

# **Gaspésie lobster trap fishery**

# **Announcement Comment Draft Report**

Conformity Assessment Body (CAB)	SAI Global
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Fishery client	Regroupement des Pêcheurs Professionnels du Sud de la Gaspésie (RPPSG)
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# 2 Glossary

AFR	Atlantic Fishing Regulations
AZMP	Atlantic Zone Monitoring program
BAPAP	Bureau d'accréditation des pêcheurs et des aides-pêcheurs du Québec
СС	Communal commercial
C&P	DFO Conservation and Protection
CPUE	Catch Per Unit Effort
DFO	Fisheries and Ocean Canada
ETP	Endangered, Threatened and Protected species
F	Fishing mortality
FRCC	Fisheries Resource Conservation Council
FSC	Food, Social and Ceremonial fishing
GOSLIM	Gulf of St Lawrence Integrated Management
GSL	Gulf of St Lawrence
IFMP	Integrated Fisheries Management Plan
LFA	Lobster Fishing Area
LRP	Limit reference point
MAPAQ	Ministère de l'Agriculture des Pêcheries et de l'Alimentation du Québec
MPA	Marine protected area
MLS	Minimum landing size
MSC	Marine Stewardship Council
NARW	North Atlantic right whale
PI	Performance Indicator
RPPSG	Regroupement des Pêcheurs Professionnels du Sud de la Gaspésie
SARA	Species at Risk Act
SSB	Spawning stock biomass
UoA	Unit of Assessment
UoC	Unit of Certification
USR	Upper stock reference
VME	Vulnerable Marine Ecosystem



## 3 Executive summary

This report sets out the details of the MSC re-assessment for the Gaspésie lobster trap fishery against the MSC Principles and Criteria for Sustainable Fishing.

SAI Global's team used the information provided by the client through the Client Document Checklist, information provided by DFO, information available online and information from previous surveillance audits reports to draft this Announcement Comment Draft Report (ACDR).

The report will be completed after the site visit which is scheduled to take place end of September/early October.

#### 3.1 Changes since previous assessment

#### To be drafted at Announcement Comment Draft Report stage To be completed at Public Certification Report stage

#### 3.1.1 Principle 1

There are some changes since the previous assessment relating to Principle 1. The Gaspésie lobster stock is in good condition and remains in the healthy zone. The lobster fishery is still a limited entry fishery managed by controlling fishing efforst and by escapement measures: number of licences, number and size of traps, fishing season and daily schedule, minimum and maximum legal sizes, release of berried females and release of females with a V-notch on theit uropods (V-notch marking is on a voluntary basis). A device to prevent seals to access the content of the traps is authorised since 2017 fishing season. The maximum carapace length size is reduced to 150 mm (2018) from 155 mm (2016) in LFAs 19 and 21; the minimum carapace length size is increased to 82.55 mm in 2018 in LFAs 20 and 21.

Harvest control rules are well defined and tools in place are still appropriate and effective in controlling exploitation. Information is still collected to support the harvest strategy.

There is an adequate assessment of the lobster stock status.

#### 3.1.2 Principle 2

The level of non-target species catch remains low. Male rock crab is the only non-target sepcies allowed to be retained. Main primary species are species used as bait purchased from outside the UoA. The team determines that tehre is no main secondary species. There is a partial strategy in place that is designed to maintain or to not hinder rebuilding of primary and secondary species. Information on the nature and amount of non-target species is collected through the logbooks.

Regulations dealing with the fleets' fishing practices were modified significantly in 2018 with the introduction of new mandatory measures to protect the North Atlantic Right Whale population aimed at preventing entanglements principally by reducing the amount of rope in the water, prohibiting floating lines on the surface, and requiring the reporting of lost and retrieved gear. These measures have been enhanced for the 2019 fishing season. There is a partial strategy in place that lis designed to ensure that the UoA does not hinder the recovery of ETP species. The combined effects of the MSC UoAs on the population of North Atlantic right whale are unlikely to be within national limit set for the protection and rebuilding of the population. The UoA does not cause serious or irreversible harm to habitats including VMEs.

Overall, information continues to be collected to assess te impact of the UoA on the ecosystem.

#### 3.1.3 Principle 3

Overall, there were changes neither to the management regime of the fishery not in the legislation that governs the fishery. A Integrated Fisheries Management Plan (IFMP) was adopted and published in 2018. The management system exists within an appropriate and effective legal and/or customary framework.

The fishery management system has effective consultation and decision-making processes.

Clear long-term and fishery-specific objectives aer explicit within the management system. Monitoring, control and surveillance mechanisms are implemented to ensure that the management measures are enforced and complied with. The compliance remains high in the Gaspésie lobster fishery. There is a system for monitoring and evaluating the performance of the fishery-specific management system against its objectives.



#### 3.1.4 Main strengths and weaknesses

**Table 1.** Main strengths and weaknesses of the Gaspésie lobster trap fishery.

	Main strenghts	Mean weaknesses		
Principle 1	<ul> <li>The lobster stock is healthy</li> </ul>	• Stock status is only expressed in relative terms, based		
	<ul> <li>Robust harvest strategy in place</li> </ul>	on empirical indicators (landings)		
	<ul> <li>Well-defined HCRs are in place</li> </ul>			
	• Tools are effective in controlling			
	exploitation			
	• Relevant information is collected to			
	support the harvest strategy			
Principle 2	• The non-target species catches remains	• The combined effects of the MSC UoAs on the		
	low	population of North Atlantic right whale are unlikely to		
	• There is a partial strategy in place that is	be within national limit set for the protection and		
	designed to maintain or to not hinder	rebuilding of the population.		
	rebuilding of primary and secondary species			
	Management measures are regularly			
	reviewed			
	• The interactions of the fishery with EIP			
	species are low			
	• Information continues to be confected to			
	assess the impact of the OOA of the			
Drinciplo 2	• Effective national legal and/or customary	• No particular weekness in Brinsiple 2		
Frincipie 5	framework	• No particular weekness in Frinciple 5		
	<ul> <li>Effective consultation processes that</li> </ul>			
	support the management system			
	Comprehensive short and long-term			
	objectives			
	• Effective decision-making processes			
	Proven enforcement and compliance			
	systems			
	• Effective monitoring programs with			
	appropriate performance evaluation			

#### 3.1.5 Draft determination reached by the assessment team

During the review and analysis of available information and data for drafting of the ACDR, the team did not identify any issues that could prevent the fishery from continuing to conform with the MSC Fisheries Standard.



## 4 Report details

#### 4.1 Authorship and peer review details

#### 4.1.1 Assessment team

#### Dr. Géraldine Criquet (Lead Assessor, primarily responsible for Principle 2, Traceability and RBF)

Géraldine is an MSC approved Fisheries Team Leader for SAI Global - experienced fishery scientist in both Finfish and Shellfish fisheries, and ecosystems considerations. Géraldine holds a PhD in Marine Ecology (École Pratique des Hautes Études, France) which focused on coral reef fisheries management, Marine Protected Areas, fish biology and ecology and ecosystem impacts. She worked 2 years for the Institut de Recherche pour le Développement (IRD) at Reunion Island for studying fish target species growth and connectivity between fish populations in the Indian Ocean using otolith analysis. She served as Consultant for FAO on a Mediterranean Fisheries Program (COPEMED) and developed and implemented a monitoring program of catches and fishing effort in the Marine Natural Reserve of Cerbère-Banyuls (France). Géraldine is an experienced full time MSC Lead Assessor with SAI Global, successfully leading MSC certifications and assessment teams and acting as Principle 2 expert for multiple MSC Pre, Full and Surveillance audits including full assessments and surveillance audits of Canadian lobster trap fisheries. Géraldine led the assessment team for the initial assessment of the Gaspésie lobster trap fishery as well as for all previous surveillance audits.

#### Dr. Jean-Claude Brêthes (Assessor, primarily responsible for Principle 1)

Jean-Claude is a fisheries biology professional at the Institut des sciences de la mer at the Université du Québec a Rimouski. Previously he has held positions at Board, Chair and Director level for University undergraduate and post graduate fishery science/marine/oceanography courses, scientific advisory councils and committees for various government organizations such as the Canadian Atlantic Fisheries Advisory Council. His key experiences have been focused upon the dynamics and ecology and management of exploited species. In particular, Jean- Claude has conducted various projects on the ecology of snow crab, lobster and cod in locations in Atlantic Canada. He has published and presented several scientific papers in lobster fisheries in key journals and science fora and has also taken part in several MSC and related studies including lobster fisheries in this and other regions.

#### Bob Allain (Assessor, primarily responsible for Principle 3)

R. J. (Bob) Allain is the president and principal consultant of OceanIQ Management Services Inc. He is a former senior executive with over 30 years experience with Canada's Federal Department of Fisheries and Oceans in fisheries management, strategic policy development and analysis, facilitation and conflict resolution, and mentoring. He has consulted internationally for the Canadian International Development Agency, the (former) International Centre for Ocean Development, the World Bank, and the Food and Agricultural Organization of the United Nations. Bob has participated in several Atlantic Canadian pelagic, demersal, and crustacean fishery assessments under the MSC Standard since 2010 as a P3 expert, auditor, client representative, and, most recently, as a peer reviewer. He has also undertaken assessments and annual surceillance audits of U.S. fisheries of the Gulf of Mexico and along the Atlantic Coast. In 2014, Bob was inducted into the Atlantic Marine Industries Hall of Fame in the Builders Category in recognition of his long service to and involvement with the Atlantic fishery.

#### 4.1.2 Peer Reviewers

#### Peer reviewer information to be completed at Public Comment Draft Report stage

The report shall contain:

- Names of the peer reviewers
- Statement that peer reviewers can be viewed on the assessment downloads page on the MSC website.



#### 4.2 Version details

The MSC Fisheries Program documents used for the re-assessment of the Gaspésie lobster trap fishery reassessment are listed in Table 2.

Table 2. Fisheries program documents versions.			
Document	Version number		
MSC Fisheries Certification Process	Version 2.1		
MSC Fisheries Standard	Version 2.1		
MSC General Certification Requirements	Version 2.3		
MSC Reduced Re-assessment Reporting Template	Version 2.1		



#### **Confirmation of scope** 5

The Gaspésie lobster trap fishery continue to be within the scope of the MSC fisheries Standard.

- The target species under Principle 1 is neither an amphibian nor a reptile nor a bird nor a marine mammal.
- The fishery does not use destructive fishing practices such as poisons or explosives.
- The fishery is not conducted under a controversial unilateral exemption to an international agreement.
- The client group does not include an entity that has been successfully prosecuted for a forced labour or child labour violation in the last 2 years.
- The client group has provided the Certificate Holder Forced and Child Labour Policies, Practicies and -Measures Template.
- The fishery applying for re-certification is not the subject of controversy and/or dispute, and there is a mechanism for resolving disputes within the fishery management system.
- The Gaspésie lobster trap fishery is not an enhanced fishery. -
- The Gaspésie lobster trap fishery is not an introduced species based fishery.
- -There are no catches of non-target stocks that are inseparable or practicably inseparable (IPI) from the target stock.

#### Unit(s) of Assessment and Certification and results overview 6

#### 6.1 Unit(s) of Assessment and Unit(s) of Certification

#### Unit(s) of Assessment 6.1.1

To be drafted at Announcement Comment Draft Report stage

Table 3. Unit of Assessment (UOA).			
UoA	Description		
Species	Homarus americanus, American lobster		
Stock	Gaspésie lobster stock		
Geographical area	FAO Fishing Area 21 Northwest Atlantic, NAFO Division 4T, Canada EEZ, Gaspe Peninsula, Lobster Fishing Areas (LFAs) 19, 20 and 21		
Harvest method/gear	Baited lobster trap		
Client group	Regroupement des Pêcheurs Professionnels du Sud de la Gaspésie (RPPSG)		
Other eligible fishers	There are no other eligible fishers. All commercial lobster harvesters entitled to fish lobster in LFAs 19, 20 and 21 are members of the client group.		
	In LFA 21, there is a Food, Social and Ceremonial (FSC) fishery which is conducted by Aboriginal groups for food, social and ceremonial purposes under the rights affirmed by the Supreme Court of Canada in the <i>Sparrow</i> decision (1990). Products from the FSC fishery are not for sale and operators are not considered as other eligible fishers.		

