IFMP) for 2+3KLMNO groundfish completed by the spring of 2018, but the audit of the Office of the Commissioner of the Environment and Sustainable Development (CESD) required the Department to adjust priorities which changed that timing. This was confirmed by DFO officials at the Site Visit. They also confirmed an additional staff officer has been hired for this task.</p> <p>It was also confirmed that the target now is to circulate the draft IFMP for industry review in the fall 2018, and to have this document adopted at the 2+3KLMNO Groundfish Advisory Committee Meeting in the spring of 2019.</p>
<p>Status on Year 1</p>	<p>Behind target.</p> <p>Based on the results of the 1st annual surveillance audit, the client's progress is determined to be behind target. The Audit Team acknowledges the previous significant effort by the client in cooperation with the management authority, but progress to date has now clearly fallen behind target.</p> <p>The guidelines provided by the MSC v2.0 scheme document MSC CR 7.23.13.1 state: "The team shall audit conformity with, and progress and performance against, certification conditions".</p> <p>"a. The CAB shall document conformity with, and progress and performance against, certification conditions using the narrative or metric form of the original condition".</p> <p>"b. The CAB shall document whether progress is 'on target', 'ahead of target' or 'behind target', as well as its rationale for such a judgement".</p> <p>"i. If progress against the measurable outcomes, expected results or (interim) milestones specified when setting the condition is judged to be behind target, the CAB shall specify the remedial action, and any revised milestones, that are required to bring process back on track within 12 months to achieve the original condition by the original deadline".</p> <p>The ramifications of any shortfalls with regards to this condition is expected to include implementation of MSC CR 7.23.13.2 which states:</p> <p>"In the event that the CAB determines that progress against a condition is not back 'on target' within 12 months of falling 'behind target', the CAB shall:</p> <p>a. Consider progress as inadequate.</p> <p>b. Apply the requirements of GCR 7.4 (suspension or withdrawal)".</p> <p>Based on MSC CR7.23.13.1b, the Audit Team has set revised milestones to bring the process back on track at the next surveillance audit</p> <p>Revised milestones have been identified in the current surveillance audit report and will be considered in the next surveillance. The Assessment Team will evaluate if the progress against these revised milestones are back "on target" for the next surveillance audit.</p>
<p>Revised Milestones</p>	<p>By the second year_the client will provide evidence that short and long term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery's management system. Meeting this milestone will demonstrate that all scoring issues of the SG 80 have been met and would result in a score of 80 for this performance indicator</p>
<p>Progress on Condition (Year 2)</p>	<p>A new IFMP for all groundfish in 2+3KLMNO was approved and implemented since the 1<sup>st</sup> Audit. This new IFMP indicates how the NL Region will manage groundfish</p>

	<p>stocks in those areas (and the fisheries based on them, including 3LN Redfish). This new IFMP in Section 5 contains broad objectives for groundfish management under the headings of Stock Conservation and Sustainable Harvesting, Ecosystem Health and Sustainability, Stewardship and stock specific objectives where rebuilding plans are in place (this includes 3LN Redfish). The NAFO Conservation Plan and Harvest control Rule for 3LN Redfish is formally and specifically included in Appendix 5. Section 10 “Performance Review” contains a listing of Measurable Objectives/Activities and Fisheries Management Strategies for groundfish in 2+3KLMNO that address the outcomes desired by MSC Principle 1 and 2. However, not all the stated objectives are well defined or quantitatively measurable.</p>
<p>Status on Year 2</p>	<p>Based on the contents of the new IFMP regarding fishery management objectives for all groundfish fisheries in 2+3KLMNO and the specific inclusion of the NAFO rebuilding plan for 3LN Redfish, this condition is now closed. The scoring table for 3.2.1 has been revised and this PI is now accorded a score of 80. <b>Closed – on target</b></p>

