



Marine Stewardship Council fisheries assessments

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# Gulf of St Lawrence Northern shrimp trawl fishery



# 1<sup>st</sup> Surveillance Report

Conformity Assessment Body (CAB)	Lloyd's Register
Assessment team	Paul Knapman and Julian Addison
Fishery client	Association Coopérative des Pêcheurs de L'Ile Ltée. Association Québécoise de l'Industrie de la Pêche. Produits Belle-Baie Ltée. Association of Seafood Producers Inc.
Assessment type	First Surveillance
Date	February 2022

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# 1 Assessment Data Sheet



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#### Glossary 2

AQIP	Association Québécoise de l'Industrie de la Pêche
ASP	Association of Seafood Producers
C&P	DFO Conservation and Protection Branch
CAB	Conformity Assessment Body
CHP	Conservation Harvesting Plan
CPUE	Catch Per Unit Effort
DFO	Department of Fisheries and Oceans (Canada)
EBSA	Ecologically and Biologically Significant Areas
ETP	Endangered, Threatened, Protected species
GLM	General Linear Model
GSL	Gulf of St. Lawrence
HCR	Harvest Control Rule
IFMP	Integrated Fisheries Management Plan
IPI	Inseparable or Practically Inseparable (species or stocks)
LRP	Limit Reference Point
MSC	Marine Stewardship Council
MSC FCR	Marine Stewardship Council Fisheries Certification Requirements
NARW	North Atlantic Right Whale
PI	Performance Indicator
RBF	Risk Based Framework
SARA	Species at Risk Act
SBA	Significant Benthic Area
SeBA	Sensitive Benthic Area
SFA	Shrimp Fishing Area
SFF	Sustainable Fisheries Framework
EGSAC	Estuary and Gulf Shrimp Advisory Committee
TAC	Total Allowable Catch
UoA	Unit of Assessment
UoC	Unit of Certification
URP	Upper Reference Point
USR	Upper Stock Reference (synonymous with URP)
VMS	Vessel Monitoring System

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# **3 Executive summary**

The Gulf of St. Lawrence Northern Shrimp Trawl Fishery was originally certified in March 2009 and has been reassessed twice. The same assessors that undertook the last re-assessment of the fishery conducted this first annual audit. The audit was conducted remotely with the Audit Team holding MS Team meetings with the client representative and Department of Fisheries and Oceans (DFO) Canada staff.

A total of 19 stakeholders having previously expressed an interest in the fishery were identified and consulted by LRQA during this surveillance audit. The interest of other stakeholders was solicited through the postings on the MSC website and through LRQA updates.

The following was inspected during the audit:

- The scientific base of information and stock assessment
- Changes to the fishery and its management, e.g., legislation and regulations
- Changes and updates on ecosystem issues
- Changes to personnel involved with the science, management, and industry
- Any changes that might affect traceability within the fishery and conformity with regulations
- Compliance with the fishery monitoring, control, and surveillance system
- Progress against the two remaining conditions of certification.

No significant changes in the fishery and its management were reported. Stock assessment of Northern Shrimp in the Gulf of St. Lawrence is conducted every two years, with the most recent full assessment completed in January 2020, and a stock update is provided in intervening years. Details of the latest assessment and stock update are included in the report.

At the last re-assessment the same two conditions of certification were applied to each Unit of Certification (UoC) and so a total of 8 conditions were set. Conditions 1-4 were closed out at this audit. A new recommendation in relation to updating geo-spatial analysis of the fishery footprint has been made.

The Audit Team conclude that the fishery meets the requirements of the MSC Standard, and that MSC Certification should continue with annual audits.

### 3.1 Confirmation of scope

The fishery was considered to be "in scope" for MSC certification during its initial assessment. The surveillance team made enquiries during this audit to confirm that the fishery remains in scope.

### 3.2 Destructive fishing practices

The client and DFO confirmed that no destructive fishing practices (explosives or poisons) are used in this fishery.

#### 3.3 Controversial unilateral exemptions

The client and DFO confirmed the fishery is not subject to any controversial unilateral exemptions.

#### 3.4 Forced labour

The client has submitted a Declaration on Forced and Child Labour to the MSC as required by §7.4.2.4 *et seq* of FCP v2.2.

### 3.5 Aims of the surveillance

The purpose of the annual Surveillance Report is fourfold:

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

**Please note:** The primary focus of this surveillance audit is to assess changes made in the previous year. For a complete picture, this report should be read in conjunction with the Public Certification Report for this fishery assessment which can be found on the MSC website here: https://fisheries.msc.org/en/fisheries/gulf-of-st-lawrence-northern-shrimp-trawl-fishery/@@view



# 4 Report details

# 4.1 Surveillance information

#### Table 1. Surveillance information

1	Fishery name	
	Gulf of St Lawrence Northern shrimp trawl fishery	
2	Unit(s) of Assessment (UoA)	
	UoA 1	Description
	Species	Northern Shrimp (Pandalus borealis)
	Stock	Shrimp Fishing Area 8 (Esquiman)
	Geographical area	Gulf of St. Lawrence, Canada
	Harvest method / gear	Otter trawl
	Client group	<ul> <li>Association Québécoise de l'Industrie de la Pêche (AQIP)</li> <li>L'Association Coopérative des Pêcheurs de L'Ile Ltée,</li> <li>Produits Bell-Baie Ltée</li> <li>Association of Seafood Producers (ASP)</li> </ul>
	Other eligible fishers	Other shrimp fishers operating in the region subject to the terms of the certificate sharing agreement
	UoA 2	Description
	Species	Northern Shrimp (Pandalus borealis)
	Stock	Shrimp Fishing Area 9 (Anticosti)
	Geographical area	Gulf of St. Lawrence, Canada
	Harvest method / gear	Otter trawl
	Client group	<ul> <li>Association Québécoise de l'Industrie de la Pêche</li> <li>L'Association Coopérative des Pêcheurs de L'Ile Ltée,</li> <li>Produits Bell-Baie Ltée</li> </ul>
	Other eligible fishers	Other shrimp fishers operating in the region subject to the terms of the certificate sharing agreement
	UoA 3	Description
	Species	Northern Shrimp (Pandalus borealis)

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	Stock	Shrimp Fishing Area 10 (Sept-II	es)
Geographical area		Gulf of St. Lawrence, Canada	
	Harvest method / gear	Otter trawl	
	Client group	<ul> <li>Association Québécoise de l</li> <li>L'Association Coopérative de</li> <li>Produits Bell-Baie Ltée</li> </ul>	l'Industrie de la Pêche es Pêcheurs de L'Ile Ltée
	Other eligible fishers	Other shrimp fishers operating terms of the certificate sharing	in the region subject to the agreement
	UoA 4	Description	
	Species	Northern Shrimp (Pandalus bor	ealis)
	Stock	Shrimp Fishing Area 12 (Estuar	у)
	Geographical area	Gulf of St. Lawrence, Canada	
	Harvest method / gear	Otter trawl	
	Client group	<ul> <li>Association Québécoise de L'Association Coopérative de Produits Bell-Baie Ltée</li> </ul>	l'Industrie de la Pêche es Pêcheurs de L'Ile Ltée
	Other eligible fishers	Other shrimp fishers operating i of the certificate sharing agreen	n the region subject to the terms nent
3	Date certified		Date of expiry
	30 <sup>th</sup> November 2020		15 <sup>th</sup> October 2025
4	Surveillance level and t	уре	
	Level 4 on site surveilla	nce audit (Now remote due to C	OVID-19)
5	Surveillance number		
	1st Surveillance		x
6	Surveillance team lead	er	
	Paul Knapman (Team Paul is an independent fisheries nearly 30 year and EU fisheries regula (1993-2001), as their F extensive programme of	Leader and Principle 2 and 3 sp consultant based in Halifax, Nov s ago as a fisheries officer in the tions. He then worked with the L isheries Programme Manager, re of work with fisheries managers, s	ecialist) va Scotia, Canada. Paul began his career in e UK, responsible for the enforcement of UK IK government's nature conservation advisors esponsible for establishing and developing an scientists, the fishing industry and ENGOs,

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		researching the effects of fishing and integrating nature conservation requirements into national and European fisheries policy and legislation.
		Between 2001-2004 he was Head of an inshore fisheries management organisation in England, with responsibility for managing an extensive area of inshore fisheries on the North Sea coast. The organisation's responsibilities and roles included: stock assessments; setting and ensuring compliance with allowable catches; developing and applying regional fisheries regulations; the development and implementation of fisheries management plans; the lead authority for the largest marine protected area in England.
		In 2004, Paul moved to Canada and established his own consultancy providing analysis, advisory and developmental work on fisheries management policy in Canada and Europe. He helped draft the management plan for one of Canada's first marine protected areas, undertook an extensive review on IUU fishing in the Baltic Sea and was appointed as rapporteur to the European Commission's Baltic Sea Regional Advisory Council.
		In 2008, Paul joined Moody Marine as their Americas Regional Manager, with responsibility for managing and developing their regional MSC business. He became General Manager of the business in 2012. Paul has been involved as a lead assessor, team member and technical advisor/reviewer for more than 60 different fisheries in the MSC programme. Paul has previously led audits and assessments of the Canada Scotian Shelf Prawn Trawl Fishery. He returned to fisheries consultancy in 2015.
		Paul has passed all the MSC training requirements for Team Member and Lead Assessor and has no Conflict of Interest in relation to this fishery. A full CV is available upon request.
Team Leader Experience		Paul has completed a number of MSC assessment as TL and meets all Fishery TL Qualification and Competency Criteria under MSC FCP v2.2 Table PC1 and MSC GCR v2.4.1 Table 1.
	•	
	7	Surveillance team members
	7	Surveillance team members Julian Addison (Principle 1 and 2 specialist)
	7	Surveillance team members Julian Addison (Principle 1 and 2 specialist) Dr Julian Addison is an independent fisheries consultant with more than 30 years' experience of stock assessment and provision of management advice on shellfish fisheries, and a background of scientific research on shellfish biology and population dynamics and inshore fisheries. Until December 2010 he worked at the Centre for Environment, Fisheries and Aquaculture Science (Cefas) in Lowestoft, England where he was Senior Shellfish Advisor to Government policy makers, which involved working closely with marine managers, legislators and stakeholders, Government Statutory Nature Conservation Organisations and environmental NGOs. He has experienced shellfish management approaches in North America as a visiting scientist at DFO in Halifax, Nova Scotia and at NMFS in Woods Hole, Massachusetts. For four years he was a member of the Scientific Committee and the UK delegation to the International Whaling Commission providing scientific advice to the UK Commissioner. He has worked extensively with ICES and was Chair of the Working Group on the Biology and Life History of Crabs, a member of the Working Group on Crangon Fisheries and Life History and a member of the Steering Group on Ecosystems Function. He has extensive experience of the MSC certification process primarily as a P1 team member but also as a P2 team member and team leader. He has undertaken nearly 40 MSC full assessments of crustacean and mollusc fisheries worldwide. He has also undertaken MSC pre-assessments in Europe, North America, and Australia and over 60 annual surveillance audits and technical reviews. He is a member of the MSC Peer Review College and has carried out peer reviews of MSC assessments worldwide of a wide range of fish and shellfish fisheries. Julian has previously been a MSC audit team member for the Gulf of St. Lawrence Trawl Fishery. Julian is a MSC qualified lead assessor and has completed his RBF training.

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Local Context	English is spoken widely in the Gulf of St Lawrence. Both Paul and Julian have had assignments in the region in the last 10 years.
Traceability	Both Paul and Julian have completed the MSC traceability module in the last five years.
RBF	Julian has completed the RBF training.
8	Audit/review time and location
	Remote audit week commencing 8 <sup>th</sup> November 2021
9	Assessment and review activities
	All relevant data, progress on the Client Action Plan and progress on the open conditions 1-4 and 5-8.