# 



#### 6.1.2 Unit(s) of Certification

#### To be drafted at Announcement Comment Draft Report stage

Table 4. Unit of Certification (UoC).			
UoC	Description		
Species	Homarus americanus, American lobster		
Stock	Gaspésie lobster stock		
Geographical area	FAO Fishing Area 21 Northwest Atlantic, NAFO Division 4T, Canada EEZ, Gaspe Peninsula, Lobster Fishing Areas (LFAs) 19, 20 and 21		
Harvest method/gear	Baited lobster trap		
Client group	Regroupement des Pêcheurs Professionnels du Sud de la Gaspésie (RPPSG)		

#### 6.2 Assessment results overview

#### 6.2.1 Determination, formal conclusion and agreement

#### To be drafted at Final Draft Report

#### To be completed at Public Certification Report

The report shall include a formal statement as to the certification determination recommendation reached by the assessment team on whether the fishery should be certified.

The report shall include a formal statement as to the certification action taken by the CAB's official decisionmakers in response to the Determination recommendation.

Reference(s): FCP v2.1 Section 7.21

#### 6.2.2 Principle level scores

#### To be drafted at Client and Peer Review Draft Report

The report shall include scores for each of the three MSC principles in the table below.

Reference(s): FCP v2.1 Section 7.17

#### Table 5. Principle level scores.

•					
Principle	UoA 1	UoA 2	UoA 3	UoA 4	
Principle 1 – Target species					
Principle 2 – Ecosystem impacts					
Principle 3 – Management system					

#### 6.2.3 Summary of conditions To be drafted at Client and Peer Review Draft Report

The report shall include a table summarising conditions raised in this assessment. Details of the conditions shall be provided in the appendices. If no conditions are required, the report shall include a statement confirming this.

Reference(s): FCP v2.1 Section 7.18



# Table 6. Summary of conditions. Condition number Condition Performance Indicator (PI) Related to previous condition? Image: Condition number Image: Condition number Yes / No / NA Image: Condition number Image: Condition number Yes / No / NA Image: Condition number Image: Condition number Yes / No / NA Image: Condition number Image: Condition number Yes / No / NA Image: Condition number Image: Condition number Yes / No / NA Image: Condition number Image: Condition number Yes / No / NA

#### 6.2.4 Recommendations

#### To be drafted at Client and Peer Review Draft Report stage

If the CAB or assessment team wishes to include any recommendations to the client or notes for future assessments, these may be included in this section.



## 7 Evaluation results

#### 7.1 Eligibility date

The eligibility date is the date of re-certification.

#### 7.2 Traceability within the fishery

#### To be drafted at Announcement Comment Draft Report stage To be completed at Public Certification Report stage

#### Table 7. Traceability within the fishery.

Factor	Description
Will the fishery use gears that are not part of the Unit of Certification (UoC)?	No. Lobster trap is the only fishing gear allowed to be used to target losbter.
Will vessels in the UoC also fish outside the UoC geographic area?	No. Fishing vessels from the UoC do not fish outside the geographical area covered by the UoC. By regulation, lobster harvesters licenced to fish in LFAs 10-21 are not allowed to fish for lobster outside LFAs 19-21.
Do the fishery client members ever handle certified and non-certified products during any of the activities covered by the fishery certificate? This refers to both at- sea activities and on-land activities. - Transport - Storage - Processing - Landing - Auction If Yes, please describe how any risks are mitigated.	No.
Does transhipment occur within the fishery?	No. Transhipment is prohibited.
Are there any other risks of mixing or substitution between certified and non-certified fish?	No, no other risk has been identified.

#### 7.3 Eligibility to enter further chains of custody

#### To be drafted at Announcement Comment Draft Report stage

#### To be completed at Public Certification Report stage

Chain of Custody commences at the point of first sale for any party not included in the fishery certificate and for parties within the fishery certificate as outlined.

The point of intended change of ownership of product is at first sale.

The point from which subsequent Chain of Custody is required is at first sale.

SAIG determines that the system of tracking and tracing in the UoA are sufficient to ensure all lobster and lobster products are harvested and landed from the UoC, and are therefore eligible to carry the MSC ecolabel. All buyers are registered with the provincial government (MAPAQ) and as such must keep and submit records of purchases, first generated at the point of vessel landing by the buyers on transfer of product. All registered lobster buyers must submit their purchase slips to DFO.



The scope of the fishery certificate includes all eligible vessels within the region of Gaspésie which is covered 100% by the UoC. The certificate is owned by the client, RPPSG, who represent all eligible fishers (all Gaspésie lobster fishermen are members).

Vessels that operate under RPPSG and land lobster from the certified fishery do not require chain of custody certification. An active list of eligible vessels within RPPSG, the client group, has been provided to the team and will be maintained available to potential buyers. All lobsters from the fishery under assessment are landed in LFAs 19, 20 and 21.

The system for recording the transfer of product to buyers is sufficient to identify that all product is eligible for MSC CoC. The point of commencement of the CoC is the first point of transfer of ownership outside the client group.

However, the following categories of parties will also require chain of custody certification even though they are members of the fishery certificate:

- Any parties that purchase lobsters from outside of the UoC
- Any parties that transform live lobsters

All parties that take title of product and are not included in the fishery certificate and wish to claim the product as coming from an MSC certified fishery or entities that they sell to wish to make the claim must obtain MSC Chain of Custody certification; except in the following circumstances;

• Parties that act as transporters between vessels and buyers within the fishery certificate or those that have separate chain of custody must be included in the scope of their management procedure, identifiable by name and have available documentation that allows traceability to a certified vessel to be confirmed for every delivery.



# 8 Scoring

#### 8.1 Summary of Performance Indicator level scores

To be drafted from Announcement Comment Draft Report

Principle	Component	Weight		Performance Indicator (PI)	Weight	Likely Score
	Outcomo	0 222	1.1.1	Stock status	1.000	≥80
	Outcome	0.555				
0.55			1.2.1	Harvest strategy	0.250	≥80
One	Managana	0.007	1.2.2	Harvest control rules & tools	0.250	≥80
	Management	0.667	1.2.3	Information & monitoring	0.250	≥80
			1.2.4	Assessment of stock status	0.250	≥80
			2.1.1	Outcome	0.333	≥80
	Primary species	0.200	2.1.2	Management strategy	0.333	≥80
			2.1.3	Information/Monitoring	0.333	≥80
			2.2.1	Outcome	0.333	≥80
	Secondary species	0.200	2.2.2	Management strategy	0.333	≥80
			2.2.3	Information/Monitoring	0.333	≥80
	ETP species	0.200	2.3.1	Outcome	0.333	60-79
Two			2.3.2	Management strategy	0.333	≥80
			2.3.3	Information strategy	0.333	≥80
	Habitats	0.200	2.4.1	Outcome	0.333	≥80
			2.4.2	Management strategy	0.333	≥80
			2.4.3	Information	0.333	≥80
			2.5.1	Outcome	0.333	≥80
	Ecosystem	0.200	2.5.2	Management	0.333	≥80
			2.5.3	Information	0.333	≥80
			3.1.1	Legal &/or customary framework	0.333	≥80
	Governance and policy	0.500	3.1.2	Consultation, roles & responsibilities	0.333	≥80
Three			3.1.3	Long term objectives	0.333	≥80
	Fishery specific	0 500	3.2.1	Fishery specific objectives	0.250	≥80
	management system	0.500	3.2.2	Decision making processes	0.250	≥80



3.2.3	Compliance & enforcement	0.250	≥80
3.2.4	Monitoring & management performance evaluation	0.250	≥80



#### 8.2 Principle 1

#### 8.2.1 Principle 1 background

#### 8.2.1.1. Overview of the Gaspésie lobster trap fishery

#### Lobster life history

The American lobster (*Homarus americanus*) ranges along the west coast of the Atlantic, from Labrador to Cape Hatteras. Adults prefer rocky substrates where they can find shelter, but also live on sandy or even muddy bottoms.

Lobsters begin life by going through a planktonic larval phase that lasts about three to four weeks. Over the course of the planktonic phase, lobsters are exposed to high mortality due to predator action and displacement by currents, which can carry larvae far from the sites that would be optimal for the continuation of their life cycle. At the end of this planktonic phase, the postlarvae drift down from the surface layer and settle on the bottom in coastal habitats that offer many crannies where they can find shelter (nurseries). Lobsters leave the nursery when they reach a carapace length (CL) of about 40-50 mm and outgrow their shelters. At this stage, the lobsters are about 3 to 4 years old. It is estimated that lobsters in Gaspésie reach 83 mm CL at around 8 years of age or older in cold regions, after they have moulted about 16 times since settling on the bottom. Females reach sexual maturity at a size of about 82 mm CL in the southern part of the Gaspé; the size is higher in the northern part. Males reach sexual maturity at a smaller size. Females spawning for the first time can produce around 8,000 eggs, while large females measuring 127 mm (jumbo size) can lay up to 35,000 eggs. Although recruitment cannot be predicted on the basis of egg numbers, this nevertheless plays a key role in the productivity of populations. Maintaining adequate egg production and increasing the contribution of multiparous females to this production are key stock management goals.

#### Location of the fishery

The Gaspésie lobster fishery occurs in FAO Fishing Area 21 (Northwest Atlantic) in Division 21.4T. The Gaspésie lobster harvesters have access to LFAs 19, 20 and 21 (Figure 1) as described in the Schedule XIII/Annexe XIII of the *Atlantic Fishing Regulations (AFR), 1985*<sup>1</sup>.

These areas are subdivided into 28 sub-areas (Figure 1) around the Gaspé Peninsula.

<sup>&</sup>lt;sup>1</sup> <u>http://laws-lois.justice.gc.ca/eng/regulations/SOR-86-21/page-41.html#docCont</u>





Figure 1. The main LFAs and sub-areas in the Estuary and Gulf of St Lawrence. Source: DFO 2018a.

#### A brief history of the lobster fishing and management (DFO 2018a)

Lobster harvesting in North America dates back to ancient times, over 10,000 years ago, when the ancestors of the Mi'kmaq settled in the coastal regions around the Gaspé and the maritime provinces east of the Saint John River, in what became the Mi'kma'ki, traditional Mi'kmaq territory.

The Canadian lobster fishery has provided a means of income for many in Atlantic Canada since the mid-1850s Motorised boats, mechanized haulers and the parlour trap were introduced in the early 1900s. The lobster fishery has been essentially a small-boat inshore fishery, using passive gear, for much of its history.

The Canadian lobster fishery grew in the mid-19<sup>th</sup> century when American operators set up canneries to compensate for declining catches in the USA. After an initial increase, landings underwent a long decline from the late 1800s to the mid-1920s apparently as the pristine unexploited populations were fished down.

Following the mid-1920s, total landings in the Atlantic region showed little overall trend until the mid-1970s, although long-term fluctuations were observed with peaks in the 1930s and in the 1950s.

In Quebec, landings peaked in 1992 and have since declined. In the Gaspé Peninsula, landings showed a gradual increase in the 1980s and slight decrease since the early 1990s.

The Canadian lobster trap fishery has one of the longest histories of fishery regulation in Canada with the implementation of several of the measures currently in place dating back to over a century.

The *Fisheries Act* was enacted in 1868. The first known regulation in 1873 forbade the taking of egg-bearing female weighing less than one and a half pounds as well as soft-shelled, newly moulted lobsters. In 1874, the first closed season was established during July and August to protect lobster during the spawning period. The same year, the first size limit of nine inches overall length was established. Today, the regulated minimum carapace size of lobster is set with the objective of ensuring at least 50% of female lobsters reach sexual maturity before capture.

In addition to the limited size of the traps, the presence of escape vents has been mandatory since 1994.



The Listuguj Micmacs First Nation has been practicing a fall subsistence fishery in 21B since 2002.

The lobster fishery has been the subject of two reviews by the former Fisheries Resource Conservation Council (FRCC 1995, 2007). Two conservation plans (1998 and 2005) were developed to double the 1996 level of egg production per recruit by increasing the minimum legal size (MLS), and to reduce the fishing effort through licences buybacks and reduction of the number of traps occurred. The establishment of the Atlantic Lobster Sustainability Measures (ALSM) program in 2009<sup>2</sup> helps Canada's lobster fishery to ensure its long-term sustainability and economic prosperity. The program supports industry efforts to maintain healthy lobster stocks in all Lobster Fishing Areas, and improve lobster abundance in areas where stocks have declined. It also supports economic prosperity by helping to set the conditions for commercial success. The RPPSG has submitted a Lobster Conservation Plan in 2009 as part of this program. Between 2007 and 2016, a total of 55 lobster licences in the Gaspé were bought back, including 48 by the Regroupement des pêcheurs professionnels du sud de la Gaspésie (RPPSG) with financial assistance from the Ministère de l'Agriculture des Pêcheries et de l'Alimentation du Québec (MAPAQ) and the DFO.

Lobster can only be retained if they comply with a minimum legal size (MLS) designed to allow 50% of females to reach sexual maturity before being harvested. Egg-bearing females must be released. In 2008, a maximum catch size of 155 mm CL was implemented in LFA 20. On a voluntary basis, fishers mark berried females by Vnotching their uropods. However, the release of V-notched lobsters is mandatory.