### 7.3 Re-scoring Performance Indicators

Table 15. Evaluation Table for PI 3.2.1

For both UoAs

PI 3.2.1		The fishery has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Objectives, which are broadly consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are implicit within the fishery's management system	Short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery's management system.	Well defined and measurable short and long-term objectives, which are demonstrably consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery's management system.
	Met?	Y	Y	N
	Justification	<p><i>Short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery's management system.</i></p> <p>NAFO's 3LN redfish management plan contains short and long term objectives for stock rebuilding as well as a harvest control rule for TAC increases. These are outlined in "Development of a Risk-Based Management Strategy for 3LN Redfish (FC-SC RBMS WP 14/4 Rev 3)" which has been adopted by NAFO's FC at the 2014 Annual Meeting (NAFO 2014a). They include stepwise TAC increases out to 2020 which will be monitored and fully assessed every 2/3 years with a full evaluation taking place after seven years.</p> <p>The long-term objective of 3LN redfish Conservation Plan is to maintain the biomass in the 'safe zone', as defined by the NAFO Precautionary Approach framework, and at or near Bmsy. The Conservation Plan does not include specific objectives for Principle 2.</p> <p>There is now a new IFMP in force for the NL Region's Groundfish in 2+3KLMNO that indicates how the Region will manage groundfish stocks in those areas (and the fisheries based on them, including 3LN Redfish). This new IFMP in Section 5 contains broad objectives for groundfish management under the headings of Stock Conservation and Sustainable Harvesting, Ecosystem Health and Sustainability, Stewardship and stock specific objectives where rebuilding plans are in place (this includes 3LN Redfish). The NAFO Conservation Plan and Harvest control Rule for 3LN Redfish is formally and specifically included in Appendix 5. Section 10 "Performance Review" contains a listing of Measurable Objectives/Activities and Fisheries Management Strategies for groundfish in 2+3KLMNO that address the outcomes desired by MSC Principle 1 and 2. However, not all the stated objectives are well defined or quantitatively measurable.</p> <p>Therefore, the fishery now fully meets SG80 but not SG100.</p>		
References		<p>DFO NL Region 2019. "Integrated Fisheries Management Plan (IFMP) 2+3KLMNO"</p> <p>NAFO 2014. Part D: Scientific Council Ad hoc working group on management strategies for redfish in Div. 3LN, 13 May 2014. NAFO SC 13 May 2014. 27 p.</p>		

<b>PI 3.2.1</b>	<b>The fishery has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2</b>
<b>OVERALL PERFORMANCE INDICATOR SCORE:</b>	<b>80</b>
<b>CONDITION NUMBER (if relevant):</b>	<b>NA</b>

**Table 16. Updated Principle 3 scoring sheet for both UoAs**

Principle	Component	PI No	PI	PI Initial score	PI score at 1 <sup>st</sup> surveillance audit	PI score at 2 <sup>nd</sup> surveillance audit
Three	Governance and policy	3.1.1	Legal & customary framework	80	85	85
		3.1.2	Consultation, roles & responsibilities	95	95	95
		3.1.3	Long term objectives	80	80	80
		3.1.4	Incentives for sustainable fishing	90	90	90
	Fishery specific management system	3.2.1	Fishery specific objectives	70	70	80
		3.2.2	Decision making processes	85	85	85
		3.2.3	Compliance & enforcement	85	85	85
		3.2.4	Research plan	80	80	80
		3.2.5	Management performance evaluation	80	80	80

P3 overall score was revised from 84.8 for both UoAs.