#### 4.2.1 The fishery

The Gulf of St. Lawrence Northern shrimp trawl fishery is conducted by trawlers in four Shrimp Fishing Areas (SFA) that are also identified by geographic names: SFA 8 (Esquiman), SFA 9 (Anticosti), SFA 10 (Sept-Iles) and SFA 12 (Estuary) (Figure 1). This is a limited entry fishery which opens on April 1<sup>st</sup> and closes on December 31<sup>st</sup>, or before, if the Total Allowable Catch (TAC) is reached. In 2021, the number of active fishing licences in the fishery was 108 (see Table 2). The fishery has been managed by TAC since 1982. Technical conservation measures include a minimum mesh size (40 mm) and, since 1993, the compulsory use of the Nordmore grate, which reduces groundfish bycatch. A protocol to limit small bycatch is also in place, particularly to limit the catch of small redfish. Monitoring of fishing activity and catches is maintained through mandatory use of a satellite Vessel Monitoring System (VMS), completion of log books (with e-logs being phased in from 2018), a dockside monitoring program that covers 100% of the landings, and an industry-funded observer program which aims to cover at least 5% of fishing trips in each year. With one exception, all shrimp are landed for processing as fresh (iced) whole, shell-on. The exception is one vessel, that is operating as an at-sea catcher/processer. In order to mitigate concerns that at-sea processing could encourage highgrading, resulting in discarding of small shrimp, the vessel is subject to 50% observer coverage. The management regulations and harvest strategy are set out in detail in the Integrated Fishery Management Plan (IFMP) for the Northern Shrimp in the Estuary and Gulf of St. Lawrence (Areas 8, 9, 10 and 12) (Pandalus borealis) (DFO, 2018). A Conservation Harvesting Plan (CHP) is published as an annual Notice to Fishers on the DFO website and includes information on TACs, seasons, fishing areas, all regulations, requirements for catch recording, marine mammal interaction reporting and requirements for reporting under the Species at Risk Act.

In the period 1990 to 2012, landings in the Gulf of St. Lawrence doubled, with the peak year for landings in 2010. Since then, the landings and TACs have declined in each SFA, although there was a pronounced upsurge in landings in Estuary (SFA 12) in 2020 (Figure 2). Using logbook and VMS data from 2012-2019 the distribution of shrimp trawl fishing effort in the Gulf of St. Lawrence is shown in Figure 3. Since 2012, the total annual fishing effort corresponds to a maximum footprint on the seabed of about 7,000 km<sup>2</sup>, assuming no overlapping of tows. The fishing footprint overlaps 15% of the shrimp's distribution range.





Figure 1. Shrimp Fishing Areas (SFA) in the Estuary and Gulf of St. Lawrence (Source: DFO, 2020a)



# Figure 2. Landings and total allowable catch (TAC) by fishing area and by year. The 2020 landings data are preliminary on date of December 21, 2020. (Source: DFO, 2021a)

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Figure 3. Distribution of the mean annual fishing effort from 2012 to 2019 according to data from the vessel monitoring system (VMS). (Source: DFO, 2020a)

Table 2. The number of active fishing licences within the Gulf of St. Lawrence Shrimp Trawl Fishery and their associated Province in 2021. (Source: DFO 2021b)

Authorized SFA / Access	NL	QC	NB	PEI	NS	Total
SFA 8	38	2				40
SFA 8, 9, 10 and 12		42				42
SFA 8, 9 and 10			23	2	1	26
Total	38	44	23	2	1	108

#### 4.2.2 Changes in management system

A single meeting of the Estuary and Gulf Shrimp Advisory Committee was held in February 2020. The minutes of this meeting were provided to the Audit Team. There were no reported significant changes in the management of the fishery during the audit period.

#### 4.2.3 Changes in relevant regulations

There were no reported changes in legislation or regulation of the fishery for the audit period.

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#### 4.2.4 Compliance

The Audit Team spoke with a representative from Conservation and Protection (C&P) Quebec Region. The fishery is generally considered to be a low risk fishery, and any non-compliance tends to be more administratively related, e.g., in 2020, owing to a focused effort by C&P, there was an increase in occurrences and warnings related to landings commencing before landing data had been submitted. An officer has been dedicated to monitor VMS as a result of the introduction of temporary closed areas to fishing (particularly affecting fixed gear fisheries) in the spring and early summer months when North Atlantic Right Whale are more prevalent in the Gulf of St. Lawrence.

# Table 3. Summary of enforcement activity for DFO Quebec, Gulf and Newfoundland & Labrador Regions for 2019, 2020 and part of 2021. (Source: Sébastien Beauchamp, C&P Quebec Region).

	2019		20	020	2021*	
		Que	ebec Region			
Fishery officer hrs	Land = 580	Air/Sea = 82	Land = 344	Air/Sea = 74	Land = 404	Air/Sea = 63
# of occurrences detected		6		50		18
# written warning issued		4		21	6**	
# prosecutions		1		1		0
Gulf Region						
Fishery officer hrs	Land = 1.9	Air/Sea = 0	Land = 0	Air/Sea = 45	Land = 4	Air/Sea = 2
# of occurrences detected	,	11	1		6	
# written warning issued		3	0		0	
# prosecutions		0	1		0	
		Newfoundlan	nd & Labrador	Region		
Fishery officer hrs	Land = 18	Air/Sea = 7	Land = 30	Air/Sea = 9	Land = 30	Air/Sea = 13
# of occurrences detected	18		9		21	
# written warning issued	2		6		0	
# prosecutions		0	0		0	

\*As of November 1<sup>st,</sup> 2021; \*\*Several cases still under investigation

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

No changes in key personnel involved in science and management or within the shrimp fishery were reported for the audit period.

#### 4.2.6 Changes to scientific base of information, including stock assessments

Stock assessment of Northern Shrimp in the Estuary and Gulf of St. Lawrence is conducted every two years, with the most recent full assessment completed in January 2020 (DFO, 2020a), and a stock update was provided following the Science Response Process in January 2021 (DFO, 2021a). Shrimp fishing is regulated by a number of management measures, including the setting of TACs in the four areas. TAC-based management limits fishing in order to protect the reproductive potential of the population. The essential elements for the establishment of a precautionary approach were adopted in 2012. The two key elements of the harvest strategy are the setting of reference points and the associated harvest control rules (HCRs) which are governed by DFO's Sustainable Fisheries Framework (SFF) (DFO,

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2009). Reference points were determined, and harvest guidelines were established based on the main indicator and its position in relation to the stock status classification zones (healthy, cautious, and critical).

#### Update on stock status for the UoAs

The main stock status indicator is based on two independent sources of data - the catch per unit of effort (CPUE) from the commercial fishery in June, July and August, which is standardised to take into account changes in the fishing capacity/power and in the seasonal fishing patterns using a GLM (general linear model) procedure with variables vessel length and propulsion power, month and year, and the index of shrimp abundance from the DFO research survey in August. The survey data are used to estimate the distribution and abundance of shrimp and some groundfish species. Abundance of shrimp is estimated by size category and stage of maturity, and a geostatistical method (kriging) is used to estimate biomass and coefficients of variation for both males and females from the surveys. From these two sources of data, indices for male and female components are estimated, giving a total of four indices by fishing area. In order to combine them into one indicator, each index is standardised in relation to a reference period. The stock indicators provide the fisheries management authorities with the projected harvests for the following year in SFA 8, 9, 10 and 12, according to the guidelines of the precautionary approach.

The commercial fishery indices (CPUE) for males and females in Estuary have been relatively stable over the last few years at high values (

Figure 4 and Figure 7). In Sept-Iles, Anticosti and Esquiman, CPUE has been increasing for two years, but still remains lower than the high values observed from 2005 to 2015. The abundance index of females from the research survey in Estuary are highly variable, with the very high level in 2019 followed by a significant decrease in 2020 to a level similar to the low values observed in 2017 and 2018 (

). A similar pattern was observed for males and females (Figure 7). The abundances of males and females in Septlles and Anticosti increased slightly in 2020, but still remain at low levels. Downward trends continue in Esquiman for both males and females and the 2020 estimates compare to the low values observed in the early 1990s. An index of the exploitation rate is obtained by dividing the commercial catches in number by the abundance estimated from the research survey. Whilst caution should be applied in interpreting exploitation rate index as it does not estimate the absolute exploitation rate or relate the index to target exploitation rates, it provides a rough guide to how exploitation may have changed across the years. The exploitation rate index, like the survey abundance index, for the Estuary is highly variable, dropping in 2019 to the lowest value in the series (1990-2019) but then increasing dramatically again in 2020 (**Error! Reference source not found.**). In 2020, the exploitation rate indices for Sept-Iles and Anticosti were comparable to the series average, while the index for Esquiman increased significantly in 2020 having fluctuated around its long-term average in recent years (**Error! Reference source not found.**).

The main stock status indicator for Estuary declined sharply in 2020 following a strong increase observed in 2019. It compares to the value observed in 2018 and remains in the healthy zone (Figure 8). The indicator for Sept-Iles continues to improve for a second consecutive year and is still in the cautious zone but very near the upper reference point. The Anticosti and Esquiman stocks have been in the healthy zone for about 20 years and their main stock indicators have been relatively stable for four or five years, near the upper reference point (Figure 8).

DFO scientists consider that there are two main reasons for the recent observed decline in shrimp stocks in the Estuary and Gulf of St Lawrence – deep-water temperature continues to warm and predator biomass, especially redfish, is increasing (Figure 9). These changes may have an impact on the dynamics and productivity of *Pandalus borealis*, including changes in spatial distribution, growth, reproduction, and trophic relationships (DFO, 2018). Ecosystem conditions for northern shrimp in the Gulf of St. Lawrence have not improved in 2020 with deep waters continuing to warm and redfish abundances are still very high (DFO, 2021a), but the main stock status indicator remains in the heathy zone for three of the four UoAs.

In previous years there were differences between the trends in the fishery and survey stock indicators for both Estuary and Anticosti (Figure 7). This discrepancy is likely due to the two indices not sampling the same fraction of the population, with the survey covering the entire shrimp distribution, but the fishery targeting channel heads where shrimp abundance is higher. The stock surveys are now more widespread and the discrepancies between the stock surveys and fisheries indicators have not been so evident in recent years in Anticosti. However, the discrepancies between the two indicators are still marked in Estuary. The research surveys are multi-disciplinary surveys and **YOUR FUTURE. OUR FOCUS**.

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therefore station positions cannot be easily changed, but there are plans for future industry surveys to cover a wider geographical range of stations (Hugo Bourdages, DFO Science, pers. comm.). Current DFO Science research suggests that there is some connectivity between the shrimp populations in the Estuary and Sept-Iles areas and that it may be appropriate to combine the surveys for the two areas in future. DFO Science confirmed that future work will also consider whether the method of combining the commercial fishery indices and survey indices into a single main stock indicator remains appropriate. As with stocks of *Pandalus borealis* in other geographical areas, recruitment patterns may be influenced more by environmental factors and predator abundance than stock size, although distribution of shrimp stocks is still influenced by depth and possibly by sediments more than by temperature. DFO Science reiterated that in recent years, there have been higher temperatures in the Gulf of St. Lawrence and increased abundance of redfish, and therefore it is critical to re-evaluate whether the reference points remain appropriate. DFO Science confirmed that there is ongoing research looking at this issue and that a workshop has been organised in December 2021 to review approaches to the issue across all Canadian stocks of *Pandalus borealis*.