The use of an electronic logbook (e-log) is mandatory and it must be completed for each fishing day since the 2012 fishing season.

#### Number of commercial licences

Table 8 details the number of commercial licences per LFA. The overall number of licence did not change from 2018 to 2019. The 4 experimental fishing licneces issued in 2018 for Area 19A-1 have been re-issued in 2019.

Table 8. Number of commercial licences per LFA, 2017-2018. Source: DFO.					
LFA	2018 2019				
19	8 + 4 for experimental lobster fishing 8 + 4 for experimental lobster fishing				
<b>20</b> 140		140			
21 (commercial fishery) 13		13			
TOTAL161 + 4 for experimental lobster fishing161 + 4 for experimental lobster fish					

#### 2019 fishing season oeping and closing dates

In the Gaspésie, the commercial lobster fishery is mainly a spring activity that lasts 69 days in LFAs 20 and 21 and 71 days in LFA 19, including the first day where traps are set (Table 9).

Table 9. 2019 commercial fishing season ope	ening and closing dates per sub-areas i	n Gaspé Peninsula. Source: DFO.
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Sub-areas	2019 Opening and closing dates
19A2	4 May -13 July
19A3	4 May -13 July
19B	4 May -13 July
19C1	11 May – 20 July
19C2	4 May – 13 July

<sup>2</sup> http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/lobster-homard/alsm-mdih-eng.htm



Sub-areas	2019 Opening and closing dates
20A1	4 May – 6 July
20A2-20A8	1 May – 8 July
20A9-20A10	4 May – 11 July
20B8	4 May - 11 July
21A	10 May – 17 July
21B	4 May -13 July

Table 9. 2019 commercial fishing season opening and closing dates per sub-areas in Gaspé Peninsula. Source: DFO.

#### 8.2.1.2. Lobster stock assessment and status

There is no direct measurement of lobster biomass (empirical or analytical). The lobster stock assessment is based on the analysis of trends of stock indicators. Stock status indicators including abundance, demographic structure, fishing pressure and production.

Lobster stock status is assessed every three years, however indicators are monitored annually.

The last stock assessment report was published in October 2016 and results were presented in the 2017 surveillance audit report.

The Gaspésie lobster stock was assessed in March 12<sup>th</sup> 14<sup>th</sup>, 2019. The scientific advice is not yet published but the audit team has been provided with the official highlights of the assessment (DFO 2019a) summarised below.

- The decline in lobster landings from 2017 to 2018 was attributed to fisheries closures in agreement with the conservation plan for the NARW. However, 2018 landings were 26 % higher than 2015 and 116 % higher than the historical mean (1993-2017).
- CPUEs derived from the commercial sampling have increased between 2015 and 2018. They were higher than the historical mean (2001-2017): 202% in LFA 19, 133% in LFA 20, 162% in area 21B. CPUEs from logbooks show the same trend.
- In LFAs 19 and 21, mean lobster sizes were high in 2018, but smaller than in 2015, possibly due to recruitment. In LFA 20, mean lobster size remains unchanged and size structure was less broad than in other areas.
- Exploitation rates in LFA 20 were inferior in the period 2015-2017 (76%) than between 2011-2014, but remain high.
- In LFA 20, productivity indicators were high. Abundance of berried females is increasing since 2011. Compared to the period 1994-1996, theoretical egg production was 8.6 time higher. In 2018, precruits abundance has increreased by 16% compared to 2015, which means that landings could increase in the future.

The conclusion is that the Gaspésie lobster stock is in good condition and remains in the healthy zone. However, the lobster sizes in LFA 20 raise some concerns. This will be further investigated during the reassessment.

#### 8.2.1.3. Harvest strategy

The lobster fishery is a limited entry fishery managed by controlling fishing efforst and by escapement measures: number of licences, number and size of traps, fishing season and daily schedule, minimum and maximum legal sizes, release of berried females and release of females with a V-notch on theit uropods (V-notch marking is on a voluntary basis).



Table 10 summarizes the main management measures for the 2019 fishing season. There were no changes from 2018.

Table 10. Main management measures for the Gaspésie lobster fishery for 2019 fishing seasons. Source: DFO.					
Lobster Fishing Area (LFA)	19	20	21		
Lobster maximum and minimum landing sizes (MLS, mm)	Min: 83 Max: 150	Min: 82.55 Max: 145	Min: 82.55 Max: 150		
Maximum number of traps	250	235 435 (permanent licences merging done before December 1, 2018) 335 (permanent licences merging from December 1, 2018) 435 (temporary licences merging)	235 335 (permanent licences merging licences)		
Size of traps	92 cm length 61 cm width 50 cm height	Wire traps92 cm length54 cm width39 cm heightWood traps (or hybrid wood/othermaterials)92 cm length61 cm width46 cm height	<u>Wire traps</u> 92 cm length 54 cm width 39 cm height <u>Wood traps (or hybrid</u> <u>wood/other materials)</u> 92 cm length 61 cm width 46 cm height		
Escape vents	Circular Vents         Two unobstructed circular openings of a diameter no less than 65 mm, the top of the openings is at most 102 mm from the floor of the trap in at least one of the outer walls of each parlour.         Rectangular Vents         One unobstructed rectangular opening no less than 127 mm in length and 46 mm in height in at least one of the outer walls of each parlour, the top of the				
Trap lines	When fishing is carried out using lines of traps in sub-areas 20AB and 21A, they must count at least (minimum) 6 traps. The maximum distance authorised between each trap of a same trawl is 12 fathoms.				
Device against seals	The only authorized device to prevent seals to access the content of traps is a simple horizontal bar made of wood or wire located at the entry of the trap, of which the height is not more than 40 mm, fixed in a manner that the space located between this bar and the top of the runner is at a minimum of 165 mm.				
Other management measures	<ul> <li>Release of V-notched females is mandatory.</li> <li>It is prohibited to haul the traps on the opening day.</li> <li>It is prohibited to haul and bait the traps more than once a day.</li> <li>It is the responsibility of fishermen to haul their trap at least every 72 hours.</li> <li>Tagging of all traps is mandatory.</li> <li>Floating cables are not allowed.</li> <li>New management measures to minimise the risk of interactions with the NARW, see section 5.3.2.</li> </ul>				



An Integrated Fisheries Management Plan (IFMP) was adopted in June 2018. This Plan describes a comprehensive strategy for the fishery aiming at:

- Ensuring sustainable harvesting of lobster;
- Developing and apply an ecosystem approach for the lobster fishery;
- Improving compliance with fisheries regulations;
- Fostering economic prosperity;
- Encouraging the active participation of First Nations in the lobster fishery and the development of their capacities;
- Improve governance.

The IFMP includes decision rules established according to the Precautionary Approach in oder to allow the implementation of management measures depending on lobster stock status from the Gaspé Peninsula (Figure 2).



**Figure 2.** Decision rules (predetermined actions) for each stock status zone (healthy, cautious and critical). Source: DF0 2018a.

#### 8.2.2 Catch profiles

Figure 3 shows the lobster ladings in Gaspésie from 2003 to 2016. Landings remained relatively stable betwee 2003 and 2009. Starting in 2010, landings increased steadly from 741 t in 2009 to 1,926 t in 2016.





**Figure 3**. Breakdown of landed volume of lobster in the Gaspé, by area, 2003–2016p (in tonnes). Source: DFO 2018a.

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

The fishery is not TAC managed.

Table 11 and Table 12 present lobster landings (t), from both commercial and FSC fishery, per LFA for 2017 and 2018. Commercial landings represent 99% of lobster total landings in Gaspésie. Commercial landings decreased from 2017 to 2018 as a result of a decrease in landings in LFA 20, while landings in LFAs 19 and 21 increased.

In 2018, 80% of commercial landings came from LFA 20, 11% from LFA 19 and 9% from LFA 21.

In 2017, lobster landings from the commercial fishery in Gaspésie account for approximately 30% of lobster total landings in Québec and for approximately 2.5 % of lobster total landings in the whole Canada Atlantic<sup>3</sup>.

Table 11. Total Allowable Catch (TAC) and catch data. Source: DFO.					
TAC	Year	N/A	Amount	N/A	
UoA share of TAC	Year	N/A	Amount	N/A	
UoA share of total TAC	Year	N/A	Amount	N/A	
Total green weight catch by UoC	Year (most recent)	2018	Amount	2,294.984 t	
Total green weight catch by UoC	Year (second most recent)	2017	Amount	2,486.181 t	

<sup>&</sup>lt;sup>3</sup> http://www.dfo-mpo.gc.ca/stats/commercial/land-debarg/sea-maritimes/s2017aq-eng.htm



LFA	2017			2018		
	Commercial fishery	Food, Social and Ceremonial Fishing	TOTAL	Commercial fishery	Food, Social and Ceremonial Fishing	TOTAL
19	198.403	0	198.403	261.060	0	261.060
20	2,123.468	0	2,123.468	1,811.159	0	1,811.159
21	164.310	22.631	186.941	222.765	9.914	232.679
TOTAL	2,486.181	22.631	2,508.812	2,294.984	9.914	2,304.898

#### Table 12. Total catch data by Lobster Fishing Area (LFA). Source: DFO



#### 8.2.4 Principle 1 Performance Indicator scores and rationales

PI 1.1.	기 1.1.1 – Stock status							
<b>PI 1.</b> 1	l.1	The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing						
Scoring	Scoring Issue SG 60 SG 80 SG 100							
	Stock status relative to recruitment impairment							
а	Guide post	It is <b>likely</b> that the stock is above the point where recruitment would be impaired (PRI).	It is <b>highly likely</b> that the stock is above the PRI.	There is a <b>high degree of</b> <b>certainty</b> that the stock is above the PRI.				
	Met?	Yes	Yes	Yes				

#### Rationale

There is a **high degree of certainty** that the stock is above the PRI.

The Gaspésie Lobster stocks were assessed in March, 12-14, 2019. The scientific advice is not yet published but the official highlights of the assessment were provided to the team.

In summary:

- In 2018, landings reached 2,315 t, declining from the 2,509 t in2017; that decline was attributed to fisheries closures in agreement with the conservation plan for the NARW. However, 2018 landings were 26 % higher than 2015 and 116 % higher than the historical mean (1993-2017).
- CPUEs derived from the commercial sampling have increased between 2015 and 2018. They were higher than the historical mean (2001-2017): 202% in LFA 19, 133% in LFA 20, 162% in area 21B. CPUEs from logbooks show the same trend.
- In LFAs 19 and 21, mean lobster sizes were high in 2018, but smaller than in 2015, possibly due to recruitment. In LFA 20, mean lobster size remains unchanged and size structure was less broad than in other areas.
   Exploitation rates in area 20 were inferior in the period 2015-2017 (76%) than between 2011-2014, but remain high.
- In LFA 20, productivity indicators were high. Abundance of berried females is increasing since 2011. Compared to the period 1994-1996, theoretical egg production was 8.6 time higher. In 2018, precruits abundance has increreased by 16% compared to 2015, which means that landings could increase in the future.

The conclusion is that the Gaspésie lobster stocks are in good condition and remains in the healthy zone. However, the lobster sizes in LFA 20 raise some concerns.

Landings are accepted as a proxy for the biomass. The Limit Reference points of 325 t defined in the Lobster Precautionary Approach can be considered as equivalent to the PRI. Landings are above the LRP since 1980 reaching now 2,300 t. Therefore the team determines that SG60, SG80 and SG100 are met.

#### Stock status in relation to achievement of Maximum Sustainable Yield (MSY)

b	Guide post	The stock is at or fluctuating around a level consistent with MSY.	There is a high degree of certainty that the stock has been fluctuating around a level consistent with MSY or has been above this level over recent years.
	Met?	Yes	No

#### Rationale

The stock is at or fluctuating around a level consistent with MSY.

Landings are used as a proxy of the fishable biomass The Upper Reference points of 650 t defined in the Lobster Precautionary Approach. Landings are above the URP since 1990 reaching now 2,300 t.

However, there is no formal estimation of  $B_{MSY}$ . Landings are used as a proxy. They may be influenced by lobster catchability and fishing capacity. It is not possible to affirm that there is a high degree of certainty that the stock has been fluctuating around a level consistent with MSY or has been above this level over recent years. SG 100 is not met.



# PI 1.1.1

The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing

#### References

DFO. 2016a. 2015 Lobster stocks assessment in the Gaspé, Quebec area (LFAS 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2016/043.

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2016/2016 043-eng.html

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

DFO 2019a. Sommaire: Évaluation des stocks de homards des eaux côtières du Québec en 2018.