## 8 References

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## 9 Appendices

### 9.1 Evaluation processes and techniques

#### 9.1.1 Site visit

**Table 17.** Summary of Site visits and conference calls for 2nd surveillance audit of Canada 3LN Redfish Fishery.

Organization	Participants	Venue	Date/Time	Purpose
SAI Global	Dr. Ivan Mateo - Lead Assessor Eric Dunne - Assessor (contractor)	DFO Newfoundland -Labrador Region St Johns, Newfoundland	21 May 2019 9:00 am - 12:00 pm	<ul style="list-style-type: none"> <li>• Highlight changes to MSC Standard (v2.1);</li> <li>• Discuss results of updates to stock assessments (target and non-target species and surveys);</li> <li>• Discuss Redfish Complex species identification study by AGC;</li> <li>• Future stock assessment plans;</li> <li>• Update information on Oceans, Habitat, Ecosystems, Resource Management, Enforcement, Regulations and Policies;</li> <li>• Changes to key personnel;</li> <li>• RDG's material changes;</li> <li>• Observations on bycatch and discard data;</li> <li>• Update to MPAs and AOIs, SARA-listing consultations and timelines;</li> <li>• Approved changes to Groundfish IFMP and CHPs;</li> <li>• Logbook reporting changes;</li> <li>• Traceability within the fishery; and</li> <li>• Review of outstanding conditions.</li> </ul>
Atlantic Groundfish Council	Kris Vascotto Steve Devitt			
DFO Newfoundland - Labrador Region	Danny Ings Barry Peters Nadine Wells Gillian Janes Ellen Careen Shelley Dyer Bonnie Gauvin (by Phone)			
SAI Global	Dr. Ivan Mateo - Lead Assessor Eric Dunne, Assessor (contractor)	Hotel Courtyard Marriott meeting room	21 <sup>rd</sup> May 2019 2:00 pm - 3:00 pm	<p style="text-align: center;"><u>Post site visit</u></p> <ul style="list-style-type: none"> <li>• Identified additional data requirements;</li> <li>• Discussed need for additional evidence to support existing conditions; and</li> <li>• Discussed next steps and timelines.</li> </ul>
Atlantic Groundfish Council	Kris Vascotto Steve Devitt			

SAI Global	Dr. Ivan Mateo - Lead Assessor Eric Dunne, Assessor (contractor)	Hotel Courtyard Marriott meeting room	21 <sup>rd</sup> May 2019 1:00 pm - 2:00 pm	<ul style="list-style-type: none"> <li>• Discuss results of updates to stock assessments (target and non-target species and surveys);</li> <li>• Discuss Redfish Complex species identification study by AGC;</li> <li>• Future stock assessment plans</li> </ul>
NAFO	Tom Blasdale (By phone)			
Atlantic Groundfish Council	Kris Vascotto Steve Devitt			

### 9.1.2 Stakeholder participation

At the surveillance announcement published on the MSC website on 18<sup>th</sup> April 2019, interested stakeholders were invited to indicate their interest in meeting with SAI Global's Assessment Team on or before 17:00 UTC on 22<sup>nd</sup> May 2019. No stakeholders contacted SAI Global to request a meeting with the Assessment team; consequently, a stakeholder engagement plan was not required

## **9.2 Stakeholder input**

No stakeholder input was received during the process of the surveillance audit.

### **9.3 Revised surveillance program**

It is not proposed to change the surveillance program.

## 9.4 Harmonised fishery assessments

**Table 18. Overlapping fisheries.**

Fishery name	Certification status and date	Performance Indicators to harmonise
US Acadian Redfish, haddock and Pollock Otter Trawl	Not the same P1 stock or overarching governance and policy framework	
US Gulf of Maine and George's Bank Haddock, Pollock and Redfish trawl	Not the same P1 stock or overarching governance and policy framework	
Canada Atlantic Halibut	Recertified in July 2018.	2.11-2.53 3.11-3.1.3
Canada/Newfoundland 3Ps cod	Certified March 2016 Suspended 12th May 2017	
OCI Grand Bank (GB) Yellowtail flounder	Recertified in October 2016.	2.11-2.53 3.11-3.1.3
Canada OAB 2+ 3KLMN-Greenland-halibut-bottom-trawl-and-gillnet/	In assessment. No report has been published yet	

**Table 19. Overlapping fisheries. Supporting information**

MSC FCR v2.1 Guidance states that, *"The aim of harmonisation is to avoid the perversity that two essentially similar fisheries receiving materially different scores (materially in the number, and text, of conditions, or in the overall outcome, whether a pass or a fail). Fisheries that are identical should receive identical scores."* MSC have also confirmed that harmonisation of similar fisheries using different versions of the default assessment tree, i.e. v1.3 and v2.0, should still take place where they are materially unchanged (MSC Interpretations webpage).