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# Figure 4. Standardized catch per unit effort (CPUE) in the four SFAs including 95% confidence intervals. (Source: DFO Science)



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Figure 5. Female Shrimp biomass index from the research survey (confidence interval 95%) for all SFAs. For Estuary, the open circles represent results obtained by integrating strata from the shallow portion that were added in 2008. (Source: DFO Science)



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Figure 6. Index of the exploitation rate by fishing area and by year. The solid horizontal line represents the 1990-2015 mean  $\pm$  0.5 standard deviation. (Note that data from 2018 are not included in the 2018 stock update). (Source: DFO Science)

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Figure 7. Standardised indices of catch per unit effort of male and female shrimp in the commercial fishery (blue) and abundance of male and female shrimp from the DFO survey (red) by fishing area and year. (Source: DFO, 2021a)

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Figure 8. Main stock status indicator by year and limit (LRP) and upper (USR) stock reference points for each area. (Source: DFO, 2021a)



# Figure 9. Biomass indices (kg per trawling tow) estimated during the DFO survey in the northern Gulf of St. Lawrence for invertebrates and fish. (Source: DFO, 2020a)

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The current research on developing a risk-based approach to assessing status of shrimp stocks was discussed at the most recent regional peer review meeting (DFO, 2020b), an extract from which is reproduced below:

"Research has been undertaken to examine the feasibility of using a risk-based approach to incorporate the effects of the observed ecosystem changes in the assessment of shrimp stocks and the formulation of the science advice. The approach presented by Marie-Julie Roux and Daniel Duplisea is based on analysis and risk management methods. The ecosystem changes influence the uncertainty associated with the data acquisition process (observation uncertainty) and the uncertainty associated with stock dynamics (process uncertainty). This approach makes it possible to assess resource status and to condition harvest advice by considering the state of the environment (favourable or unfavourable). A risk-based approach can be used with different levels of knowledge and data availability. For example, Marie-Julie Roux described a semi- quantitative method that can be used to condition the harvest control rules so as to reduce removals where environmental conditions are unfavourable. As another example, Daniel Duplisea presented an approach based on the empirical relationship between shrimp stock productivity and certain environmental variables (e.g., bottom temperatures, predation), outlining the situations in which this approach would be useful."

An additional source of uncertainty in the assessment is that the four indices used to calculate the main stock indicator are measures of numbers of shrimp and do not take shrimp size into account, but the average size of male and female shrimp in both the commercial fishery data and the DFO research survey data has been declining in all four stocks since the early 1990s. DFO (2020a) states that "Given the divergence between these two types of indices and the decrease in average shrimp size, it is pertinent to ask whether the main indicator still accurately reflects the stock status." However, at the site visit, the Clients reported that the counts per pound had declined between 2019 and 2021 suggesting that average size of shrimps in the catch had increased.

In relation to scoring P1 Performance Indicators (PIs), there has been no change in stock status for the four UoAs since the publication of the Public Certification Report (PCR) (Knapman and Addison, 2020). For UoC 1 (Esquiman), UoC 2 (Anticosti) and UoC 4 (Estuary), the main stock indicator remains at or above the USR, and therefore there is no change to the score for these UoCs for PI 1.1.1. The main stock indicator for UoC 3 (Sept-Iles) has increased in the last two years such that it is at or just below the USR, but it has recently been in the cautious zone for 3-4 years, and therefore despite the recent increase it cannot be concluded that the stock in UoC 3 is at or fluctuating around a level consistent with MSY, and therefore the SG 80 for PI 1.1.1b is still not met.

Following the annual stock assessment updates, projected harvests are calculated by DFO Science for each SFA based on the harvest guidelines which have been established according to the main stock indicator and its position relative to the limit reference point (LRP) and the upper stock reference point (USR), i.e., whether the stock is in the healthy, cautious or critical zone in compliance with the precautionary approach. According to the guidelines, the projected harvests for 2020 are 1,524 tonnes for Estuary, 5,123 tonnes for Sept-Iles, 6,311 tonnes for Anticosti, and 6,142 tonnes for Esquiman (DFO, 2020a). This information is provided to Resource Management and, in consultation with the Estuary and Gulf of St Lawrence Shrimp Advisory Committee (EGSAC), the TACs for the following year are set. Following the 2020 assessment, the 2020 TACs were increased by 154% in the Estuary and by 20% in Sept-Iles. The TAC was reduced by 8% in Anticosti and it remained unchanged in Esquiman. These variations represent a total increase of 4% for the Estuary and Gulf of St. Lawrence fishery. The Audit Team queried the very large increase in TAC for Estuary given the lack of coherence between the commercial fisheries and survey indices. DFO noted that that a precautionary approach had been taken in that the increase in TAC was substantially less that the estimated increase in stock abundance. For the four stocks, preliminary landings for 2020 were 17,881 tonnes, or more than 99% of the TAC of 17,999 tonnes (DFO, 2021a).

#### 4.2.7 Updates on ecological background information

#### Bycatch composition

In the PCR for the fishery (Knapman and Addison, 2020), the Assessment Team reviewed annual summary reports of bycatches provided in DFO stock assessment reports and science updates based on observer data, and also raw catch composition data from the observer programme kindly provided by Hugo Bourdages, DFO Science, Mont-Joli.

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Bycatches estimated from the observer programme were previously very low averaging around 1.8% of the total shrimp landings, but after 2013 increased significantly above the long-term average and reached a peak of 1.500 tonnes in 2016 equivalent to approximately 5% of the shrimp landing (Figure 10). Bycatches have since declined and were 652 tonnes and 653 tonnes in 2018 and 2019 respectively (Bourdages et al., 2020). Despite the significant increase in bycatches in the last few years, current average overall bycatch levels of less than 5% across the four SFAs continue to represent a very clean catch. In 2019, the main species of bycatch were, in order of importance, Greenland halibut, redfish, capelin, witch flounder, herring, white barracudina, and American plaice (Bourdages et al., 2020) demonstrating that there had been no changes in bycatch composition since bycatch data were analysed for the PCR (Knapman and Addison, 2020). The upward trend that began in 2013 can be explained by the increase in catches of small redfish as a result of the strong redfish recruitment observed in recent years, although redfish catches have been declining since 2018 because the fish are now larger and cannot fit through the openings in the Nordmore grate, and there is less overlap between the shrimp and redfish distribution now that the strong redfish year classes are growing in size. In 2019, bycatches of Greenland halibut catches increased significantly particularly in the Sept-Iles area, and witch flounder bycatches have also been increasing since 2016. The 2017 and 2018 Greenland halibut cohorts and the 2016 witch flounder cohort were strong and the fish were of a size that could be caught by shrimpers in 2019, as they were too small to be excluded by the Nordmore grate (Bourdages et al., 2020). Despite these increases in bycatches, total catches estimated per species in these bycatches represent less than 1% of the estimate of their respective biomass in the DFO trawl survey except for Greenland halibut in 2019 (1.2%) and witch flounder since 2016 (>1%) (Bourdages et al., 2020).

Since the publication of the PCR, there has been no change in the stock status of redfish in Units 1 and 2 with the *Sebastes mentella* stock in the healthy zone above the USR, and the *S. fasciatus* stock in the cautious zone between the LRP and USR (DFO, 2020c). Similarly, there has been no change in the stock status of Greenland halibut since the publication of the PCR with the annual biomass indicator in 2020 in the cautious zone midway between the LRP and the USR (DFO, 2021b).

Catches of other shrimp species during commercial fishing activities are very low compared to Northern shrimp catches. Two shrimp species are common in catches: white shrimp (*Pasiphaea multidentata*) and the striped pink or Aesop shrimp (*Pandalus montagui*). Owing to the physical similarities and appearance of *P. borealis* and *P. montagui*, they are inseparable during the normal fishing operation and practically inseparable during processing. MSC refer to these species or stocks as "Inseparable or Practically Inseparable (IPI)". The most recent data from sampling of landings shows that *P. montagui* comprised 0.014% and 0.023% of the total landings in the fishery in 2018 and 2019 respectively (Bourdages *et al.*, 2020). As the quantities of *P. montagui* remain < 2% of the total catch, they are not considered to create a significant impact on the IPI stock as a whole. Following a variation request accepted by the MSC, the IPI status of *P. montagui* is recognised and is exempt from MSC requirements as set out in Annex PA of MSC FCP v 2.2, and therefore *P. montagui* can continue to enter into certified chains of custody with *P. borealis*.



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Figure 10. Ratio (%) of the bycatch of all species on the northern shrimp catch by year and by fishing area. Solid line indicates the average for the years 2000-2019. (Source: Bourdages *et al.*, 2020)

#### Endangered, Threatened and Protected (ETP) species

The following list of species are designated as ETP species in the Estuary and Gulf of St. Lawrence: Spotted Wolffish, Northern Wolffish, Leatherback Turtle, Blue Whale, North Atlantic Right Whale (NARW), Fin Whale, Beluga Whale and Great White Shark. There have been very rare occurrences of Spotted and Northern Wolffish caught in the shrimp trawls, but at the site visit DFO Science reported that no interactions have been recorded in recent years. There have been no reports of any bycatches or entanglements of any whale species or Leatherback Turtles in the shrimp trawl fishery, and no bycatches of Great White Shark. Whilst previous bycatch analysis indicates that Species at Risk Act (SARA) listed species are not currently a concern for the shrimp trawl fishery in the Estuary and Gulf of St. Lawrence, there has been focus on the shrimp trawl fishery because of recent observed entanglements of NARW with snow crab traps in the Southern Gulf of St. Lawrence. However, there are no recorded interactions of NARW with the shrimp trawl fishery or indeed any trawl fisheries in the Gulf of St. Lawrence and the geographical distribution of the shrimp fishery does not overlap with NARW sightings. DFO has introduced a suite of fisheries measures and initiatives in Atlantic Canada and Quebec to prevent entanglements of NARW in fishing gear and has been updating their approach regularly. The background to DFO's approach to prevent entanglements of NARW and the DFO fishery management measures in place for 2021 can be found on the DFO website as follows:

https://tc.canada.ca/en/backgrounder-protecting-north-atlantic-right-whales-0

https://www.dfo-mpo.gc.ca/fisheries-peches/commercial-commerciale/atl-arc/narw-bnan/management-gestion-eng.html

#### 4.2.8 Traceability

There were no reported changes in the fishery that would affect the traceability of certified Northern shrimp.

### 4.3 Version details

#### Table 4. Fisheries program documents versions

Document	Version number
MSC Fisheries Certification Process	Version 2.2
MSC Fisheries Standard	Version 2.01
MSC General Certification Requirements	Version 2.4.1
MSC Surveillance Reporting Template	Version 2.1

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# 5 Results

# 5.1 Surveillance results overview

### 5.1.1 Summary of conditions

#### Table 5. Summary of conditions

Condition number	Condition	Performance Indicator (PI)	Status	PI original score	PI revised score
1-4 (one per UoA)	<ul> <li>By the fourth annual audit the client shall provide evidence that there is:</li> <li>A partial strategy in place that is expected to achieve the Habitat Outcome 80 level of performance or above.</li> <li>Some objective basis for confidence that the measures/partial strategy will work, based on information directly about the UoA and/or habitats involved.</li> <li>Some quantitative evidence that the measures/partial strategy is being implemented successfully.</li> <li>Some quantitative evidence that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.</li> </ul>	PI 2.4.2	Closed	60	80
5-8 (One per UoA)	By the third annual audit the client shall provide evidence that the Gulf of St. Lawrence Shrimp Trawl Fishery management system is subject to regular internal and occasional external review.	PI 3.2.4	Ahead of target	75	NA

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

#### Table 6. Total Allowable Catch (TAC) and catch data: UoA 1 Esquiman (SFA 8)

TAC	Year	2020	Amount	5,959 tonnes
UoA share of TAC	Year	2020	Amount	5,959 tonnes
UoC share of TAC	Year	2020	Amount	5,959 tonnes
Total green weight catch by UoC	Year (most recent)	2020	Amount	5,992 tonnes
Total green weight catch by UoC	Year (second most recent)	2019	Amount	5,994 tonnes

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#### Table 7. Total Allowable Catch (TAC) and catch data: UoA 2 Anticosti (SFA 9)

TAC	Year	2020	Amount	6,311 tonnes
UoA share of TAC	Year	2020	Amount	6,311 tonnes
UoC share of TAC	Year	2020	Amount	6,311 tonnes
Total green weight catch by UoC	Year (most recent)	2020	Amount	6,283 tonnes
Total green weight catch by UoC	Year (second most recent)	2019	Amount	6,722 tonnes

#### Table 8. Total Allowable Catch (TAC) and catch data: UoA 3 Sept-Iles (SFA 10)

TAC	Year	2020	Amount	5,123 tonnes
UoA share of TAC	Year	2020	Amount	5,123 tonnes
UoC share of TAC	Year	2020	Amount	5,123 tonnes
Total green weight catch by UoC	Year (most recent)	2020	Amount	5,092 tonnes
Total green weight catch by UoC	Year (second most recent)	2019	Amount	3,999 tonnes

#### Table 9. Total Allowable Catch (TAC) and catch data: UoA 4 Estuary (SFA 12)

TAC	Year	2020	Amount	606 tonnes
UoA share of TAC	Year	2020	Amount	606 tonnes
UoC share of TAC	Year	2020	Amount	606 tonnes
Total green weight catch by UoC	Year (most recent)	2020	Amount	570 tonnes
Total green weight catch by UoC	Year (second most recent)	2019	Amount	199 tonnes

#### 5.1.3 Recommendations

A new non-binding recommendation was made by the Audit Team at this first audit: Within the remaining certification period (i.e. the existing certificate is valid until 15<sup>th</sup> October 2025) it is recommended that the client provide a geospatial analysis of the fishery footprint using more recent data than the 2005 – 2014 period used by Koen-Alonso *et al* (2018) and provide an updated estimate of the overlap with SBA/VME.