#### Stock status relative to reference points

	Type of reference point	Value of reference point	Current stock status relative to reference point
Reference point used in scoring stock relative to PRI (Sla)	Limit Reference Points corresponding to 40% of the average landings over the period 1985-2009	325 t	Landings/LRP = 9.8
Reference point used in scoring stock relative to MSY (SIb)	Upper Reference Points corresponding to 80% of the average landings over the period 1985-2009	650 t	Landingsd/URP = 4.9

Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable SGs/elements likely met			<u>Likely</u> overall PI
Draft scoring range	SG60	SG80	SG100	score
	1 of 1	2 of 2	1 of 2	≥80
Information gap indicator	Information sufficient to score PI. However, the rationale will be completed when the 2019 stock assessment report will be published.			

#### **Overall Performance Indicator scores added from Client and Peer Review Draft Report**

	Applica	Querall seere		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
Condition number (if relevant)				



#### PI 1.1.2 – Stock rebuilding

PI 1.1.2 Where the stock is reduced, there is evidence of stock rebuilding within a specified timeframe				in a specified timeframe			
Scoring	Issue	SG 60	SG 80	SG 100			
	Rebuilding	ding timeframes					
а	Guide post	A rebuilding timeframe is specified for the stock that is the <b>shorter of 20 years or 2 times its</b> <b>generation time</b> . For cases where 2 generations is less than 5 years, the rebuilding timeframe is up to 5 years.		The shortest practicable rebuilding timeframe is specified which does not exceed <b>one generation time</b> for the stock.			
Met?		NA		NA			
Rationa	le						
This PI is	not scored a	s PI 1.1.1 achieve a likely score of ≥8	30 (SA2.3.1).				
	Rebuilding	Rebuilding evaluation					
b	Guide post	Monitoring is in place to determine whether the rebuilding strategies are effective in rebuilding the stock within the specified timeframe.	There is <b>evidence</b> that the rebuilding strategies are rebuilding stocks, <b>or it is likely</b> based on simulation modelling, exploitation rates or previous performance that they will be able to rebuild the stock within the <b>specified timeframe</b> .	There is <b>strong evidence</b> that the rebuilding strategies are rebuilding stocks, <b>or it is highly</b> <b>likely</b> based on simulation modelling, exploitation rates or previous performance that they will be able to rebuild the stock within the <b>specified timeframe</b> .			
Met? NA		ΝΑ	NA	NA			
Rationale							
This PI is not scored as PI 1.1.1 achieve a likely score of ≥80 (SA2.3.1).							
References							
DFO. 202 Rep. 201 <u>http://w</u>	16a. 2015 Lob 16/043. ww.dfo-mpo	oster stocks assessment in the Gaspé	, Quebec area (LFAS 19, 20 and 21). D S/2016/2016_043-eng.html	PFO Can. Sci. Advis. Sec. Sci. Advis.			

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

DFO 2019a. Sommaire: Évaluation des stocks de homards des eaux côtières du Québec en 2018.

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable	<u>Likely</u> overall PI		
Draft scoring range	SG60	SG80	SG100	score
	X of x	X of x	X of x	<60/60 – 79/≥80



PI 1.1.2	Where the stock is reduced, there is evidence of stock rebuilding within a specified timeframe				
Information gap indicator		More information sought/Information sufficient to score PI			
Overall Performance Indicator scores added from Client and Peer Review Draft Report					
		Applicable SGs/elements met			Overall score
Overall Performanc	e Indicator score	SG60	SG80	SG100	Overall score
		X of x	X of x	X of x	
Condition number (if relevant)					



#### PI 1.2.1 – Harvest strategy

PI 1.2	2.1	There is a robust and precautiona	a robust and precautionary harvest strategy in place			
Scoring Issue		SG 60	SG 80	SG 100		
	Harvest s	trategy design				
а	Guide post	The harvest strategy is <b>expected</b> to achieve stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy <b>work together</b> towards achieving stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and is <b>designed</b> to achieve stock management objectives reflected in PI 1.1.1 SG80.		
	Met?	Yes	Yes	Yes		

#### Rationale

The harvest strategy is responsive to the state of the stock and is **designed** to achieve stock management objectives reflected in PI 1.1.1 SG80.

The lobster fishery is a limited entry fishery managed by controlling fishing efforst and by escapement measures: number of licences, number and size of traps, fishing season and daily schedule, minimum and maximum legal sizes, release of berried females and release of females with a V-notch on theit uropods (V-notch marking is on a voluntary basis).

A multiyear integrated management plan was implemented in 1999, in order to address 1995 FRCC's recommendation. The long term objectives were to ensure the continued sustainability of the lobster fishery by implementing a precautionary approach to conservation of the resource. In 1998, a conservation plan aimed at doubling egg production by 2000. To achieve that target, the harvest strategy resulted in a progressive increase of the carapace size (from 76 mm to 82 mm, reached in 2002), reduction of nominal fishing effort (number of traps per license, number of licenses, length of the season).

The harvest strategy was adjusted over time, through a succession of conservation plans proposed by the industry and DFO. In 1998, a plan to increase minimum legal size was proposed. Other measures were implemented: voluntary V-notching (1992), escape vents and biodegradable twine (1993), reduction of the number of licences (starting in 2003), reduction of the number of traps per license (250 to 235, 2003), diminution of the number of days fished (70 to 68, in 2006), maximum legal size (2007). As a result, the nominal fishing effort has decreased by 16% between 1995 and 2009.

In 2014, a new set of references points, based on landings, was peer-reviewed and approved. Landings are used as the stock status indicator and as a proxy for the estimation of BMSY. The median landing for the 1985-2009 period for the entire Gaspésie is proposed as a proxy value for BMSY. The USR value is defined as 80% of BMSY and the LRP is defined as 40% of BMSY. Landings from 2018 indicate that the stock is in the healthy zone, above both the USR and BMSY values. It is obviously premature to anticipate the efficiency of this new approach. However, this approach is similar to the approaches defined for other lobster stocks (Magdalen Islands). The harvest strategy was adjusted in response to the state of the stock and clear limits and reference points were set.

Therefore the team determines that SG60, SG80 and SG100 are met.

#### Harvest strategy evaluation

b	Guide post	The harvest strategy is <b>likely</b> to work based on prior experience or plausible argument.	The harvest strategy may not have been fully <b>tested</b> but evidence exists that it is achieving its objectives.	The performance of the harvest strategy has been <b>fully</b> <b>evaluated</b> and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.
	Met?	Yes	Yes	No
Rationa	le			



## PI 1.2.1

#### There is a robust and precautionary harvest strategy in place

The harvest strategy may not have been fully tested but evidence exists that it is achieving its objectives.

The harvest strategy was primarily designed to increase egg production. In 2005, the FRCC recognized that the objective was reached. Along with the various measures implemented, the abundance of berried females has increased. The nominal fishing effort was reduced and the exploitation rate was reduced. The stock status if fully evaluated every three years, through the SCAS cycle. Indicators are updated annually and presented at the Lobster Advisory Committee, where the result of the strategy are discussed. The stock is in the healthy zone since the mid 90' and is reaching now historical highs. Evidence exists that the strategy has achieved its objective. Objective of maintaining the stock above the Upper Reference point is achieved. Therefore the team determines that SG60 and SG80 are met.

The new reference points and harvest control rules have been adopted recently, so it is obviously premature to anticipate the efficiency of this new approach, preventing the fishery from meeting SG100.

#### Harvest strategy monitoring

Guide post	Monitoring is in place that is expected to determine whether the harvest strategy is working.	
Met?	Yes	

#### Rationale

С

Monitoring is in place that is expected to determine whether the harvest strategy is working.

The lobster stock assessment is based on the analysis of trends of stock indicators including abundance, fishing pressure and production, derived from fishery-dependent and fishery-independent data. The fishery-dependent data include DFO official catch statistics, at-sea sampling activities, and voluntary recruitment-index program. The stock status if fully evaluated every three years, through the SCAS cycle., however, indicators are updated annually.

The new mandatory electronic logbook has improved catch data collection and the monitoring of the fishery. Therefore SG60 is met.

d	Harvest strategy review							
	Guide post			The harvest strategy is periodically reviewed and improved as necessary.				
	Met?			Yes				

#### Rationale

The harvest strategy is periodically reviewed and improved as necessary.

The global performance of the fishery is evaluated every three years through the Regional Advisory Process.

The harvest strategy is reviewed during the Lobster Advisory Committee, which meets every year. Every two years, a workshop is held with industry, Fisheries and Oceans and the Quebec Department of Agriculture Food and Fisheries (MAPAQ), to address the main issues that the fishery is facing. Changes in the harvest strategies are discussed and proposed to the Advisory Committee.

The harvest strategy was adjusted over time, through a succession of conservation plans proposed by the industry and DFO. In 1998, a plan to increase minimum legal size was proposed. Other measures were implemented: voluntary V-notching (1992), escape vents and biodegradable twine (1993), reduction of the number of licences (starting in 2003), reduction of the number of traps per license (250 to 235, 2003), diminution of the number of days fished (70 to 68, in 2006), maximum legal size (2007). As a result, the nominal fishing effort has decreased by 16% between 1995 and 2009.

In 2014, a new set of references points, based on landings, was peer-reviewed and approved.

In 2018, the MLS was increased from 82 mm to 82.55 mm in LFAs 20 and 21. The maximum size was reduced from 155 mm to 150 mm in LFAs 19 and 21. This change of the maximum size aims to improve stock productivity and was supported by an industry survey.

Therefore SG100 is met.



PI 1.2	PI 1.2.1 There is a robust and precautionary harvest strategy in place					
	Shark fin	ning				
e	Guide post	It is <b>likely</b> that shark finning is not taking place.	It is <b>highly likely</b> that shark finning is not taking place.	There is a <b>high degree of</b> <b>certainty</b> that shark finning is not taking place.		
	Met?	NA	NA	NA		
Rationa	le					
This sco	oring issue i	s not scored as the target species	s is not a shark (SA2.4.3).			
	Review of alternative measures					
f	Guide post	There has been a review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality of unwanted catch of the target stock.	There is a <b>regular</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality of unwanted catch of the target stock and they are implemented as appropriate.	There is a <b>biennial</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality of unwanted catch of the target stock, and they are implemented, as appropriate.		
	Met?	Yes	Yes	Yes		

#### Rationale

There is a **biennial** review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock, and they are implemented, as appropriate.

Unwanted catches are undersized lobster, berried and V-notch females. Trap must be equipped with escapement vent to prevent catches of undersized lobsters. Escapement vent size was increased following the increase in the MLS. Traps are regularly controlled for their conformity.

In case of unwanted catches, fishers must release animals with minimal harm. Anecdotal information suggest that the survival is very high. Experiments were conducted to minimize the impact of the release of lobsters at sea, and especially on the females. One intend was to reduce egg losses, and various types of releasing were tested (Voegtlin et al 2010). A slide channel was also tested (Grelon et al 2015), but the results were not convincing compared to good handling and release practices.

The effectiveness of current measures are controlled throughout the season by dockside and at-sea inspections. An annual post-fishing season review is conducted to evaluate the effetiveness of management measures. This post-season review is followed by the Lobster Advisory Committe meeting during which new management measures, including traps modifications and other measures to minimise UoA-related impact of the target species, can be proposed and discussed. Minutes of the annual Lobster Advisory Committe meeting are available.

Therefore the team determines that SG60, SG80 and SG100 are met.

#### References

DFO. 2016a. 2015 Lobster stocks assessment in the Gaspé, Quebec area (LFAS 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2016/043.

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2016/2016 043-eng.html

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

Grelon, D. 2015. Étude d'implantation d'une glissière à homard sur les bateaux en Gaspésie. MERINOV, rapport de projet 15-02, 6p.

Voegtlin, M., L. Seychelles, C. Jabouin, J. Laurent & M.L. Larrivée. 2010. HAIRE. Homard: atténuation des impacts de la remise à l'eau. Halieutec, Service de technologie en pêches (STEP). Rapports de R-D RDD-179, 17p.



# PI 1.2.1

#### There is a robust and precautionary harvest strategy in place

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable SGs/elements likely met			<u>Likely</u> overall PI
Draft scoring range	SG60	SG80	SG100	score
	4 of 4	3 of 3	3 of 4	≥80
Information gap indicator		Information suff	icient to score PI	

#### **Overall Performance Indicator scores added from Client and Peer Review Draft Report**

Overall Performance Indicator score	Applicable SGs/elements met			Quarallessore
	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
Condition number (if relevant)				



PI 1.2	2.2	There are well defined and effective harvest control rules (HCRs) in place				
Scoring Issue		SG 60	SG 80	SG 100		
a	HCRs design and application					
	Guide post	<b>Generally understood</b> HCRs are in place <b>or available</b> that are <b>expected</b> to reduce the exploitation rate as the point of recruitment impairment (PRI) is approached.	Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY, or for key LTL species a level consistent with ecosystem needs.	The HCRs are expected to keep the stock <b>fluctuating at or above</b> a target level consistent with MSY, or another more appropriate level taking into account the ecological role of the stock, <b>most</b> of the time.		
	Met?	Yes	Yes	No		

## PI 1.2.2 – Harvest control rules and tools

#### Rationale

Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY, or for key LTL species a level consistent with ecosystem needs.