Therefore, in this instance, it is concluded that harmonisation is required for those fisheries that:

1. Target the same Principle 1 stock and have been assessed using v1.3, i.e. the same version used for the Canada 3LN Redfish Fishery; and,
2. Operate under the same overarching governance and policy framework (PIs prefixed with 3.1.1-3.13).
3. Have 2 UoAs that are identical in scope even if the UoCs are different (ie different client)

- **Rationale for harmonization decisions**

- The two US Acadian redfish, pollock and haddock certified fisheries and the Canada 3LN redfish are not considered as overlapping fisheries, and harmonization is not required in any of the 3 Principles. The redfish population in 3LN is genetically distinct from the redfish population in the Gulf of Maine. Genetics studies show population structure of *S. fasciatus* characterized by 3 groups that belong to three geographic areas (Valentin 2006, Valentin et al 2014); (1) Gulf of St. Lawrence – Laurentian Channel, (2) the slope of the Grand Banks (3LNO) to the southern margin of Unit 2 (southern tip of St. Pierre Bank), (3) Gulf of Maine and Nova Scotia Shelf. Overall, this southern group tends to be genetically differentiated from the northern group and from that of the Gulf of St. Lawrence – Laurentian Channel. Also The redfish fisheries operates in different ecosystems under different management system.

- Other Canadian Newfoundland and Labrador groundfish fisheries are certified (Table 20). Harmonization should be considered between the 3LN redfish fishery and the other Canadian fisheries with respect to performance indicators PI-3.1-3.14 from Principle 3. For Principle 2, it was considered that harmonization should be done only with the OCI Grand Bank yellowtail flounder as redfish UoC 1 bottom trawl and yellowtail flounder are fished in the same area by the same fishing vessels using the same fishing gear

Was either FCP v2.1 Annex PB1.3.3.4 or PB1.3.4.5 applied when harmonising?

**No**

Date of harmonisation meeting

**Not required**

If applicable, describe the meeting outcome

**Not required**

**Table 20. Scoring differences.**

Performance Indicators (PIs)	Canada Atlantic 3LN Redfish UoC1 Demersal Trawl	Canada Atlantic 3LN Redfish UoC2 Midwater Trawl	OCI 3LKNO Yellowtail flounder	Canada Atlantic Halibut
2.1.1	80	80	80	
2.1.2	95	95	100	
2.1.3	75	75	95	
2.2.1	80	100	95	
2.2.2	80	80	80	
2.2.3	80	80	80	
2.3.1	90	90	80	
2.3.2	95	95	90	
2.3.3	80	80	80	
2.4.1	80	100	80	
2.4.2	85	95	85	
2.4.3	85	85	90	
2.5.1	80	100	80	
2.5.2	80	80	80	
2.5.3	85	85	85	
3.1.1	85	85	90	90
3.1.2	95	95	90	95
3.1.3	80	80	80	85

**Table 21. Rationale for scoring differences**

If applicable, explain and justify any difference in scoring and rationale for the relevant Performance Indicators (FCP v2.1 Annex PB1.3.6)

**Differences in PI 2.1.3 scores**

There are differences on interpretations on scoring guiding post 2.1.3 80d where it says

*Sufficient data continue to be collected to detect any increase in risk level (e.g. due to changes in the outcome indicator score or the operation of the fishery or the effectiveness of the strategy)*

The P2 assessor for the 3LN redfish wrote on the rationale

*Sufficient data continue to be collected to detect any increase in risk level to all main retained species except for deep-water redfish.*

*Monitoring of retained species is conducted in sufficient detail to assess ongoing mortalities to all retained species except for deep-water redfish species.*

*The redfish species-specific monitoring is now in place in the DFO fall survey and in sampling of commercial catches. However, given its recent implementation (autumn 2015) it cannot said that sufficient data continue to be collected to detect any increase in risk level*