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# 5.2 Re-scoring Performance Indicators

Conditions 1-4 (PI 2.4.2) have been re-scored at this surveillance audit and so the overall Principle 2 score has been amended:

#### Table 10. Revised summary of Performance Indicator level scores

Dringinle	Component		Performance Indicator (PI)		UoC Score			
Principie	Component		Performance indicator (PI)	1	2	3	4	
	Outcome	1.1.1	Stock status	80	80	70	80	
	Outcome	1.1.2	Stock rebuilding	N/A	N/A	80	N/A	
1		1.2.1	Harvest strategy	95	95	95	95	
I	Managamont	1.2.2	Harvest control rules & tools	80	80	80	80	
	Management	1.2.3	Information & monitoring	90	90	90	90	
		1.2.4	Assessment of stock status	85	85	85	85	
	Deira en l	2.1.1	Outcome	100	100	95	95	
	Primary	2.1.2	Management	95	95	95	95	
	300003	2.1.3	Information	100	100	95	100	
	Coordon	2.2.1	Outcome	80	80	80	80	
	Secondary	2.2.2	Management	95	90	90	90	
	species	2.2.3	Information	100	95	95	90	
	ETP species	2.3.1	Outcome	100	100	100	100	
2		2.3.2	Management	90	90	90	90	
		2.3.3	Information	80	80	80	80	
	Habitats	2.4.1	Outcome	95	95	95	95	
		2.4.2	Management	80	80	80	80	
		2.4.3	Information	80	80	80	80	
		2.5.1	Outcome	90	90	90	90	
	Ecosystem	2.5.2	Management	85	85	85	85	
		2.5.3	Information	90	90	90	90	
		3.1.1	Legal & customary framework	100	100	100	100	
	Governance and	3.1.2	Consultation, roles & responsibilities	95	95	95	95	
	policy	3.1.3	Long term objectives	100	100	100	100	
2		3.2.1	Fishery specific objectives	90	90	90	90	
3	Fishery specific	3.2.2	Decision making processes	85	85	85	85	
	management	3.2.3	Compliance & enforcement	85	85	85	85	
	system	3.2.4	Monitoring & management performance evaluation	70	70	70	70	

#### Table 11. Revised Principle level scores

Principle Scores					
Principle	UoC 1	UoC 2	UoC 3	UoC 4	
Principle 1 – Target Species	85.0	85.0	83.3	85.0	
Principle 2 – Ecosystem	<del>89.3-</del> 90.7	<del>88.7</del> 90	<del>88.0</del> 89.3	<del>88.0</del> 89.3	
Principle 3 – Management System	90.4	90.4	90.4	90.4	

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# 5.3 Conditions

### 5.3.1 Closed Conditions

Within the last 18 months, the Audit Team members have worked on a number of MSC fisheries assessments and audits within the Atlantic region. It was noted that despite the same policy and regulatory framework, extensive mapping and modelling work and the introduction of areas closed to all fishing methods that may contact the seabed (e.g., DFO 2009a, DFO 2015, Beazley *et al* 2016, Guijarro *et al* 2016, Kenchington *et al* 2016, Murillo *et al* 2016, DFO 2017a; DFO 2017b, DFO 2020d, Koen-Alonso *et al* 2018), there have been different approaches and outcomes in the evaluation of PI 2.4.2. As a result, discussions were held between team members and a consensus was achieved. This has caused the Audit Team to re-evaluate the scoring of PI 2.4.2 for the Gulf of St. Lawrence Northern Shrimp Fishery.

In so doing, the Audit Team have taken account of an MSC derogation which was issued in the period between the reassessment and this first audit and applies to scoring issue 2.4.2a. The derogation applies to scoring issue 2.4.2a for any certified fishery or fishery undergoing initial assessment, surveillance audit, scope extension, expedited audit, or reassessment against v2.0 or v2.01 of the Fisheries Standard before or after 5<sup>th</sup> November 2020.

The objective of the derogation is: If a fishery has a partial management strategy in place that protects and avoids vulnerable marine ecosystems (VMEs) and potential VMEs, then commonly accepted move-on rules are not required (at the SG 60 level).

The derogation applies until fisheries are assessed against the next version of the MSC Fisheries Standard.

The derogation requirements are as follows:

- Eligibility The CAB shall only apply the derogation when assessing and scoring PI 2.4.2 scoring issue 'a' for UoAs that encounter VMEs or potential VMEs.
- Derogation When scoring PI 2.4.2 the CAB shall assess the UoA at the SG80 level for scoring issue 'a' first.
- If SG80 for scoring issue 'a' is met, including complying with requirements under SA3.14.2.2 and associated guidance GSA3.14.2.2, the CAB shall not assess the UoA at the SG60 level for scoring issue 'a'.
- The CAB shall follow FCP 7.17.4, 7.17.7.2, 7.17.7.3, 7.17.9 and 7.17.10 the CAB shall consider SG60 for PI 2.4.2 scoring issue 'a' as met.
- The CAB shall report the application of this derogation in the scoring rationale for PI 2.4.2 scoring issue 'a'.
- If SG80 is not met the CAB shall assess the UoA at the SG60 level as per FCP 7.17, SA3.14.2.3, GSA3.14.2.3 and the accompanying interpretation.

In light of the above, the following sets out the revised evaluation and rescoring of PI 2.4.2 for the Gulf of St. Lawrence Northern Shrimp Fishery. Original justification text which is now redundant has been crossed out and new text inserted as <u>blue text</u>.

#### Table 12. Revised evaluation table for PI 2.4.2 for the Gulf of St. Lawrence Northern Shrimp Fishery

PI 2.4	.2	There is a strategy in place that is designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats.			
Scoring Issue SG 60		SG 60	SG 80	SG 100	
а	Manage	ment strategy in place			
	Guide post	There are <b>measures</b> in place, if necessary, that are expected to achieve the Habitat Outcome 80 level of performance.	There is a <b>partial strategy</b> in place, if necessary, that is expected to achieve the Habitat Outcome 80 level of performance or above.	There is a <b>strategy</b> in place for managing the impact of all MSC UoAs/non-MSC fisheries on habitats.	
	Met?	All UoCs – ¥ Not scored	All UoCs – <del>N</del> Y	All UoCs - N	

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Justifi	The MSC FCR v 2.0, SA3.14.2.3, states that, "In scoring issue (a) at the SG60 level, "measures" for
cation	a. Requirements to comply with management measures to protect VMEs (e.g., designation of closed areas)
	b. Implementation by the UoA of precautionary measures to avoid encounters with VMEs, based on commonly accepted move-on rules.
	MSC-guidance with respect to scoring issue (a) at the SG 60 level (GSA3.14.2.3) states that, "At the SG60 level, commonly accepted move-on rules can be used as "Measures". These may be rules that are used for the same gear in other situations or in other areas of the world but that have not been specifically designed for the UoA's gear and/or encountered VMEs."
	SA3.14.2.2, states that, "In scoring issue (a) at the SG80 level, the "partial strategy" for a UoA that encounters VMEs shall include, at least, the following points: a. Requirements to comply with management measures to protect VMEs (e.g., designation of closed areas).
	b. Implementation by the UoA of precautionary measures to avoid encounters with VMEs, such as scientifically based, gear- and habitat-specific move-on rules or local area closures to avoid potential serious or irreversible harm on VMEs.
	MSC guidance with respect to scoring issue (a) at the SG 80 level (GSA3.14.2.2) states that, "In the absence of a comprehensive management plan that takes all fishing activities into account, MSC UoAs cannot necessarily assume that their impacts, while unlikely to cause serious and irreversible harm on their own (and therefore potentially meeting the SG80 level under the outcome PI 2.4.1), will not contribute to a cumulative impact that is serious and irreversible to VMEs.
	Therefore, the MSC will expect these MSC UoAs to take appropriate action within measures/strategies to avoid impacting VMEs. Given the complexity of undertaking an impact assessment on VMEs, the MSC expects that most UoAs will choose to apply the simpler approach of avoiding VMEs.
	A common precautionary response to the presence of VMEs is to develop avoidance measures (e.g., move-on rules) with the intention that the UoA is able to avoid any further encounter with VMEs or potential VMEs. This response ensures that serious and irreversible harm is avoided."
	The MSC FCR v 2.0, SA3.14.2.1, states that, "In scoring issue (a) at the SG100 level, the "strategy" for a UoA that encounters VMEs shall include a comprehensive management plan that is supported by a comprehensive impact assessment that determines that all fishing activities will not cause serious or irreversible harm to VMEs"
	MSC guidance with respect to scoring issue (a) at the SG 100 level (GSA3.14.2.1) states that, "UoAs may qualify for a higher score on this PI if they have a comprehensive management plan that is supported by a comprehensive impact assessment that determines that all fishing activities will not cause serious or irreversible harm to VMEs Some damage to VMEs is acceptable as long as overall serious or irreversible harm to structure and function is avoided. If a strategy chooses not to afford complete protection to all VMEs in an area, this decision should include an impact assessment to demonstrate that serious or irreversible harm is avoided and that VMEs are not impacted more than 20% of their unimpacted levels."
	Habitat management in Canadian waters is based on the Policy for Managing Impact of Fishing on Sensitive Benthic Areas (DFO 2009a). The policy outlines steps for both historically fished (defined as areas with a history of fishing by any gear type whose ecosystem impacts are considered similar to the potential impacts of a gear type being proposed for fishing) and frontier areas (defined as areas with no history of fishing in Canadian waters, specifically waters >2,000 m depth or areas in the Arctic where there is little information on benthic features).
	In historically fished areas, management measures to address potential impacts may include:
	Gear restrictions or modifications or substitutions to reduce contact with the benthos and seafloor.