The IFMP includes decision rules established according to the Precautionary Approach in oder to allow the implementation of management measures depending on lobster stock status from the Gaspé Peninsula, see below.



Harvest control rules are well defined along with reference points. Both SG 60 and 80 are met. Until now, the stock is above a target level consistent with MSY, however, the ecological role of lobster is not taken into account in the HCR, preventing the fishery from meeting SG100.

#### HCRs robustness to uncertainty

- b
- Guide post

The HCRs are likely to be robust<br/>to the main uncertainties.The HCRs take account of a wide<br/>range of uncertainties including

The HCRs take account of a **wide** range of uncertainties including the ecological role of the stock, and there is **evidence** that the HCRs are robust to the main uncertainties.



PI 1.2	2.2	There are well defined and effective harvest control rules (HCRs) in place		
	Met?		Yes	Νο
Rationa	ale			

The HCRs are likely to be robust to the main uncertainties.

Harvest control rules include a broad set of measures aiming at preventing the lobster stock to decline in a changing environment. Those uncertainties are clearly mentioned in the 2009 Conservation Plan, which consider the implementation of an ecosystemic approach for the lobster fishery management.

However, it is not possible to affirm that the HCR take into account a wide range of uncertainties. The use of landings as a proxy for the biomass remains debatable, and the robustness of HCR is not certain. This prevents the fishery from meeting SG100.

HCRs	eva	luation
TICING	cvu	luuuion

с	Guide post	There is <b>some evidence</b> that tools used <b>or available</b> to implement HCRs are appropriate and effective in controlling exploitation.	Available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.	<b>Evidence clearly shows</b> that the tools in use are effective in achieving the exploitation levels required under the HCRs.
	Met?	Yes	Yes	No

#### Rationale

**Available evidence indicates** that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.

Exploitation is well controlled.

In order to achieve the objectives defined in the harvest strategy, fishing pressure was reduced with the diminution of the nominal fishing effort. The effort of reducing fishing pressure was done even if the various biological indicators show that the stock is healthy, under the new reference points (landings above the Upper Reference Limit) and that the trends are positive. The objective of increasing egg production was reached. A secondary objective was to reduce exploitation rate. That objective was also reached as, since 1995, this exploitation rate has been reduced by 50% (for the same fraction of the stock)

The tools have demonstrated to be effective to achieve the targets defined in the harvest strategy and in the newly defined precautionary approach, the fishery meeting SG60 and SG80.

However, the team determines that there is no clear evidence that the tools are effective, preventing the fishery from meeting SG100. Stock status is only expressed in relative terms, based on empirical indicators. Landings are used by default as a proxy for BMSY and it is not evident that the current exploitation level is adapted to the stock productivity, even if landings are increasing.

#### References

DFO. 2016a. 2015 Lobster stocks assessment in the Gaspé, Quebec area (LFAS 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2016/043.

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2016/2016 043-eng.html

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

DFO 2019a. Sommaire: Évaluation des stocks de homards des eaux côtières du Québec en 2018.

Fogarty, M.J. and L. Gendron. 2004. Biological reference points for American lobster (Homarus americanus) populations: limits to exploitation and the precautionary approach. Canadian Journal of Fisheries and Aquatic Science 61: 1392-1403.

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Draft scoring range	Applicable SGs/elements <u>likely</u> met			<u>Likely</u> overall PI
Drait scoring range	SG60	SG80	SG100	score



PI 1.2.2	There are well defined and effective harvest control rules (HCRs) in place				
		2 of 2	3 of 3	0 of 3	≥80
Information gap in	dicator	Information sufficient to score PI			
Overall Performance Indicator scores added from Client and Peer Review Draft Report					
Overall Performance Indicator score		Applicable SGs/elements met			Querall coore
		SG60	SG80	SG100	Overall score
		X of x	X of x	X of x	
Condition number (if relevant)					


PI 1.2	2.3			
Scoring Issue		SG 60	SG 80	SG 100
	Range of	information		
а	Guide post	<b>Some</b> relevant information related to stock structure, stock productivity and fleet composition is available to support the harvest strategy.	<b>Sufficient</b> relevant information related to stock structure, stock productivity, fleet composition and other data are available to support the harvest strategy.	A comprehensive range of information (on stock structure, stock productivity, fleet composition, stock abundance, UoA removals and other information such as environmental information), including some that may not be directly related to the current harvest strategy, is available.
	Met?	Yes	Yes	No

## PI 1.2.3 – Information and monitoring

#### Rationale

**Sufficient** relevant information related to stock structure, stock productivity, fleet composition and other data are available to support the harvest strategy.

Fleet composition is well known with the licensing system. A wide range of information is collected on the lobster stock on a yearly basis through various tools: at-sea sampling, recruitment index program, SCUBA divers survey. Size composition of catches, abundance of pre-recruits and berried females are thus available. Those data allow to provide information on the global trends of the lobster population and to verify if the harvest strategy is reached.

Therefore the team determines that SG60 and SG80 are met.

However, while the number of indicators is quite high, they are not comprehensive. *E.g.*: stock abundance estimates rely on indirect indicators (landings, CPUEs), and natural fluctuations due to environment is uncertain, preventing the fishery from meeting SG100.

#### Monitoring

b	Guide post	Stock abundance and UoA removals are monitored and <b>at</b> <b>least one indicator</b> is available and monitored with sufficient frequency to support the harvest control rule.	Stock abundance and UoA removals are <b>regularly</b> <b>monitored at a level of accuracy</b> <b>and coverage consistent with</b> <b>the harvest control rule</b> , and <b>one or more indicators</b> are available and monitored with sufficient frequency to support the harvest control rule.	All information required by the harvest control rule is monitored with high frequency and a high degree of certainty, and there is a good understanding of inherent uncertainties in the information [data] and the robustness of assessment and management to this uncertainty.
	Met?	Yes	Yes	Νο

#### Rationale

Stock abundance and UoA removals are **regularly monitored at a level of accuracy and coverage consistent with the harvest control rule**, and **one or more indicators** are available and monitored with sufficient frequency to support the harvest control rule.

Stock abundance and fishery removals are regularly monitored at a level of accuracy and coverage consistent with the harvest control rule, and one or more indicators are available and monitored with sufficient frequency to support the harvest control rule. The lobster stock assessment is based on the analysis of trends of stock indicators including abundance, fishing pressure and production, derived from fishery-dependent and some fishery-independent data. The fishery-dependent data include DFO official catch statistics, and voluntary recruitment-index program. Fishery-independent data are being developed and consist of post-season trap survey.



## PI 1.2.3

#### Relevant information is collected to support the harvest strategy

All information required by the harvest control rule is regularly monitored. The coverage allow to analyze the effectiveness of the harvest control rules. Several indicators are followed: catch rates, exploitation rates, individual size, abundance of berried females, recruitment indices, abundance of large animals ("jumbo").

Therefore the team determines that SG60 and SG80 are met.

However, it is not possible to affirm that information is gathered at a high frequency and a high degree of certainty, and there is not a good understanding of inherent uncertainties in the information and the robustness of assessment and management to this uncertainty. Although it is considered that catch rates reflect lobster abundance on the sea floors, they can also be affected by catchability variations that bring about uncertainty in their interpretation. Changes in catchability can also create uncertainty in the calculation of exploitation rate indices. Spatial fishing patters can affect the abundance index of berried female if, for example, fishers avoid areas where these female can gather. There is also uncertainty as the representativeness of small-scale observations for the entire population. This prevents the fishery from meeting SG100.

#### Comprehensiveness of information

С	Guide post	other fishery removals from the stock.	
	Met?	Yes	

#### Rationale

There is good information on all other fishery removals from the stock.

Lobster caught by the FSC fishing is recorded and catch data were provided to the team.

Due to condition of licence, lobster should not be retained without a lobster licence and must be released immediate in water. Post capture mortality is recognized to be low and actual removals should be minor.

Poaching and illegal fishing is no longer a concern. According to stakeholders and enforcement staff, removals remain minor, due to self-policy, surveillance and heavy penalties.

Therefore the team determines that SG80 is met.

#### References

DFO. 2016a. 2015 Lobster stocks assessment in the Gaspé, Quebec area (LFAS 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2016/043.

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2016/2016\_043-eng.html

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

DFO 2019a. Sommaire: Évaluation des stocks de homards des eaux côtières du Québec en 2018.

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable	<u>Likely</u> overall PI		
Draft scoring range	SG60	SG80	SG100	score
	2 of 2	3 of 3	0 of 3	≥80
Information gap indicator		Information suff	icient to score PI	

#### **Overall Performance Indicator scores added from Client and Peer Review Draft Report**

	Applica	Overall seers		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	





Relevant information is collected to support the harvest strategy

Condition number (if relevant)



### PI 1.2.4 – Assessment of stock status

PI 1.2	2.4	There is an adequate assessment	ssessment of the stock status				
Scoring Issue SG 60 SG 80		SG 80	SG 100				
	Appropri	ateness of assessment to stoc	k under consideration				
а	Guide post		The assessment is appropriate for the stock and for the harvest control rule.	The assessment takes into account the major features relevant to the biology of the species and the nature of the UoA.			
	Met?		Yes	Yes			

#### Rationale

The assessment takes into account the major features relevant to the biology of the species and the nature of the UoA. Harvest control rules are based on landings, used as a proxy for the biomass. The assessment also considers indicators: recruitment index (SCUBA and trawl survey), CPUEs, abundance of berried females, and egg production.

The assessment is appropriate for the stock and for the harvest control rule, meeting SG 80. It takes into account the major features relevant to the biology of the species, such as benthic settlement, size and abundance of berried females, the fisheey meeting SG100.

#### Assessment approach

b	Guide post	The assessment estimates stock status relative to generic reference points appropriate to the species category.	The assessment estimates stock status relative to reference points that are appropriate to the stock and can be estimated.	
	Met?	Yes	Yes	

#### Rationale

The assessment estimates stock status relative to reference points that are appropriate to the stock and can be estimated. Reference points are based on landings which are considered to be appropriate for the stock. Same approach is used for other lobster stocks in the Gulf of St Lawrence.

However, the assessment is also based on a set of indicators (landings, CPUEs, berried female, recruitment indices). Those indicators are periodically compared with defined reference points (LRP, URP), especially during the Regional Advisory Process.

	Uncertair	nty in the assessment		
с	Guide post	The assessment <b>identifies major sources</b> of uncertainty.	The assessment take uncertainty into account.	The assessment takes into account uncertainty and is evaluating stock status relative to reference points in a <b>probabilistic</b> way.
	Met?	Yes	Yes	No

#### Rationale

The assessment takes uncertainty into account.

The stock status report formally specified the sources of uncertainties such as: weather condition, which influence catchability, and can therefore have impacts on several demographic assessment indicators; low sat-sea sampling coverage and spatial fishing patterns, which bring uncertainty on the value of the CPUEs. Both SG60 and SG80 are met.

The uncertainties are not evaluated in terms of probability, preventing the fishery from meeting SG100.

**d** Evaluation of assessment

. . . . . . . . . . . . . . . . .



PI 1.2.4		There is an adequate assessment	of the stock status	
	Guide post			The assessment has been tested and shown to be robust. Alternative hypotheses and assessment approaches have been rigorously explored.
	Met?			Νο

#### Rationale

The robustness of the assessment has not been formally tested, especially as landings are used as reference points. It is not possible to say that alternative hypotheses and assessment approaches have been rigorously explored, preventing the fishery from meeting SG100.

	Peer review of assessment					
e	Guide post		The assessment of stock status is subject to peer review.	The assessment has been internally and externally peer reviewed.		
	Met?		Yes	Νο		

#### Rationale

The assessment of stock status is subject to peer review.

The stock assessment is subject to peer review at the Regional Advisory Process, which takes place every two years, the fishery meeting SG80. The assessment is not externally peer reviewed, preventing the fishery from meeting SG100.

#### References

DFO. 2016. 2015 Lobster stocks assessment in the Gaspé, Quebec area (LFAS 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2016/043.

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2016/2016\_043-eng.html

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

DFO 2019a. Sommaire: Évaluation des stocks de homards des eaux côtières du Québec en 2018.