The P2 assessor for YTTF wrote on the rationale

*Data on the retained catch of all species are recorded in logbooks, and information is corroborated through observer records (48% of all YTTF fishing days were observed in 2011-2014) and a 100% dockside monitoring programme. It is therefore considered that monitoring of retained species is conducted in sufficient detail to assess ongoing mortalities to all retained species, and the YTTF scores 100, here.*

The discrepancies from the 2 CABS on 2.1.3 stems that the proportion of redfish as retained catch on the YTTF is zero (please see Table 4 Retained and discarded catches for the YTTF for 2013, as recorded in logbooks on YTTF PCR and Table 3.1-1: Catch data for the OCI Grand Bank yellowtail flounder trawl fishery, 1/11/2015 –31/10/2016 YTTF 1<sup>st</sup> surveillance report) whereas the proportion of *S. Mentella* on the 3LN redfish fishery is approximately 10% (Criquet et al 2017).

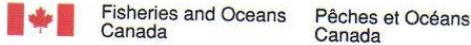
**Differences in 2.4.1 scores**

Differences are based on operations of distinct fishing gear (3LN redfish UoC2= Midwater trawl operates water column while YTTF UoC demersal trawl operates on substrate bottoms)

**Differences in 2.5.1 scores**

Differences are based on operations of distinct fishing gear (3LN redfish UoC2= Midwater trawl operates water column while YTTF UoC demersal trawl operates on substrate bottoms)

## 9.5 DFO NFL Material Change Letter



P.O. Box 5667  
St. John's, NL A1C 5X1

May 14, 2019

Mr. Kris Vascotto, Executive Director  
Atlantic Groundfish Council  
P.O. Box 28  
Clementsvalle, NS B0S 1G0  
[vascotto@vrsi.ca](mailto:vascotto@vrsi.ca)

Re: 3LN Redfish Marine Stewardship Council Certification – Second Annual  
Surveillance Audit and Support for the Client Action Plan

Dear Mr. Vascotto:

This material change letter is in response to your request, as required for the upcoming annual surveillance audit of the 3LN Redfish fishery in the Newfoundland and Labrador Region. We can report that there have been no material changes to the management of this fishery in the past 12 months.

Fisheries and Oceans Canada (DFO) recognizes your continued commitment to meeting the conditions outlined within the Client Action Plan related to this fishery. DFO supports the Plan, recognizing that the Department's involvement must align with its annual work plan priorities and activities. In particular, we have been working collaboratively to address the two conditions identified in the 2018 Surveillance Report, as follows:

**Condition 1:** *To provide evidence that sufficient data continue to be collected to detect an increase in risk level to deep-water redfish *S. mentella**

DFO and the Atlantic Groundfish Council (AGC) have agreed on methods to sample and test Anal Fin Ray Counts (AFC) as a proxy for species identification of redfish. DFO is responsible for conducting surveys and providing samples to the AGC, and the AGC is responsible for identification and subsequent work.

**Condition 2:** *To provide documented evidence that short and long-term objectives for the 3LN Redfish fishery have been adopted which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2 and are explicit with the fishery's management system.*

.../2



-2-

DFO has completed its groundfish Integrated Fisheries Management Plan (IFMP), which was released publicly in April 2019.

We commend the AGC for its dedication to sustainable fisheries. Should you require anything further, please contact Paul Glavine, Senior Policy & Economic Analyst, in the Policy and Economics Branch at (709) 772-4568.

Sincerely,

  
 Jacqueline Perry  
Regional Director General  
Newfoundland and Labrador Region

## 10 Template information and copyright

This document was drafted using the 'MSC Surveillance Reporting Template v2.01'. Note amendments have been made to formatting in order to comply with SAI Global's corporate identity; however, content and structure follow that of the original template.

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Version	Date of publication	Description of amendment
1.0	08 October 2014	Date of issue
2.0	17 December 2018	Release alongside Fisheries Certification Process v2.1
2.01	28 March 2019	Minor document change for usability

A controlled document list of MSC program documents is available on the [MSC website \(msc.org\)](http://msc.org)

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