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<ul> <li>Effort reduction.</li> <li>Spatial management of effort (taking into account the spatial distribution of benthic habitat and communities).</li> <li>Partial or total time and area closures to all or specific fishing gear; and</li> <li>Higher levels of monitoring, control, and surveillance, including enhanced data collection and reporting, vessel monitoring and at sea observer requirements.</li> </ul>
As part of meeting a previous condition of certification related to this PI and SI, in 2015, the client conducted a preliminary assessment of the potential level of risk to sensitive benthic habitats and species from shrimp trawling. Research showed that the cumulative impact of shrimp trawling has likely been low on sea pen fields since the depths targeted for fishing (200 – 300 m) are not optimal depths for the establishment of sea pen fields (> 300 m). Sponges are found in a wide range of depths and regular fishing activity may have affected their distribution, although high concentrations of sponges have been observed in areas once intensively fished. The assessment concluded that the risk level was moderate to high and that the shrimp fishery overlapped with areas where soft corals and sponges are found. As a result, the client concluded that a "partial strategy1" was necessary. The outcome of this work coincided with the development and implementation of DFOs Québec Region Working Group on fishery impacts on sponge and coral areas and new work on the distribution of corals and sponges (Murillo <i>et al</i> , 2016; Kenchington et al, 2016).
Given the overlap between the client's response to the MSC condition of certification and the development of the DFO Coral and Sponge Conservation Strategy and supporting research, the combined work resulted in a habitat partial strategy being adopted by EGSAC and included in the updated IFMP (DFO, 2018a) as an Appendix.
In 2017, following collaboration between DFO Québec, Gulf and the Newfoundland and Labrador regions and extensive consultation with the fishing industry on 20 areas where significant concentrations of soft corals and sponges had been identified (https://www.dfo-mpo.gc.ca/oceans/ceccsr-cerceef/egsl-eng.html), 11 coral and sponge conservation areas were established, resulting in the prohibition of all bottom contacting fishing gear within them. DFO have confirmed that the closed areas are monitored by VMS and infringements by the shrimp fleet have not been an issue (Sébastien Beauchamp, C&P Quebec Region, pers. comm.).
Recent published research (DFO, 2017a, Koen-Alonso <i>et al</i> , 2018) shows that the shrimp trawl fishery overlaps with sponge and sea pen SBAs/VMEs impacting approximately 8.4% and 12.7% of the estimated sponge and sea pen SBA/VME, respectively, within the Gulf of St. Lawrence, bioregion.
By comparing the 11 coral and sponge conservation areas and the overlap of the shrimp trawl fishery, it appears that the closures do not coincide with where the shrimp trawl fishery generally operates and so the potential overlap of the trawl fishery with some SBAs/VMEs is still possible.
As a direct result of the requirements set out in MSC FCR v2.0 to ensure protection and minimal impact of the UoA on VMEs, and, in the absence of DFO management requirements to have scientific or precautionary measures in place to avoid encounters with SBAs/VMEs, the fishery client has developed with the support of the shrimp harvesters, "Move-on Protocols". These have been based on the NAFO developed and implemented "move-on" rule as set out in Article 22, of the NAFO Conservation and Enforcement Measures "Provisions in case of an encounter with VME indicator species" (NAFO, 2019).
The "Gulf of St. Lawrence Northern Shrimp Trawl Fishery Move-on Protocols" became effective as of August 2019. In summary, they require that if, in 1 tow: 7 Kgs of sea pens; and/or 60 Kgs of other live coral; and/or 300 Kgs of sponges are caught then the vessel should cease fishing and move at

<sup>1</sup> In MSC terms, a "partial strategy" is represents a cohesive arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome and an awareness of the need to change the measures should they cease to be effective. It may not have been designed to manage the impact on that component specifically

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		least 2 nautical miles from their location before re-commencing fishing. The encounter is also recorded and forwarded to the client representative.				
		As a result, of the above, it is concluded that the SG 80 is met as there is a partial strategy in place that is expected to achieve the Habitat Outcome 80 level of performance.				
		It is noted that, in accordance 60 is not scored.	e with the MSC's derogation on sco	oring this SI, if SG 80 is met then SG		
		The SG 100 is not met as UoAs/non-MSC fisheries or	there is not a strategy in place for habitats.	r managing the impact of all MSC		
		A recommendation is made is valid until 15 <sup>th</sup> October 20 more recent data than the 2 updated estimate of the over	that within the remaining certification 25) the client provide a geo-spatial a 2005 – 2014 period used by Koen- erlap with SBA/VME.	on period (i.e. the existing certificate analysis of the fishery footprint using Alonso <i>et al</i> (2018) and provide an		
b	Manager	ment strategy evaluation				
	Guide post	The measures are <b>considered likely</b> to work, based on plausible argument (e.g. general experience, theory, or comparison with similar UoAs/habitats).	There is some objective basis for confidence that the measures/partial strategy will work, based on information directly about the UoA and/or habitats involved.	Testing supports high confidence that the partial strategy/strategy will work, based on information directly about the UoA and/or habitats involved.		
	Met?	All UoCs - Y	All UoCs - <del>N</del> Y	All UoCs - N		
	Justifi cation	<ul> <li>The following lists the habitat information that is known or being gathered about the UoA and the actions that are being taken:</li> <li>Surficial sediments have been identified and mapped.</li> <li>Geospatial mapping of habitats and fishing effort (Koen-Alonso <i>et al</i>, 2018).</li> <li>Implementation of DFOs Coral and Sponge Conservation Strategy for Eastern Canada and protected areas network in the Gulf of St Lawrence;</li> <li>The identification and delineation of SBAs (which are considered to be the equivalent of VMEs) (DFO, 2017e) (on-going); and</li> <li>Work on the development of guidance on the protection of SBAs (e.g. Koen-Alonso <i>et al</i>. 2018, DFO, 2017e) (on-going).</li> <li>The above indicates a stepwise approach toward the development and implementation of the partial strategy/strategy. The approach is considered likely to work based on the general experience and comparison to areas closed to all seabed contacting fishing gears in Atlantic Canada and elsewhere around the world. As a result, the SG 60 is met.</li> </ul>				
		The assessment team rec Conservation Strategy for E going process and measure In the meantime, the new "m on a scientific basis and so Therefore, the SG 80 is not	ognises that the implementation of Eastern Canada (DFO, 2015) and S s to avoid encounters with identified nove-on protocols" have not yet beer there is no objective basis for con met.	of the of DFOs Coral and Sponge CoBA Policy (DFO, 2009b) is an on- ISBAs/VMEs are likely in the future. In tested in the fishery, nor developed fidence that the measure will work.		
		DFO have confirmed that th objective basis for confident	e shrimp fleet are adhering to the cl ce that the partial strategy will work	osed areas, therefore there is some and so the SG 80 is met.		
		The SG 100 is not met as the confidence that the partial s	there was no evidence of direct tes trategy will work.	ting within the UoA to support high		

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С	Management strategy implementation			
	Guide post		There is <b>some quantitative</b> <b>evidence</b> that the measures/partial strategy is being implemented successfully.	There is <b>clear quantitative</b> <b>evidence</b> that the partial strategy/strategy is being implemented successfully and is achieving its objective, as outlined in scoring issue (a).
	Met?		All UoCs – <del>N</del> Y	All UoCs - N
	Justifi cation	The gathering and presentat spatial mapping of habitats areas (DFO 2017b) ; and, Policy on Managing the Ir publication on the delineatio Koen Alonso <i>et al</i> , 2018) a provides excellent quantitati to avoid encounters with VM	tion of information to support the Hab and fishing intensity; the designatio the on-going work on informing an npacts of Fishing on Sensitive Be on of SBAs and overlap of fishing w and the protection of coral and spor- ve evidence. However, in the absen- des the SG 80 is not met. Therefore	bitat Management Strategy, i.e. geo- n of coral and sponge conservation d developing the application of the enthic Areas, e.g. the review and vith SBAs (Kenchington <i>et al</i> , 2016; nge seabed habitats (DFO, 2017b) are of measures or a partial strategy e, the SG 80 is met.
		While there is evidence tha areas (Sébastien Beauchar not yet been conducted to s not met.	t the shrimp fishing fleet, through V np, C&P Quebec Region, pers. cor show that the partial strategy is mee	'MS data, is adhering to the closed mm.) further habitat monitoring has ting its objectives and so SG 100 is
d	Complia protect	nce with management requ VMEs	irements and other MSC UoAs'/n	on-MSC fisheries' measures to
	Guide post	There is <b>qualitative</b> <b>evidence</b> that the UoA complies with its management requirements to protect VMEs.	There is <b>some quantitative</b> <b>evidence</b> that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.	There is <b>clear quantitative</b> <b>evidence</b> that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.
	Met?	All UoCs - Y	All UoCs – <del>N</del> Y	All UoCs - N
	Justifi cation	The UoAs approach to mana and Sponge Conservation vessels. It is noted that this	aging the protection of VMEs has be Areas where fishing with bottom co prohibition applies to all MSC UoAs	en to identify and establish 11 Coral ontacting gears is prohibited by all and non-MSC fisheries.
		Monitoring to ensure that r through the requirement to h of all trips). The VMS report of these areas C&P will co surveillance and at-sea patr Beauchamp, C&P Quebec F	no shrimp vessels encroach and finave operating VMS and carry obsets the vessel position every 30 minutes the vessel to ensure they more than the vessel to ensure the vessels for the vessel to ensure the vessels to ensure the vessel to ensure the vessel to ensure the vessel to ensure the vessels for the vessel to ensure the vessels to ensure the vessels for the vessel to ensure the vessels to ensure the	sh within these areas is facilitated rvers when required (a target of 5% utes. If a vessel is approaching one ove away. C&P will also use aerial or fishing in these areas (Sébastien
		It is noted that there has been in the Gulf of St. Lawrence (NARW), particularly in the indication of any non-comple shrimp fleet (Sébastien Bean that there is some quantitation and that the same requirem	en a higher level of active monitoring since 2018 as a result of the higher southern Gulf of St. Lawrence. Du iance with the spatial boundaries es uchamp, C&P Quebec Region, pers ive evidence that the UoA complies ents are applied to all MSC UoAs a	g of fishing and other vessel activity level of North Atlantic Right Whale ring this period, there has been no stablished to protect habitats by the . comm.). Therefore, it is considered with its management requirements nd non-MSC fisheries.

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		In addition to closed areas to protect VMEs, MSC requirements state that, to achieve a conditional minimum for this PI, "precautionary measure to avoid encounters with VMEs, based on commonly accepted move-on rules", need to be in place.
		While the new "move-on protocols" have not yet been tested, there is some qualitative evidence to show vessels do not fish in protected areas, thereby, complying with management requirements to protect VMEs and, therefore, meeting the SG 60.
		Quantative evidence that the UoA complies with the new move-on protocols is not yet available, and so the SG 80 is not met.
		Since multiple fisheries may operate in the same area, the net impact on a given VME will result from the cumulative effects from all fisheries interacting within it. MSC FS v 2.0 SA3.14.3 requires that the cumulative impact of MSC certified fisheries on VMEs is taken into account at the SG 80 and 100.
		There are a number of other fisheries operating in the Gulf of St. Lawrence that have been MSC certified: AQIP Gulf of St Lawrence Greenland Halibut Fixed Gear Fishery, Gaspesie Lobster Trap Fishery, Iles-de-la-Madeleine Lobster, AQIP Snow Crab Trap and Maritime Canada Inshore Lobster Trap. All of these fisheries are fixed gears and, as such, are considered to have a low impact on seabed habitats. Furthermore, as indicated above, all of these seabed contacting gears are prohibited to operate in the 11 coral and sponge conservation areas. Therefore, the cumulative effect of these MSC certified fisheries are considered highly unlikely to have a serious or irreversible effect on the VME habitats. Therefore, the SG 80 is met.
		The SG 100 is not met as up to date information was not available to verify and conclude that clear quantitative evidence that the UoA complies with its management requirements.
		DFO 2009a. Policy to Manage the Impacts of Fishing on Sensitive Benthic Areas <u>http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/benthi-back-fiche-eng.htm</u>
		DFO 2017a. Delineation of Significant Areas of Coldwater Corals and Sponge-Dominated Communities in Canada's Atlantic and Eastern Arctic Marine Waters and their Overlap with Fishing Activity. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2017/007. <u>http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2017/2017_007-eng.html</u>
		DFO 2017b Coral and Sponge Conservation Measures in the Estuary and Gulf of St. Lawrence https://www.dfo-mpo.gc.ca/oceans/ceccsr-cerceef/egsl-eng.html
Deferences	DFO 2018, Integrated Fishery Management Plan for the Northern Shrimp in the Estuary and Gulf of St. Lawrence (Areas 8, 9, 10 and 12) ( <i>Pandalus borealis</i> ) https://www.dfo-mpo.gc.ca/fisheries-peches/ifmp-gmp/shrimp-crevette/shrimp-crevette-2018-eng.html	
iterer		DFO, 2015. Coral and Sponge Strategy for Eastern Canada. <u>http://www.dfo-mpo.gc.ca/oceans/publications/cs-ce/index-eng.html</u>
		Kenchington, E., Beazley, L., Lirette, C., Murillo, F.J., Guijarro, J., Wareham, V., Gilkinson, K., Koen Alonso, M., Benoît, H., Bourdages, H., Sainte-Marie, B., Treble, M., and T. Siferd. 2016. Delineation of coral and sponge significant benthic areas in Eastern Canada using kernel density analyses and species distribution models. DFO Can. Sci. Advis. Sec. Res. Doc. 2016/093. vi + 178 p. <u>http://waves-vagues.dfo-mpo.gc.ca/Library/40577806.pdf</u>
		Koen-Alonso, M. C. Favaro, N. Ollerhead, H. Benoît H. Bourdages, B. Sainte-Marie, M. Treble, K. Hedges; E. Kenchington, C. Lirette, M. King S. Coffen-Smout, and J. Murill, 2018. Analysis of the overlap between fishing effort and Significant Benthic Areas in Canada's Atlantic and Eastern Arctic marine waters. Canadian Science Advisory Secretariat (CSAS) Res. Doc. 2018/015 http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2018/2018_016-eng.html