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable	<u>Likely</u> overall PI		
Draft scoring range	SG60	SG80	SG100	score
	X of x	X of x	X of x	<60/60 – 79/≥80
Information gap indicator	More information sought/Information sufficient to score PI			

#### **Overall Performance Indicator scores added from Client and Peer Review Draft Report**

	Applicable SGs/elements met				
Overall Performance Indicator score	SG60	SG80	SG100	Overall score	
	X of x	X of x	X of x		



PI 1.2.4

There is an adequate assessment of the stock status

Condition number (if relevant)



### 8.3 Principle 2

#### 8.3.1 Principle 2 background

Table 13 presents scoring elements assigned to components within Principle 2.

Table 13. Scoring elements.			
Component	Scoring elements	Designation	Data-deficient
Primary	Atlantic mackerel ( <i>Scomber scrombus</i> ) is Subareas 3 and 4	Main	No
Primary	Fall spawner component of Atlantic herring ( <i>Clupea harengus</i> ) in NAFO Div. 4T (Gulf of St Lawrence)	Main	No
Primary	Redfish ( <i>Sebastes mentella and Sebastes fasciatus</i> ) in Unit 1 (Gulf of St Lawrence)	Main	No
Secondary	Rock crab (Cancer irroratus)	Minor	Yes
Secondary	Sculpin (Myoxocephalus Scorpius)	Minor	Yes
Secondary	Sea urchin	Minor	Yes
Secondary	Cunner (Tautogolabrus adspersus)	Minor	Yes
Secondary	Atlantic spiny lumpsucker (Eumicrotremus spinosus)	Minor	Yes
Secondary	Ocean pout (Zoarces americanus)	Minor	Yes
Secondary	Toad crab ( <i>Hyas spp</i> )	Minor	Yes
Secondary	Common whelk (Buccinum undatum)	Minor	Yes
Secondary	Atlantic eel (Anguilla rostrate)	Minor	Yes
Secondary	Lumpfish (Cyclopterus lumpus)	Minor	Yes
Secondary	Greenland cod (Gadus ogac)	Minor	Yes
ETP species	Atlantic wolffish (Anarhichas lupus)	N/A	No
ETP species	Spotted wolffish (Anarhichas minor)	N/A	No
ETP species	Leatherback turtle (Dermochelys coriacea)	N/A	No
ETP species	North Atlantic right whale (Eubalaena glacialis)	N/A	No
ETP species	Blue whale (Balaenoptera musculus)	N/A	No
Habitats	Muddy/sandy sediments with gravels	Main (commonly encountered habitats)	No
Habitats	Coral and sponge areas	VMEs	No
Habitats	Eel grass meadows	VMEs	No



#### 8.3.1.1. The ecosystem the Gaspésie lobster fishery depends on

The Gulf of St. Lawrence is similar to an inland sea with a distinct ecosystem, characterized by partial isolation from the North Atlantic, freshwater runoff from the land, and a deep trough running along its depths, seasonal ice, the presence of a cold intermediate layer, shallow depths, and high biological productivity and diversity. The distinct qualities of physical and biological components of the Gulf combine to create its unique environment.

The Gulf of St. Lawrence is a semi-enclosed sea, covering an area of about 240 x 10<sup>3</sup> km<sup>2</sup>, which opened to the Atlantic Ocean through the Cabot Strait and the Strait of Belle Isle (Figure 4). The Laurentian Channel is a long, continuous trough over 300 m deep that runs 1,500 km from the continental shelf in the Atlantic Ocean to where it ends abruptly in the St. Lawrence Estuary at the mouth of Saguenay River near Quebec City. This trough brings deep oceanic waters to the estuary. There are secondary troughs and plateaus such as the Magdalen Shallows, which cover the southern part of the Gulf. The Gulf's submarine topography is considered complex, and strongly affects how water circulates. Circulation in the Gulf is generally counter-clockwise.



**Figure 4.** Boundary of the Gulf of St Lawrence. Source: <u>http://www.dfo-mpo.gc.ca/oceans/management-gestion/gulf-golfe-eng.html</u>

A comprehensive overview of the ecosystem within the Gulf of St. Lawrence is given in the "Estuary and Gulf of St. Lawrence Marine Ecosystem Overview and Assessment Report" (Dufour and Ouellet 2007). The physical, chemical and biological oceanographic conditions on the Gulf of St Lawrence is regularly analysed as part of the Atlantic Zone Monitoring Program (AZMP), the last report was published in 2018<sup>4</sup>.

The GSL Integrated Management (GOSLIM) plan was published in 2013 (DFO 2013b): "the plan provides a framework for inter-jurisdictional collaborative engagement of the regulatory authorities relevant to different management issues. Such collaboration gives rise to a process for effectively addressing different management issues within the GOSLIM area, when and where they arise."

<sup>&</sup>lt;sup>4</sup> http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2018/2018 037-eng.html



#### Lobster in the GSL food web

Larvae lobster are omnivorous, they feed on zooplankton (copepods, crab larvae, eggs) and phytoplankton (diatoms, dinoflagellates and filamentous algae)<sup>5</sup>. Juveniles and adults are mainly carnivorous and prey on crab, small sea stars, lobster, marine worms, molluscs and fish. Rock crab is a key food resource for lobster. Stomach analysis in Magdalen Islands, Gulf of St Lawrence, showed that lobsters feed principally on horse mussels, rock crabs, lobsters, gastropods and ectoprocts (Hudon and Lamarche 1989). Hudon and Lamarche (1989) also observed in one sampling station that large crabs appeared to eat lobster (necrophagy and active predation as well). The natural diet of juveniles and adult was investigated by stomach content analysis in Magdalen Islands (Sainte-Marie and Chabot 2002). Results showed an ontegenic shift in diet with increasing size of lobsters: the contribution of bivalves and animal flesh decreased from the smallest lobsters (28% and 39%, respectively) to the largest lobsters (2% and 11%, respectively), whereas the reverse trend was seen for rock crab (7% in smallest lobsters to 53% in largest lobsters. Stomach analysis in Northumberland Strait showed that rock crab was the single most important component of the diet (between 45 and 68% of prey biomass) (Hanson 2009). Small see stars and lobster represented between 0.7 and 12.9% of the prey biomass. Molluscs, polychaetes, and fish remains each did not exceed 7.5% of prey biomass. Predation on planktonic stages of lobster is rare and predation upon benthic stages of lobster is uncommon, principally restricted to finfish (sculpin and cod) and cannibalism (during the moult). DFO investigated lobster and predator-prey relationships using samples collected during trawl surveys in LFA 25 and part of LFA 26 (Comeau et al. 2008). Stomach analysis showed that decapods were the principal prey (57% to 84% of prey biomass), with rock crab being the single most important component of the diet (45% to 78%). Lobster represented 8% to 13% of the prey biomass. It has also been observed that the only demersal fish demonstrated to consume large amounts of lobster was the sculpin.

#### 8.3.1.2. Primary and secondary species

According to MSC Fisheries Standard v.2.01, primary and secondary species are non-target species that are not ETP species. Table 14 gives the definition of these two components bearing in mind that primary and secondary species can be either landed or discarded or species used as bait.

**Table 14.** Definition of Primary and Secondary Species (Table GSA2 of MSC Guidance to MSC Fisheries Standard v.2.01.).

Primary Species	Secondary Species
<ul> <li>In scope species, e.g. gish and shellfish</li> </ul>	• Fish and shellfish, and out of scope species
<ul> <li>Managed with tools controlling exploitation</li> </ul>	(birds, reptiles, amphibians and mammals) that
<ul> <li>Reference points are in place</li> </ul>	are not ETP species
• Analytical or empirical derived stock	<ul> <li>Not managed according to reference points</li> </ul>
assessment in place	<ul> <li>No analytical or empirical derived stock</li> </ul>
	assessment in place

The assessment team determines which species are considered as main and which are considered as minor according to the MCS Fisheries Standard v.2.1. A species is considered as main if:

- The catch of a species by the UoA comprises 5% or more by weight of the total catch of all species by the UoA; or
- The species is classified as less resilient and the catch of the species by the UoA comprises 2% or more by weight of the total catch of all species by the UoA.
- In the case of very large fisheries with exceptionally large catches (MSC GSA 3.4.4), the assessment team shall still classify species that do not meet the threshold of 5% and 2% as main. It is not the case for the Gaspésie lobster trap fishery which total catches cannot be considered as exceptionally large.

<sup>&</sup>lt;sup>5</sup> <u>http://slgo.ca/en/lobster/context/foodchain.html</u>



Under licence condition, lobster harvesters are not authorized to keep any groundfish species caught incidentally. All bycatches species must be returned to the water and released in the exact capture location with as little harm as possible. Nonetheless, under the section 55 of the AFR, lobster harvesters are allowed to retain male rock crab without requiring a rock crab licence. A portion of the rock crab caught is retained to be used as bait (12 t in 2018, DFO data from logbooks) but the vast majority of rock crab caught is discarded.

Non-target species catches are mandatory to be recorded in logbooks. Also, DFO carried out a bycatch survey during the 2011 fishing season (Gendron and Duluc, 2012). The bycatch composition from logbooks and the DFO survey is similar, and both bycatch data collection methods show a very low level of bycatch with most of the bycatch species accounting for less than 2% of the total catch.

There is strong scientific evidence that individuals are release alive with very low post-capture mortality. As per GSA3.4.3, very low post capture mortality is interpreted as no less than a 90% survival rate.

In cases where scientific evidence is not available for the particular fishery, studies pertaining to similar fisheries can be used with appropriate rationales provided.

A collaborative research project, "Bycatch composition and vitality assessment of species caught as bycatch during the lobster fishery in the Southern Gulf of St Lawrence", led by DFO Gulf Region has been implemented in 2015 (DFO 2017a). The results of the bycatch study was presented during the Southern Gulf of St Lawrence Lobster Advisory Committee meeting held in January 2017. DFO Gulf also presented the results during the 11<sup>th</sup> International Conference & Workshop on Lobster Biology and Management that has been held in Portland (Maine, US) in June 2017. Consequences for the status of affected populations have been investigated through the study of bycatch survival by noting injuries and evaluating vitality every minute for 10 minutes. There was no mortality during vitality observations, 98% of observed individuals had no visible injury, there was very little variation in individuals vitality over time. Sorting is manual and bycatch species are quickly returned to water; lobster fishing occurs in shallow waters so there is no everted stomach or bloated swim bladder in fish caught. It was determined that survival of all returned species is very high.

Gaspésie lobster fishery operations are similar to the Southern Gulf of St Lawrence lobster fishery operations, and the bycatch composition is very similar with rock crab, cunner and sculpin accounting for the bulk of bycatch.

Note that where individual are released alive, they shall not contributed to the definition of main (MSC SA3.4.3).

Given that 1) Gaspésie lobster fishery total catches are not considered as exceptionally large, 2) only male rock crab can be retained, 2) the amount of rock crab retained to be used as bait is less than 1% of total catches; and 3) there is evidence that individuals of all other bycatch species are released alive, the assessment team determines that there is no main secondary species.

Main primary species are species used as bait, Atlantic mackerel and the fall spawner component of the herring caught in the Gulf of St Lawrence which amount used as bait is  $\geq$ 5%. The redfish caught in the Gulf of St Lawrence is also determined to be main primary species as the amount used as bait is approximately 2% and redfish fish species are less resilient (slow growth, long-lived species).

Except rock crab which can be retained and used as bait by lobster harvesters, all secondary species are unwanted catches. There is no unwanted primary species.

Table 15 lists primary and secondary species for the Gaspésie lobster trap fishery.



**Table 15.** Primary and secondary species for the Gaspésie lobster trap fishery. Source: Gendron and Duluc 2012, and data from logbooks provided by DFO and the RPPSG.