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	Murillo, F.J., Kenchington, E., Beazley, L., Lirette, C., Knudby, A., Guijarro, J., Benoît, H., Bourdages, H., Sainte-Marie, B. 2016. Distribution Modelling of Sea Pens, Sponges, Stalked Tunicates and Soft Corals from Research Vessel Survey Data in the Gulf of St. Lawrence for Use in the Identification of Significant Benthic Areas. Can. Tech. Rep. Fish. Aquat. Sci. 3170: vi + 132 p. <u>http://waves-vagues.dfo-mpo.gc.ca/Library/364125.pdf</u> NAFO (2019). NAFO Conservation and Enforcement Measures, 2019 https://www.nafo.int/Portals/0/PDFs/COM/2019/comdoc19-01.pdf		
OVERALL PERFORMANCE INDICATOR SCORE:		UoC 1 – SFA 8 (Esquiman)	<del>60</del> 80
		UoC 2 – SFA 9 (Anticosti)	<del>60</del> 80
		UoC 3 – SFA 10 (Sept Iles)	<del>60</del> 80
		UoC 4 – SFA 12 (Estuary)	<del>60</del> 80
CONDITION NUMBER (if relevant):		UoC 1 – SFA 8 (Esquiman)	1-NA
		UoC 2 – SFA 9 (Anticosti)	<del>2</del> NA
		UoC 3 – SFA 10 (Sept Iles)	3 NA
		UoC 4 – SFA 12 (Estuary)	4 NA

Table 13. Conditions 1-4 – Closed (To note, the justification is taken directly from the PCR (Knapman and Addison, 2020) and so references and figures are applicable in the PCR and not this audit report. The PCR can be accessed at https://fisheries.msc.org/en/fisheries/gulf-of-st-lawrence-northern-shrimp-trawl-fishery/@@view)

Performance Indicator	PI 2.4.2
Score	60
	SG 80, SI(a): There is a partial strategy in place, if necessary, that is expected to achieve the Habitat Outcome 80 level of performance or above.
Justification	As part of meeting a previous condition of certification related to this PI and SI, in 2015, the client conducted a preliminary assessment of the potential level of risk to sensitive benthic habitats and species from shrimp trawling. The assessment concluded that the risk level was moderate to high and that the shrimp fishery overlapped with areas where soft corals and sponges are found. As such the client concluded that a "partial strategy <sup>2</sup> " was necessary. The outcome of this work coincided with the development and implementation of DFOs Coral and Sponge Conservation Strategy for Eastern Canada (DFO 2015), the formation of a DFO Québec Region Working Group on fishery impacts on sponge and coral areas and new work on the distribution of corals and sponges (Murillo et al, 2016; Kenchington et al, 2016).

<sup>2</sup> In MSC terms, a "partial strategy" is represents a cohesive arrangement which may comprise one or more measures, an understanding of how it/they work to achieve an outcome and an awareness of the need to change the measures should they cease to be effective. It may not have been designed to manage the impact on that component specifically

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Given the overlap between the client's response to the MSC condition of certification and the development of the DFO Coral and Sponge Conservation Strategy and supporting research, the combined work resulted in a habitat partial strategy being adopted by EGSAC and included as an appendix in the updated IFMP (DFO, 2018a).

In 2017, following collaboration between DFO Québec, Gulf and the Newfoundland and Labrador regions and extensive consultation with the fishing industry on 20 areas where significant concentrations of soft corals and sponges had been identified (http://www.qc.dfo-mpo.gc.ca/golfe-gulf/coraux-eng.html), 11 coral and sponge conservation areas were established (see **Error! Reference source not found.**), resulting in the prohibition of all bottom contacting fishing gear within them.

Recent published research (DFO, 2017e, Koen-Alonso et al, 2018) shows that the shrimp trawl fishery overlaps with sponge and sea pen SBAs/VMEs (see Figures 9 and 10) impacting approximately 8.4% and 12.7% of the estimated sponge and sea pen SBA/VME, respectively, within the Gulf of St. Lawrence, bioregion. By comparing the 11 coral and sponge conservation areas in **Error! Reference source not found.** and the overlap of the shrimp trawl fishery in **Error! Reference source not found.** and **Error! Reference source not found.** and the overlap of the shrimp trawl fishery in the closures do not coincide with where the shrimp trawl fishery generally operates and so the overlap of the trawl fishery with SBAs/VMEs will continue if current fishing patterns remain the same. Therefore, at present, there are no management measures in place to mitigate potential or actual interactions between the shrimp trawl fishery and some sponge and sea pen SBAs/VMEs.

As a direct result of the requirements set out in MSC FCR v2.0 to ensure protection and minimal impact of the UoA on VMEs, and, in the absence of DFO management requirements to have scientific or precautionary measures in place to avoid encounters with SBAs/VMEs, the fishery client has developed, with the support of the shrimp harvesters, "Move-on Protocols" (see Habitat policy and management in the UoA in Section **Error! Reference source not found.** and Appendix 2). These have been based on the NAFO developed and implemented "move-on" rule as set out in Article 22, of the NAFO Conservation and Enforcement Measures "Provisions in case of an encounter with VME indicator species" (NAFO, 2019).

The "Gulf of St. Lawrence Northern Shrimp Trawl Fishery Move-on Protocols" became effective as of August 2019. In summary, they require that if, in 1 tow: 7 Kgs of sea pens; and/or 60 Kgs of other live coral; and/or 300 Kgs of sponges are caught then the vessel should cease fishing and move at least 2 nautical miles from their location before recommencing fishing. The encounter is also recorded and forwarded to the client representative.

As a result, it is concluded that the SG 60 is met as there are measures in place, i.e., closed areas to protect VME and move-on rules, that are expected to achieve the Habitat Outcome 80 level of performance. The SG 80 is not met as the precautionary measures to avoid encounters and potential serious or irreversible harm on VME are not yet scientifically based.

SG 80, SI(b): There is some objective basis for confidence that the measures/partial strategy will work, based on information directly about the UoA and/or habitats involved

The following lists the habitat information that is known or being gathered about the UoA and the actions that are being taken:

- Surficial sediments have been identified and mapped.
- Geospatial mapping of habitats and fishing effort (Koen-Alonso, 2018) (on-going).
- Implementation of DFOs Coral and Sponge Conservation Strategy for Eastern Canada and protected areas network in the Gulf of St Lawrence (Habitat policy

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and management in the UoA in Section Error! Reference source not found. and Appendix 2 and Error! Reference source not found.) (on-going);

- The identification and delineation of SBAs (which are considered to be the equivalent of VMEs) (DFO, 2017e) (on-going); and
- Work on the development of guidance on the protection of SBAs (e.g. Koen-Alonso et al. 2018, DFO, 2017e) (on-going).

The above indicates a stepwise approach toward the development of a partial strategy/strategy designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats. The approach is considered likely to work based on the general experience, to date, with respect to the adherence to no fishing in protected areas and the adoption of similar "move-on rules" in fisheries operating in the NAFO Regulatory Area. As a result, the SG 60 is met.

The assessment team recognises that the implementation of the of DFOs Coral and Sponge Conservation Strategy for Eastern Canada (DFO, 2015) and SeBA Policy (DFO, 2009a) is an on-going process and measures to avoid encounters with identified SBAs/VMEs are likely in the future. In the meantime, the new "move-on protocols" have not yet been tested in the fishery, nor developed on a scientific basis and so there is no objective basis for confidence that the measure will work. Therefore, the SG 80 is not met.

# SG 80, SI(c): There is some quantitative evidence that the measures/partial strategy is being implemented successfully.

The gathering and presentation of information to support the Habitat Management Strategy, i.e. geospatial mapping of habitats and fishing intensity; the designation of Conservation Areas (see **Error! Reference source not found.**); and, the on-going work on informing and developing the application of the Policy on Managing the Impacts of Fishing on Sensitive Benthic Areas (DFO, 2009a), e.g. the review and publication on the delineation of SBAs and overlap of fishing with SBAs (Kenchington et al, 2016; Koen Alonso et al, 2018), provides excellent quantitative evidence. However, in the absence of measures or a partial strategy to avoid encounters with VMEs the SG 80 is not met.

SG 80, SI(d): There is some quantitative evidence that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non-MSC fisheries, where relevant.

Since multiple fisheries may operate in the same area, the net impact on a given VME will result from the cumulative effects from all fisheries interacting within it. MSC FCR v 2.0 SA3.14.3 requires that the cumulative impact of MSC certified fisheries on VMEs is taken into account at the SG 80 and 100.

There are a number of other fisheries operating in the Gulf of St. Lawrence that have been MSC certified or are in assessment – see **Error! Reference source not found.**. These fisheries may overlap with the shrimp trawl fishery however as this SI has scored below SG 80 the cumulative impacts on VMEs has not been evaluated at this point. If an SG 80 score is considered appropriate in future surveillance audits this aspect of VME scoring will be evaluated.

The UoAs approach to managing the protection of VMEs has been to identify and establish 11 Coral and Sponge Conservation Areas (See **Error! Reference source not found.**) where fishing with bottom contacting gears is prohibited. Monitoring to ensure that no vessels encroach and fish within these areas is facilitated through the requirement for all shrimp trawlers to have operating VMS. The VMS reports the vessel position every 30 minutes. If a vessel is approaching one of these areas C & P will contact the vessel to ensure they move away. C & P will also use aerial surveillance and at-sea patrols to monitor and deter vessels from fishing in these areas (M. Picard pers. comm.).

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	In addition condition based of	on to closed areas to protect VMEs, MSC requirements state that, to achieve a nal minimum for this PI, "precautionary measure to avoid encounters with VMEs, n commonly accepted move-on rules", need to be in place.		
	The Gulf of St. Lawrence Northern Shrimp Scotian Trawl Fishery has adopted "move-on protocols" (see Habitat policy and management in the UoA in Section <b>Error! Reference source not found.</b> and Appendix 2). While the new "move-on protocols" have not yet been tested, there is some qualitative evidence to show vessels do not fish in protected areas, thereby, complying with management requirements to protect VMEs and, therefore, meeting the SG 60.			
	Quantita available	tive evidence that the UoA complies with the new move-on protocols is not yet e, and so the SG 80 is not met.		
Condition	<ul> <li>By the fourth annual audit the client shall provide evidence that there is: <ul> <li>A partial strategy in place that is expected to achieve the Habitat Outcome 80 level of performance or above.</li> <li>Some objective basis for confidence that the measures/partial strategy will work, based on information directly about the UoA and/or habitats involved.</li> <li>Some quantitative evidence that the measures/partial strategy is being implemented successfully.</li> <li>Some quantitative evidence that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC LIOAs/non-MSC fisheries, where relevant</li> </ul> </li> </ul>			
Condition start	At recertification – 15 <sup>th</sup> October 2020			
Condition deadline	By the fourth annual audit.			
	Year 1	As detailed in section 5.3.1 above PI 2.4.2 has been re-evaluated (Table 12), the score revised, and the condition closed.		
Progress on Condition	Year 2			
	Year 3			
	Year 4			
Progress status	As detai revised,	led in section 5.3.1 above PI 2.4.2 has been re-evaluated (Table 12), the score and the condition closed.		
Remedial action	N/A			
Additional information	N/A			

#### 5.3.2 Progress against conditions

In March 2021, MSC issued a derogation, "<u>Derogation 6: Covid-19 Fishery Conditions Extension</u>", which is applicable to any fishery certified against v1.3, v2.0 or v2.01 of the Fisheries Standard before 28 March 2021. The objective of the derogation is to provide a reprieve to fishery certificate holders that have the potential to face exceptional difficulties in making progress on conditions as a result of the impacts of Covid-19 on fisheries management systems by extending the existing deadlines on eligible conditions, i.e., conditions related to management decision making, monitoring and compliance extended for 12 months:

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#### Table 14. Performance Indicators eligible for an extension under MSC Derogation 6.

Performance Indicator	Description
1.2.1	Harvest strategy (management)
1.2.2	Harvest control rules and tools
1.2.3	Information / monitoring
2.1.2	Primary species management
2.1.3	Primary species information
2.2.2	Secondary species management
2.2.3	Secondary species information
2.3.2	ETP management strategy
2.3.3	ETP information
2.4.2	Habitat management
2.4.3	Habitat information
2.5.2	Ecosystem management
2.5.3	Ecosystem information
3.1.1	Legal and/or customary framework
3.1.2	Consultation roles and responsibilities
3.1.3	Long term objectives
3.2.1	Fishery specific objectives
3.2.2	Decision making processes
3.2.3	Compliance and enforcement
3.2.4	Monitoring and evaluation

With respect to the Gulf of St Lawrence Northern shrimp trawl fishery, this derogation applies to the remaining conditions related to PI 3.2.4. As a result, the conditions are extended by 12 months.

In the following table, the conditions have been amended to take account of the derogation and a revised Client Action Plan has been provided by the client and is incorporated into each, where applicable.

For the purposes of this audit, the original year 1 milestone has been used as a measure of progress for each of the conditions and commentary provided in Table 15 below.

**Table 15. Conditions 5-8.** To note, the justification is taken directly from the PCR (Knapman and Addison, 2020) and so references and figures are applicable in the PCR and not this audit report. The PCR can be accessed at <a href="https://fisheries.msc.org/en/fisheries/gulf-of-st-lawrence-northern-shrimp-trawl-fishery/@@view">https://fisheries.msc.org/en/fisheries/gulf-of-st-lawrence-northern-shrimp-trawl-fishery/@@view</a>

Performance Indicator	PI 3.2.4
Score	70
Justification	Biennial (and, when necessary, more frequent) meetings of EGSAC provide an opportunity to monitor, review and evaluate key parts of the management system. The EGSAC may also establish ad-hoc sub-committees or working groups to review and assess specific policy and management measures (DFO, 2018a). DFO also reviews and evaluates compliance and monitoring on a regular basis (DFO, 2018a and EGSAC 2018). With respect to external review, Canadian fisheries are reviewed by a number of institutions, e.g. The House of Commons and the Senate's Standing Committees on
	Fisheries and Oceans. Also, the Canadian Auditor General has, on an ad-hoc basis, reviewed fisheries related issues (OAGC, 2009). However, the Gulf of St. Lawrence Shrimp

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	Trawl Fish the Canad	ery has never been subject to an external review by either these Committees or ian Auditor General.		
	The fishery-specific management system is therefore subject to regular internal review, thereby meeting the SG 60.			
	However, Canadian to their, or manageme	while there are a number of institutions that undertake external reviews of fisheries, the Gulf of St. Lawrence Shrimp Trawl Fishery has never been subject r any other, external review. Therefore, it cannot be said the fishery-specific ent system is subject to occasional external review and so the SG 80 is not met.		
Condition	By the third annual audit the client shall provide evidence that the Gulf of St. Lawrence Shrimp Trawl Fishery management system is subject to regular internal and occasional external review.			
Condition start	At recertifie	cation – 15 <sup>th</sup> October 2020.		
Condition deadline	Revised as	s a result of MSC Derogation 6 from the third annual audit to the fourth.		
	In light of t follows wit	the application of Derogation 6, the milestones for condition 5-8 are revised as h no milestone this year or for the recertification year.		
	At the first audit there is no milestone. The score will remain at 70.			
	At the second audit the client will provide evidence in the form of minutes and/or meeting reports showing discussion on how it will initiate and adopt an occasional external review of the shrimp trawl fishery management system.			
	This milestone is an incremental step toward fulfilling the condition. Its successful completion will not result in a change of score to the PI; the score will remain at 70.			
Milestones	At the third audit the client shall provide evidence in the form of minutes and/or meeting reports showing how an occasional external review of the shrimp trawl fishery management system will be adopted.			
	This milestone is an incremental step toward fulfilling the condition. Its successful completion will not result in a change of score to the PI; the score will remain at 70.			
	At the for management initiated ar	<b>urth audit</b> the client shall provide evidence that the shrimp trawl fishery ent system is subject to occasional external review and the review has or will be ad completed within four years of the re-certification date of the fishery.		
	Successfu of St. Law and occas	I completion of this and the previous milestones will demonstrate that the Gulf rence Shrimp Trawl Fishery management system is subject to regular internal ional external review This will result in the rescoring of this PI to at least 80.		
Progress on Condition (Year 1)	Year 1	The clients have initiated discussions with an experienced fisheries consultant to undertake a review of the fishery. The initial proposed approach is to structure the review similarly to that recently completed for another Canadian fishery; where the reviewers aggregated the MSC performance indicators into 8 statements for which they provided comments and evidence of ongoing, effective fishery management. Those aggregated statements would be the core of future external reviews.		
		It is anticipated, pending feedback from DFO, that the draft review would be conducted over the course of the next year and reported by the third audit with a plan to conduct an occasional external review periodically thereafter.		
	Year 2			

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	Year 3	
	Year 4	
Progress status	On the stre this Condi considered	ength of the progress made against the Year 1 milestone, and on the basis that tion is eligible for an extension under MSC Derogation 6, this condition is I to be 'Ahead of Target'.
Remedial action	Not applicable.	
Additional information	The milest section, ab	ones are revised to account for Derogation 6, as detailed in the 'Milestones' ove.

#### 5.3.3 **Progress on recommendations**

At the re-certification of the fishery the Assessment Team made a recommendation in relation to PI 1.2.4: The assessment team recommends that the main stock indicator is presented with confidence intervals.

In the latest stock update, the main stock indicator is not presented with confidence intervals, but at the site visit, DFO Science confirmed that it was possible to present the main stock indicator with confidence intervals and that this would be undertaken in future stock updates.

#### CLIENT ACTION PLAN Gulf of St. Lawrence Shrimp Trawl Fisheries January 2022

This action plan submitted by the Client Group is in response to conditions following the First Surveillance Audit and subsequent scoring.

Following are the stated conditions as provided in the 1st surveillance draft report of January 2022. There is one condition for each of four Units of Certification (UoC) under performance indicator 3.2.4.

Condition 3.2.4 There is a system of monitoring and evaluating the performance of the fishery-5-8: specific management system against its objectives. There is effective and timely review of the fishery-specific management system.

Condition	By the third annual audit the client shall provide evidence that the Gulf of St. Lawrence Shrimp Trawl Fishery management system is subject to regular internal and occasional external review.
Milestones	Year 1: The client will provide evidence in the form of minutes and/or meeting reports showing discussion on how it will initiate and adopt an occasional external review of the shrimp trawl fishery management system.
	Ahead of Target at Surveillance Audit 1
	<ul> <li>Year 2: The client shall provide evidence in the form of minutes and/or meeting reports showing how an occasional external review of the shrimp trawl fishery management system will be adopted.</li> <li>Year 3: The client shall provide evidence that the shrimp trawl fishery management system is subject to occasional external review and the review has, or will, be initiated and completed within four years of the re-certification date of the fishery.</li> </ul>

At second surveillance audit the CAB will be provided with evidence in the form of minutes and/or meeting reports showing how an occasional external review of the shrimp fishery trawl fishery management system will be adopted.

To accomplish this the client will undertake to:

 The client, in consultation with DFO, will initiate an external review of the fishery management system.

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- The client, in consultation with DFO, will discuss external review findings and determine a
  process regarding how findings recommendations will be considered.
- In consultation with DFO and industry stakeholders define how findings of an external review may be adopted.
- Provide written evidence regarding outcome of considerations (e.g. meeting minutes, correspondence).

At third surveillance audit the CAB will be provided with evidence that the shrimp trawl fishery management system is subject to occasional external review and the review has, or will, be initiated and completed within four years of the re-certification date of the fishery.

To accomplish this the client will undertake to:

The client will provide documentary evidence of agreement with DFO and industry stakeholders
regarding a commitment to have occasional external review, and the frequency of these reviews.



# 6 Appendices

### 6.1 Evaluation processes and techniques

#### 6.1.1 Site visits

This was a remote off-site audit conducted using MS Teams. The client provided a submission prior to the audit which included an update on progress made against the conditions of certification.

#### 6.1.2 Stakeholder consultation and meetings

8 <sup>th</sup> November 2021, MS Teams Meeting, Client Opening Meeting				
Name Organisation Role				
Paul Knapman	On behalf of LRQA	Team Lead, P2 and P3		
Julian Addison	On behalf of LRQA	P1 and P2		
Megan McLaughlin	LRQA	Fisheries Technical Officer		
Derek Butler	Association of Seafood Producers (ASP)	Client representative		

8 <sup>th</sup> November 2021, MS Teams Meeting Meeting with DFO and Client Representative			
Name	Organisation	Role	
Paul Knapman	On behalf of LRQA	Team Lead, P2 and P3	
Julian Addison	On behalf of LRQA	P1 and P2	
Megan McLaughlin	LRQA	Fisheries Technical Officer	
Derek Butler	Association of Seafood Producers (ASP)	Client representative	
Magalie Hardy	DFO	Resource Management	
Jérôme Beaulieu	DFO	Resource Management	
Hugo Bourdages	DFO	Science	
Antoine Rivierre,	DFO	Resource Management	
Sébastien Beauchamp	DFO	Conservation and Protection	
Pierre Mallet	DFO	Resource Management	

9th November 2021, MS Teams Meeting Client Closing Meeting			
Name	Organisation	Role	
Paul Knapman	On behalf of LRQA	Team Lead, P2 and P3	
Julian Addison	On behalf of LRQA	P1 and P2	
Megan McLaughlin	LRQA	Fisheries Technical Officer	
Derek Butler	ASP	Client representative	

#### 6.1.3 Stakeholder participation

No stakeholders contacted LRQA or the Audit Team prior to, during or after the audit.

# 6.2 Stakeholder input

No stakeholder submissions were sent to LRQA or the Audit Team prior to, during or after the audit.

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## 6.3 Revised surveillance program

#### Table 16. Fishery surveillance program

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

#### Table 17. Timing of surveillance audit

Year	Anniversary date of certificate	Proposed date of surveillance audit	Justification
2	15 <sup>th</sup> October	October – November 2022	This year's audit date appeared to suit everyone

#### Table 18. Surveillance level justification

Year	Surveillance activity	Number of auditors	Justification
2	Off-site	2 auditors	Year 2 is a reporting year for the single remaining condition and there are no substantive changes anticipated in the management cycle that would warrant an on-site visit.



# 6.4 Harmonised fishery assessments

The MSC Fisheries Certification Process v2.2 (FCP) sets out procedures for ensuring consistency of outcomes in overlapping fisheries (see Annex PB of the FCP). The intention of this process is to maintain the integrity of MSC fishery assessments.

The Audit Team have consulted the guidance issued on the MSC's interpretation log to identify the harmonisation requirements for this fishery (see https://mscportal.force.com/interpret/s/article/What-are-the-MSC-requirements-on-harmonisation-multiple-questions-1527586957701).

The MSC have provided the following table to guide harmonisation:

Table 19. MSC directions for harmonisation between overlapping MSC fisheries (MSC FCP v2.2.)