Species	Out of scope	Managed according to reference point	% UoA catch 2011	% UoA catch 2016	% UoA catch 2017	% UoA catch 2018	Stock	Category	Stock status	Reference
Rock crab, crabe commun <i>Cancer irroratus</i>	No	No	10%	<1%	<1%	<1%	Gaspé Peninsula	minor secondary	CPUEs are stable, size structure and average sizes have improved.	DFO 2018b
Sculpin, chaboisseau Myoxocephalus scorpius	No	No	<1%	<1%	<1%	<1%	Gulf of St Lawrence	minor secondary	Stock not assessed. But according to DFO, the species is very abundant in the GSL	-
Sea urchin, oursin	No	No	<5%	<2%	<2%	<2%	Gaspé Peninsula	minor secondary	Stock not assessed.	-
Common whelk, buccin Buccinum undatum	No	No	<1%	<1%	<1%	<1%	Gaspé Peninsula	minor secondary	Stock not assessed.	-
Cunner, tanche tautogue, Tautogolabrus adspersus	No	No	<1%	<1%	<1%	<1%	Gaspé Peninsula	minor secondary	Stock not assessed. But according to DFO, the species is very abundant in the GSL	-
Toad crab, crabe araignée <i>Hyas</i> spp	No	No	<1%	<1%	<1%	<1%	Southern Gulf of St Lawrence	minor secondary	Stock not assessed.	-
Ocean pout, loquette de mer Zoarces americanus	No	No	<1%	<1%	<1%	<1%	Southern Gulf of St Lawrence	minor secondary	Stock not assessed.	-



Species	Out of scope	Managed according to reference point	% UoA catch 2011	% UoA catch 2016	% UoA catch 2017	% UoA catch 2018	Stock	Category	Stock status	Reference
Greenland cod, ogac, Gadus ogac	No		<1%	<1%	<1%	<1%	Southern Gulf of St Lawrence	minor secondary	Stock not assessed.	-
Atlantic eel, anguille d'Amérique Anguilla rostrata	No	No	-	<1%	<1%	<1%	Western North Atlantic Ocean	minor secondary	Stock not assessed.	-
Atlantic spiny lumpsucker, poule de mer Eumicrotremus spinosus	No	No	<1%	<1%	<1%	<1%	Southern Gulf of St Lawrence	minor secondary	Stock not assessed.	-
Lumpfish, lompe Cyclopterus lumpus	No	No	-	<1%	<1%	<1%	Southern Gulf of St Lawrence	minor secondary	Stock not assessed.	-
				-	Species used a	is bait	•			
Herring, hareng <i>Clupea harengus</i> (frozen)	No	Yes			≥5%	≥5%	Fall spawner component in Southern Gulf of St Lawrence (NAFO Div. 4T)	Main primary species	SSB below the upper stock reference level and well above the limit reference point, and overfishing is not occurring	DFO 2018c
Atlantic mackerel, maquereau <i>Scomber scrombus</i> (frozen)	No	Yes			>5%	>5%	Northwest Atlantic	Main primary species	Stockisoverfished,2016SSB is40% of theLRP.Theresignsofimprovement:SSB shows a slow	DFO 2017b



Species	Out of scope	Managed according to reference point	% UoA catch 2011	% UoA catch 2016	% UoA catch 2017	% UoA catch 2018	Stock	Category	Stock status	Reference
									increasing trend since 2012, age structure in the fishery has been improved since 2013 with an increase in ages 5 and 6, and abundance index from the egg survey slowly increased.	
Redfish, Sébastes, Sebastes fasciatus and S. mentella. (frozen)	No	Yes			2%	2%	Gulf of St Lawrence (Unit 1)	Mainprimary species	Although mature biomasses are still below the limit reference point, stock has improved. Prospects are positive due to large cohorst from 2011-2013. There is a significant increase in biomass and recent strong recruitment.	Brassard et al 2017 DFO 2018d
Rock crab, crabe commun Cancer irroratus	No	No			<1%	<1%	Gaspé Peninsula	minor secondary	CPUEs are stable, size structure and	DFO 2018b



Species	Out of scope	Managed according to reference point	% UoA catch 2011	% UoA catch 2016	% UoA catch 2017	% UoA catch 2018	Stock	Category	Stock status	Reference
									average sizes have improved.	



Cumulative impacts will be considered for the main species which are all species used as bait. The species are also used as bait by other Canada Atlantic shellfish trap fisheries certified or under assessment. These fisheries overlap with the Gaspésie lobster fisheries and are listed in section 10.9.

In July 2016, MSC released the following interpretation regarding the assessment of cumulative impacts for Principle 2 species between FCR v.2.0 and CR v.1.3 fisheries<sup>6</sup>:

"The MSC has noted the points raised in relation to difficulties of assessing cumulative impacts between fisheries on v2.0 and v1.3 of the standard. We have consulted with the MSC Technical Advisory Board (TAB) and Board of Trustees and have reconsidered the language in Table GSA3. Due to the points raised in the request, the first two paragraphs of guidance on 'MSC UoAs and the assessment of cumulative impacts' in Table GSA3 may be taken as a suggestion and does not need to be implemented. The expectation would be that fisheries assessed against v2.0 of the standard shall only be required to consider cumulative impacts with other v2.0 fisheries."

There is a partial strategy in place that is designed to maintain or to not hinder rebuilding of primary and secondary species. Lobster fishing is limited in time, there is a trap allocation, fishing effort was reduced though a reduction in the number of licences and traps per licence from 1998 to 2005 and after 2009, all non-target species (except male rock crab) must be returned to the water and released in the exact capture location with as little harm as possible, escape vents are required, it is prohibited to haul and bait traps more than once a day.

#### 8.3.1.3. ETP species

According to MSC Standard v.2.01, ETP species are species recognized by national ETP legislation and/or listed in binding international agreements listed in SA3.1.5.2. Binding in this context refers to the agreement being binding on the parties to the agreement and does not require the state in whose waters the fishery takes place to be a signatory to the agreement for it to be applicable. Also ETP species are species classified as out-of-scope (amphibians, reptiles, birds and mammals) that are listed in the IUCN Red List as vulnerable, endangered or critically endangered.

Table 16 lists ETP species that are found in the Gulf of St Lawrence and may potentially overlap with the Gaspésie lobster trap fishery, and provides interactions data from the Species at Risk Act (*SARA*) logbooks.

Group	Species	SARA status	Reported interactions with the fishery over the period of 2016-2018
Fish	Atlantic wolffish, Anarhichas lupus	Special concern	85 kg in 2018
Fish	Spotted wolffish, Anarhichas minor	Threatened	45 individuals in 2016 43 kg in 2018
Sea turtle	Leatherback turtle, Dermochelys coriacea	Endangered	0
Marine mammals	North Atlantic right whale, Eubalaena glacialis	Endangered	0
	Blue whale, Balaenoptera musculus	Endangered	0

**Table 16.**ETP species that may overlap with the Gaspésie lobster trap fishery. Their *SARA* status is specified, as well as information on reporded interactions with the fishery.

<sup>&</sup>lt;sup>6</sup> <u>http://msc-info.accreditation-services.com/questions/assessing-p2-species-cumulatively-between-v2-0-and-1-3-fisheries/</u>



Pursuant to the *SARA*, no person shall kill, harm, harass, capture, take, possess, collect, buy, sell or trade an individual or any part or derivate of a wildlife species designated as endangered, the national limit for these species determined to be 0 mortality.

Cumulative impacts will be considered for these species that may potentially interact with other Canada Atlantic fisheries certified or under assessment.

In July 2016, MSC released the following interpretation regarding the assessment of cumulative impacts for Principle 2 species between FCR v.2.0 and CR v.1.3 fisheries<sup>7</sup>:

"The MSC has noted the points raised in relation to difficulties of assessing cumulative impacts between fisheries on v2.0 and v1.3 of the standard. We have consulted with the MSC Technical Advisory Board (TAB) and Board of Trustees and have reconsidered the language in Table GSA3. Due to the points raised in the request, the first two paragraphs of guidance on 'MSC UoAs and the assessment of cumulative impacts' in Table GSA3 may be taken as a suggestion and does not need to be implemented. The expectation would be that fisheries assessed against v2.0 of the standard shall only be required to consider cumulative impacts with other v2.0 fisheries."

All bycatch of ETP species must be returned to the water and release in the exact capture location with as little harm as possible.

Post-release survival of wolffish caught in lobster traps are considered to be high, see section 8.3.1.2 regarding the bycatch program research conducted by DFO Gulf.

Fact sheets including tips on how to disentangle leatherback turtles<sup>8</sup> safely and how to handle and release woflffish<sup>9</sup> to help increase successful disentanglement and release and improve survival have been published by DFO and distributed to harvesters.

Due to the characteristics of fishing operations, interactions with endangered whale are considered not to occur. Lobster traps are set very close to the shore in shallow waters (verified by the assessment team during the initial assessment site visit). There is thus low overlapping between lobster fishing grounds and areas where whales occur.

Satellite telemetry data from 70 leatherback turtles tracked in Atlantic Canadian waters were used to identify important habitat for the species (DFO 2012). It shows that the relative probability of residency of leatherbacks around Gaspé peninsula is low. Although it was noted that notable areas not sampled by tagged turtles included Gaspésie peninsula, the author of the analysis pointed out that while opportunistic sightings of leatherbacks have occurred in this area, such records are rare relative to those corresponding to the high-use areas identified via satellite telemetry.

For blue whale, accidental entanglements in fishing gear was classified as low-risk anthropogenic threats in comparison with whale watching and collisions with vessels which were classified as medium-risk anthropogenic threats, and acoustic environmental degradation and food availability which were classified as high-risk anthropogenic threats (DFO 2016b).

#### 2019 management measures to minise the risk of interaction with the North Atlantic right whale

The measures were formally announced to fishers by means of a Notice to Fish Harvesters issued on April 12<sup>th</sup>, 2019 (DFO 2019b). The management measures are similar to the ones applied in 2018 but have been refined. They remain focused on preventing entenglements.

<sup>&</sup>lt;sup>7</sup> <u>http://msc-info.accreditation-services.com/questions/assessing-p2-species-cumulatively-between-v2-0-and-1-3-fisheries/</u>

<sup>&</sup>lt;sup>8</sup> <u>http://www.dfo-mpo.gc.ca/species-especes/publications/sara-lep/leatherback-luth/index-eng.html</u>

<sup>&</sup>lt;sup>9</sup> http://www.dfo-mpo.gc.ca/species-especes/publications/sara-lep/wolffish-loup/tips-conseils-eng.html



The main adjustments for the 2019 season include:

- Adjusting the area closed to snow crab, lobster fisheries and all other non-tended fixed-gear fisheries in Atlantic Canada and Quebec to include the area where 90% of the North Atlantic Right Whale were sighted last year during the prime fishing season (Figure 5). This area is a little less than half the size it was in 2018 and is more elongated North-to-South than in 2018.
- Keeping the overall protection area the same in terms of the combined season-long closure area and the area where temporary 15-day closures may occur for snow crab, lobster fisheries and all other nontended fixed-gear fisheries from the date when right whales are sighted (Figure 5).
- If a NARW is seen in waters between the 10 and 20 fathom shallow water protocol lines, a temporary closure will occur up to the 10 fathom shallow water protocol line. Licence holders will then be required to move their fishing gear close to the coast and will be allowed to continue fishing in waters shallower than 10 fathoms.
- If a NARW is seen in waters less than the 10 fathom shallow water protocol line, a temporary closure will occur up to the coast.



**Figure 5.** North Atlantic Right Whale management measures 2019. The static fishing closure area is in yellow and areas subject to temporary closure protocol are in grey. Source: DFO 2019b.



#### 8.3.1.4. Habitats

Fishing grounds remain basically the same over time, lobster fishing activities occur on sandy/muddy sediments mixed with gravels which are considered as commonly encountered habitats.

Vulnerable Marine Ecosystems (VMEs) are coral and sponge areas and eel grass (Zostera marina) meadows.

Significant coral and sponge areas have been mapped and significant areas have been identified in the Gaspésie peninsula (Figure 6). However, these areas are not in the inshore portion of the peninsula where lobster fishing grounds are located.



**Figure 6.** Map of the geographical distribution of the lobster average annual landed value and significant coral and sponge areas (blue) in the GSL. Source: <u>http://www.qc.dfo-mpo.gc.ca/golfe-gulf/coraux-eng.html</u>

In December 2017, 11 coral and sponge conservation areas have been implemented in the Estuary and Gulf of St Lawrence (Figure 7). Fisheries management measures have been implemented and were effective on 15<sup>th</sup> December 2017 with the release of the Quebec Region Variation Order 2017-Q-104<sup>10</sup>. Lobster traps, and all other bottom-contact fishing gears, are prohibited in these conservation areas.

<sup>&</sup>lt;sup>10</sup> http://www.qc.dfo-mpo.gc.ca/peches-fisheries/commerciale-commercial/documents/2017-Q-104\_EN.pdf





**Figure 7.** Map of areas identified for coral and sponge conservation in the GSL (pink). <u>http://www.qc.dfo-mpo.gc.ca/golfe-gulf/coraux-eng.html</u>.

According to Martel et al (2009), eel grass beds are located inside rive mouths where the estuaries form bays, lagoons, and in estuaries and lagoons behind baymouth bars (known as a "barachois" in Québec) (Figure 8). Lobster fishing does not occur in these areas, so there is no overlapping between eel grass beds and lobster fishing grounds.





**Figure 8.** Distribution of eel grass beds in the GSL: Gaspé Peninsula (top panel) and Chaleur Bay (bottom panel). Source: Martel et al 2009.