Performance Indicator / Scoring Issue	Harmonise?	Comments
All P1 PIs	Yes	P1 always considers the impacts of all fisheries on a stock, so any fisheries which have the same P1 species (stocks) should be harmonised.
PI 2.1.1a	Partially	For stocks that are 'main' in both UoAs, harmonise status relative to Point of Recruitment Impairment (PRI) (at SG 60, 80 and 100) and, if below, harmonise cumulative impacts at SG 80 (not at SG 60).
PI 2.2.1a	Partially	For stocks that are 'main' in both UoAs, harmonise status relative to Biologically Based Limits (BBL) (at SG 60, 80, 100), and if below the BBL, harmonise cumulative impacts at SG 80 (not at SG 60).
PI 2.3.1a	Partially	Harmonise recognition of any limits applicable to both UoAs (SG 60, 80, 100) and cumulative effects of the UoA at SG 60, 80, 100 (not at SG 60)
PI 2.4.1b	Partially	Harmonise recognition of VMEs where both UoAs operate in the same 'managed area/s' (as in SA3.13.5).
PI 2.4.2a, c	Partially	Harmonise scoring at SG 100, since all fishery impacts are considered (not at SG 60 or 80)
All P2 PIs	Yes if	Two UoAs are identical in scope, even if the UoCs are different (e.g. separate clients).
PI 3.1.1-3	Yes if	Both UoAs are part of the same larger fishery or fleet or have stocks either P1 or P2 which are at least partially managed by the same jurisdiction/s (nation states, RFMOs or others) or under the same agreements. Harmonisation may sometimes be possible for those management arrangements that apply to both UoAs (noting the limitations accepted in GPB3). The MSC accepts that it may be impractical to attempt full harmonisation, due to the large number of fisheries that may be managed under the relevant policy framework, and the differences in application between them.
PI 3.2.1-4	Yes if	Both UoAs have stocks within either P1 or P2 which are at least partially managed by the same jurisdiction/s (nation states, RFMs or others) or under the same agreements. Harmonisation is needed for those management arrangements that apply to both UoAs, e.g. at the RFMOS level but not the national level in the case of two separate national fleets both fishing the same regional stock.

The Audit Team have taken the geographic scope of the harmonisation process to be the Gulf of St. Lawrence. The following MSC certified fisheries are found within this region:

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#### Table 20. Overlapping fisheries

Fishery name	Certification status and date
AQIP Gulf of St Lawrence Greenland Halibut Fixed Gear Fishery	Certified since 2 <sup>nd</sup> October 2020 (V 2.0)
Gaspesie Lobster Trap Fishery	Certified since 5 <sup>th</sup> March 2015 (V 2.01)
Iles-de-la-Madeleine Lobster	Certified since 16th July 2013 (V 2.0)
AQIP Snow Crab Trap	Certified since 14 <sup>th</sup> December 2020 (V 2.0)
Maritime Canada Inshore Lobster Trap	Certified since 25 <sup>th</sup> February 2021 (V 2.01)

Using Table 19 as a guide, the following PIs for all the overlapping fisheries have been identified as requiring harmonisation (blue/grey shaded rows):

#### Table 21. Performance Indicators / Scoring Issues that need to be harmonised

Performance Indicator / Scoring Issue	Comments		
All P1 PIs	None of the overlapping fisheries target Northern shrimp ( <i>Pandalus borealis</i> ). Therefore, no harmonisation required.		
PI 2.1.1a	Redfish in UoA 3 is the only main primary species in the Gulf of St. Lawrence shrimp trawl fishery. None of the overlapping fisheries has redfish as a main primary species. Therefore, there is no need to consider harmonisation.		
PI 2.2.1a	There are no main secondary species in the Gulf of St. Lawrence shrimp trawl fishery. Therefore, there is no need to consider harmonisation.		
PI 2.3.1a	All the UoAs considered the North Atlantic Right Whale (NARW) as the only ETP species with national limits. Therefore, this PI needs to be considered for harmonisation.		
PI 2.4.1b	All the UoAs are considered to operate within the same managed area, i.e., the Gulf of St. Lawrence. Therefore, this PI needs to be considered for harmonisation.		
PI 2.4.2a, c	The Gulf of St. Lawrence shrimp did not meet the SG 100 and so there is no need to consider harmonisation.		
All P2 PIs	None of the UoAs are identical. Therefore, there is no need to consider harmonisation.		
PI 3.1.1-3	All the UoAs are covered by the same management regime and so all of these PIs are required to be harmonised.		
PI 3.2.1-4	All the UoAs have their own fishery specific management systems and so are not considered for harmonisation.		

#### Table 22. Overlapping fisheries

#### Supporting information

All the Public Certification Reports and audit reports, where relevant, for each of the overlapping fisheries, were reviewed and the scores and scoring rationales considered in relation to the PI 2.3.1a, 2.4.1b, 3.1.1, 3.1.2, 3.1.3. The scores for each of these PIs/SIs are presented in Table 23 below.

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Was either FCP v2.2 Annex PB1.3.3.4 or PB1.3.4.5 applied when harmonising?	Νο	
Date of harmonisation meeting	N/A	
f applicable, describe the meeting outcome		
N/A		

#### Table 23. Scoring differences

Performance Indicators (PIs)	AQIP Gulf of St Lawrence Greenland Halibut Fixed Gear Fishery	Gaspesie Lobster Trap Fishery	lles-de-la- Madeleine Lobster	AQIP Snow crab trap	Maritime Canada Inshore Lobster Trap	Gulf of St Lawrence Northern shrimp trawl fishery
PI 2.3.1a	60	60	60	60	60	N/A
PI 2.4.1b	100	100	100	100	100	100
PI 3.1.1	100	95	95	100	95	100
PI 3.1.2	90	85	85	85	85	90
PI 3.1.3	100	100	100	100	100	100

#### Table 24. Rationale for scoring differences

If applicable, explain and justify any difference in scoring and rationale for the relevant Performance Indicators (FCP v2.2 Annex PB1.3.6)

The only PI for which there is a material difference in the score is PI 2.3.1a. The reason for the difference is the negligible likelihood of the Gulf of St Lawrence Northern shrimp trawl fishery interacting with North Atlantic Right Whale (NARW) owing to the mobile nature of the fishing gear. All the other overlapping UoAs use fixed gear and, as a result, are considered to have a higher potential to interact with NARW.

If exceptional circumstances apply, outline the situation and whether there is agreement between or among teams on this determination

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#### 7 References

Beazley, L., Murillo, F.J., Kenchington, E., Guijarro, J., Lirette, C., Siferd, T., Treble, M., Baker, E., Bouchard Marmen, M., Tompkins MacDonald, G. 2016. Species Distribution Modelling of Corals and Sponges in the Eastern Arctic for Use in the Identification of Significant Benthic Areas. Can. Tech. Rep. Fish. Aquat. Sci. 3175: vii + 210p.

Bourdages, H., Marquis, M-C., Ouellette-Plante, J., Chabot, D., Galbraith, P. and Isabel, L. 2020. Assessment of northern shrimp stocks in the Estuary and Gulf of St. Lawrence in 2019: commercial fishery and research survey data. DFO Can. Sci. Advis. Sec. Res. Doc. 2020/012. xiii + 155 p. https://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2020/2020\_012-eng.html

DFO. 2009. Sustainable Fisheries Framework (SFF). http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overview-cadre-eng.htm

DFO 2009a. Policy to Manage the Impacts of Fishing on Sensitive Benthic Areas http://www.dfo-mpo.gc.ca/reportsrapports/regs/sff-cpd/benthi-back-fiche-eng.htm

DFO, 2015. Coral and Sponge Strategy for Eastern Canada. http://www.dfo-mpo.gc.ca/oceans/publications/csce/index-eng.html

DFO 2017a. Delineation of Significant Areas of Coldwater Corals and Sponge-Dominated Communities in Canada's Atlantic and Eastern Arctic Marine Waters and their Overlap with Fishing Activity. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2017/007.

DFO 2017b Coral and Sponge Conservation Measures in the Estuary and Gulf of St. Lawrence https://www.dfompo.gc.ca/oceans/ceccsr-cerceef/egsl-eng.html

DFO. 2018. The Integrated Fisheries Management Plan (IFMP) for Northern Shrimp in the Estuary and Gulf of St. Lawrence (Areas 8, 9, 10 and 12) (Pandalus borealis).

DFO. 2020a. Assessment of Northern Shrimp stocks in the Estuary and Gulf of St. Lawrence in 2019. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2020/010. https://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2020/2020 010-eng.html

DFO. 2020b. Proceedings of the regional peer review meeting of the assessment of the Estuary and Gulf of St. Lawrence shrimp stocks; January 22–23, 2020. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2020/015. https://www.dfo-mpo.gc.ca/csas-sccs/Publications/Pro-Cr/2020/2020\_017-eng.html

DFO. 2020c. Redfish (Sebastes mentella and S. fasciatus) Stocks Assessment in Units 1 and 2 in 2019. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2020/019. https://waves-vagues.dfo-mpo.gc.ca/Library/40878454.pdf

DFO 2020d, Canada's marine protected areas https://www.dfo-mpo.gc.ca/oceans/conservation/areas-zones/indexeng.html

DFO. 2021a. Update of stock status indicator for Northern Shrimp in the Estuary and Gulf of St. Lawrence. DFO Can. Sci. Advis. Sec. Sci. Resp. 2021/015.

https://www.dfo-mpo.gc.ca/csas-sccs/Publications/ScR-RS/2021/2021\_015-eng.html

DFO. 2021b. Assessment of the Gulf of St. Lawrence (4RST) Greenland halibut stock in 2020. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2021/017. https://waves-vagues.dfo-mpo.gc.ca/Library/40976075.pdf

Guijarro, J., Beazley, L., Lirette, C., Kenchington, E., Wareham, V., Gilkinson, K., Koen-Alonso, M., and F.J. Murillo (2016). Species Distribution Modelling of Corals and Sponges from Research Vessel Survey Data in the Newfoundland and Labrador Region for Use in the Identification of Significant Benthic Areas. Canadian Technical Report on Fisheries and aquatic Sciences, No. 3171: vi + 126 pp.

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Kenchington, E., Lirette, C., Cogswell, A., Archambault, D., Archambault, P., Benoit, H., Bernier, D., Brodie, B., Fuller, S., Gilkinson, K., Lévesque, M., Power, D., Siferd, T., Treble, M., and V. Wareham (2010). Delineating coral and sponge concentrations in the biogeographic regions of the East Coast of Canada using spatial analyses. DFO Canadian Science Advisory Secretariat Science Research Document 2010/041. vi + 202 pp.

Knapman P. and Addison, J. 2020. Gulf of St Lawrence Northern Shrimp Trawl Fishery. MSC fisheries assessment, Public Certification Report, 256 pp. https://fisheries.msc.org/en/fisheries/gulf-of-st-lawrence-northern-shrimp-trawl-fishery/@@view

Koen-Alonso, M. C. Favaro, N. Ollerhead, H. Benoît H. Bourdages, B. Sainte-Marie, M. Treble, K. Hedges; E. Kenchington, C. Lirette, M. King S. Coffen-Smout, and J. Murill, 2018. Analysis of the overlap between fishing effort and Significant Benthic Areas in Canada's Atlantic and Eastern Arctic marine waters. Canadian Science Advisory Secretariat (CSAS) Res. Doc. 2018/015 <u>http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2018/2018\_016-eng.html</u>

Murillo, F.J., Kenchington, E., Beazley, L., Lirette, C., Knudby, A., Guijarro, J., Benoît, H., Bourdages, H., Sainte-Marie, B. 2016. Distribution Modelling of Sea Pens, Sponges, Stalked Tunicates and Soft Corals from Research Vessel Survey Data in the Gulf of St. Lawrence for Use in the Identification of Significant Benthic Areas. Can. Tech. Rep. Fish. Aquat. Sci. 3170: vi + 132 p

NAFO (2019). NAFO Conservation and Enforcement Measures, 2019 https://www.nafo.int/Portals/0/PDFs/COM/2019/comdoc19-01.pdf



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#### Template version control

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
2.1	25 March 2020	Minor document change for usability

A controlled document list of MSC program documents is available on the MSC website (msc.org).

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