In March 2019, DFO announced the establishment of Banc-des-Américains Marine Protected Area (MPA), an area of 1,000 km<sup>2</sup> located off the coast of the Gaspé Peninsula<sup>11</sup> (Figure 9). The MPA is designed to:

- Conserve and protect benthic (seabed) habitats;
- Conserve and protect pelagic (water column) habitats and forage species and forage species; and
- Promote the recovery of at-risk whales and wolffish.

It has a dual status, as an aquatic reserve under Quebec law, and as a marine protected area under Sub-section 35(3) of the *Oceans Act*.

*Banc-des-Américains Marine Protected Regulations* adopted in March established two management areas (6). Anchoring, commercial and recreational fishing activities are prohibited in Zone 1, the most sensitive area, but Indigenous fishing for food, social and ceremonial purposes will continue to be allowed. In Zone 2, commercial traps, longlines and hand line fishing will be allowed as long as they are not used to fish forage species. Oil and gas activities, discharge of sewage and release of grey water from large vessels are prohibited throughout the entire Marine Protected Area.

Other activities may be carried out in the MPA if they are carried out for the purpose of public safety, national defence, national security, law enforcement or to respond to an emergency. Moreover, any person may submit to the Minister an activity plan for the carrying out of any scientific research or monitoring, habitat restoration, educational or commercial marine tourism activity in the MPA.



Figure 9. Banc-des-Américains MPA.

<sup>&</sup>lt;sup>11</sup> https://www.canada.ca/en/fisheries-oceans/news/2019/03/a-new-marine-protected-area-at-the-eastern-tip-of-the-gaspe-peninsula.html



## 8.3.2 Principle 2 Performance Indicator scores and rationales

### PI 2.1.1 – Primary species outcome

PI 2.1	L.1 The UoA aims to maintain primary species above the point where recruitment would be impaired ( and does not hinder recovery of primary species if they are below the PRI						
Scoring	Issue	SG 60 SG 80		SG 100			
	Main prir	mary species stock status					
а	Guide post	Main primary species are <b>likely</b> to be above the PRI. OR If the species is below the PRI, the UoA has measures in place that are <b>expected</b> to ensure that the UoA does not hinder recovery and rebuilding.	Main primary species are highly likely to be above the PRI. OR If the species is below the PRI, there is either evidence of recovery or a demonstrably effective strategy in place between all MSC UoAs which categorise this species as main, to ensure that they collectively do not hinder recovery and rebuilding.	There is a <b>high degree of</b> <b>certainty</b> that main primary species are above the PRI <b>and are</b> fluctuating around a level consistent with MSY.			
	Met?	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish - Yes	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish - Yes	Atlantic mackerel – No GSL fall spawner herring – No Unit 1 redfish - No			

#### Rationale

Main primary species are **highly likely** to be above the PRI. If the species is below the PRI, there is either **evidence of recovery** or a demonstrably effective strategy in place **between all MSC UoAs which categorise this species as main**, to ensure that they collectively do not hinder recovery and rebuilding.

Main primary species are Atlantic mackerel, GSL fall spawner herring and Unit 1 redfish used as bait. These species are not caught in lobster traps but purchased from outside the UoA.

#### Atlantic mackerel

Stock is overfished, 2016 SSB is 40% of the LRP. Therefore Atlantic mackerel stock is considered to be below the PRI. Atlantic mackerel fishery is managed under an IFMP, there is a MLS; and the recent TAC was set below total catches of 14,000 t for which the probability of an increase in biomass is over 80% and which correspond to a low risk of decline under the precautionary approach. The stock assessment suggests that catch levels in recent years have allowed for a slow growth from 2013 to 2016. A slight improvement in age structure has been observed since 2013, with an increase of mackerel of ages 5 and 6, and there were signs that recruitment was higher in 2015 than levels observed in recent years. Therefore, the team determine that SG60 and SG80 are met but not SG100.

#### **GSL fall spawner herring**

SSB below the upper stock reference level and well above the limit reference point, and overfishing is not occurring. Therefore SG60 and SG80 are met but not SG100.

#### <u>Unit 1 redfish</u>

Although mature biomasses are still below the limit reference point, the stock being considered to be below the PRI, stock has improved. Prospects are positive due to large cohorst from 2011-2013. There is a significant increase in biomass and recent strong recruitment.

The Unit 1 redfsih fishing is under a moratorium since 1995. A TAC is established for index fishing since 1999. The harvest strategy includes conservation measures such as a MLS, a bycatch protocol, closure periods to protect redfish mating and spatial closures.

Therefore, the team determine that SG60 and SG80 are met but not SG100.





#### Rationale

There are no minor primary species.

References

Information on bait used provided by the RPPSG

Brassard, C., Bourdages, H., Duplisea, D., Gauthier, J., and Valentin, A. 2017. The status of the redfish stocks (*Sebastes fasciatus* and *S. mentella*) in Unit 1 (Gulf of St. Lawrence) in 2015. DFO Can. Sci. Advis. Sec. Res. Doc. 2017/023. ix + 53 p. http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2017/2017 023-eng.html

DFO 2017b. Assessment of the Atlantic Mackerel Stock for the Northwest Atlantic (Subareas 3 and 4) in 2016. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2017/034.

https://waves-vagues.dfo-mpo.gc.ca/Library/40619576.pdf

DFO 2018c. Assessment of the southern Gulf of St. Lawrence (NAFO Div. 4T) spring and fall spawner components of Atlantic herring (*Clupea harengus*) with advice for the 2018 and 2019 fisheries. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2018/029. http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2018/2018 029-eng.html

DFO. 2018d. Assessment of Redfish Stocks (Sebastes mentella and S. fasciatus) in Units 1 and 2 in 2017. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2018/032.

https://waves-vagues.dfo-mpo.gc.ca/Library/40713684.pdf

Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Ind	ividual scoring elements	Applicable SGs	Likely scoring		
		SG60	SG80	SG100	element scores
1	Atlantic mackerel	1 of 1	1 of 1	0 of 1	≥80
2	Fall spawner herring in the GSL	1 of 1	1 of 1	0 of 1	≥80
3	Redfish in Unit 1	1 of 1	1 of 1	0 of 1	≥80
		Applicable	<u>Likely</u> overall PI		
Draft scoring range		SG60	SG80	SG100	score
		x of x	X of x	X of x	≥80



## PI 2.1.1

The UoA aims to maintain primary species above the point where recruitment would be impaired (PRI) and does not hinder recovery of primary species if they are below the PRI

Information gap indicator

Information sufficient to score PI

**Overall Performance Indicator scores added from Client and Peer Review Draft Report** 

ividual scoring elements	Applicable SGs m	coring element	Scoring element	
	SG60	SG80	SG100	scores
Scoring element 1	X of x	X of x	X of x	
Scoring element 2	X of x	X of x	X of x	
Scoring element 3	X of x	X of x	X of x	
Scoring element 4	X of x	X of x	X of x	
	Applica	s met	Querallecore	
erall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
ndition number (if relevant)				
	ividual scoring elements  Scoring element 1  Scoring element 2  Scoring element 3  Scoring element 4  erall Performance Indicator score  ndition number (if relevant)	Applicable SGs mScoring element 1SG60Scoring element 2X of xScoring element 3X of xScoring element 4X of xScoring element 4SG60Scoring element 5SG60Scoring element 6SG60Scoring element 6SCoring element 6Scoring element 6SG60Scoring element 6SCoring element 6Scoring element 6SCoring element 6Scoring element 7SCoring element 7Scoring element 8SCoring element 8Scoring element 9SCoring element 8Scoring element 9S	Applicable SGs were individual scoring element 1Applicable SGs were individual sScoring element 1X of xX of xScoring element 2X of xX of xScoring element 3X of xX of xScoring element 4X of xX of xScoring element 5SG60SG80X of xX of xX of xScoring element 5X of xX of xScoring element 6X of xX of xScoring element 6X of xX of xScoring element 7X of xX of xScoring element 7X of xX of xScoring element 8X of xX of xScoring element 8X of xX of xScoring element 9X of xX of xScoring element 9X of xX of xScoring element 9X of xX of x<	Applicable SGs == Individual scoring elementsSG60SG80SG100Scoring element 1X of xX of xScoring element 2X of xX of xScoring element 3X of xX of xScoring element 4X of xX of xScoring element 4X of xX of xScoring element 4SG60SG80Scoring element 4SG60SG80SG60SG80SG100X of xX of xX of xSG60SG80SG100Storing element if relevantSG60SG80



### PI 2.1.2 – Primary species management strategy

PI 2.1.2 There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary and the UoA regularly reviews and implements measures, as appropriate, to minimise the mounwanted catch						
Scoring Issue		SG 60	SG 80	SG 100		
	Manageme	ent strategy in place				
а	Guide post	There are <b>measures</b> in place for the UoA, if necessary, that are expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are likely to be above the PRI.	There is a <b>partial strategy</b> in place for the UoA, if necessary, that is expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are highly likely to be above the PRI.	There is a <b>strategy</b> in place for the UoA for managing main and minor primary species.		
	Met?	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish – Yes Gaspésie lobster fishery - Yes	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish – Yes Gaspésie lobster fishery - Yes	Atlantic mackerel – N/A GSL fall spawner herring – N/A Unit 1 redfish – N/A Gaspésie lobster fishery - Yes		

#### Rationale

There is a strategy in place for the UoA for managing main and minor primary species.

Primary species are species used as bait that lobster harvesters buy from bait suppliers and are from local or GSL fisheries. None of the primary species used as bait is caught in lobster traps during lobster fishing season.

Lobster fishing is limited in time, there is a trap allocation, fishing effort was reduced though a reduction in the number of licences and traps per licence from 1998 to 2005 and after 2009, it is prohibited to haul and bait traps more than once a day. Regarding the Atlantic mackerel, the amount of mackerel used as bait decreased over time and the RPPSG strongly advocated the improvement of the mackerel fishery management participating in the Mackerel Advisory Committee meetings. Bait used (species, amount, and condition) is reported in logbooks. All non-target species (except male rock crab) must be returned to the water and released in the exact capture location with as little harm as possible, escape vents are required. Information on non-target species catches is recorded in logbooks.

Therefore, the audit team determined that there is a strategy in place for managing main and minor primary species, the fishery meeting SG 60, SG80 and SG100.

# Note that as per GSA3.4.2 "If bait is purchased and it is main, teams need to assess the management and information PIs for the bait fishery for all scoring isses at the GS60 80 levels". It means that SG100 is not scored for bait species.

Moreover, all species used as bait come from managed fisheries with harvest strategy in place to maintain stocks at sustainable levels or rebuild overfished stocks.

#### Atlantic mackerel

Atlantic mackerel fishery is managed under an IFMP, there is a MLS; and the recent TAC was set below total catches of 14,000 t for which the probability of an increase in biomass is over 80% and which correspond to a low risk of decline under the precautionary approach. New management measures have been implemented in 2017 in the Southern Gulf of St Lawrence to improve monitoring and reporting of catches in mackerel fisheries. These measures include mandatory hail-in reporting estimated weight of catch for every fishing trip and 25% dockside monitoring coverage for landings.

The stock assessment suggests that catch levels in recent years have allowed for a slow growth from 2013 to 2016. A slight improvement in age structure has been observed since 2013, with an increase of mackerel of ages 5 and 6, and there were signs that recruitment was higher in 2015 than levels observed in recent years.

Therefore, the team determine that SG60 and G80 are met.

#### **GSL fall spawner herring**

The GSL herring fishery is managed under an IFMP, there is a fishing season, a TAC, daily and weekend closures, and a depth restriction. SSB below the upper stock reference level and well above the limit reference point, and overfishing is not occurring. Therefore, the team determine that SG60 and SG80 are met.



## PI 2.1.2

There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch

#### Unit 1 redfish

The Unit 1 redfish fishing is under a moratorium since 1995. A TAC is established for index fishing since 1999. The harvest strategy includes conservation measures such as a MLS, a bycatch protocol, closure periods to protect redfish mating and spatial closures. Although mature biomasses are still below the limit reference point, the stock being considered to be below the PRI, stock has improved. Prospects are positive due to large cohorst from 2011-2013. There is a significant increase in biomass and recent strong recruitment. Therefore, the team determine that SG60 and SG80 are met.

#### Management strategy evaluation

b	Guide post	The measures are considered <b>likely</b> to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species).	There is some <b>objective basis for</b> <b>confidence</b> that the measures/partial strategy will work, based on some information directly about the fishery and/or species involved.	<b>Testing</b> supports <b>high</b> <b>confidence</b> that the partial strategy/strategy will work, based on information directly about the fishery and/or species involved.
	Met?	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish – Yes Gaspésie lobster fishery - Yes	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish – Yes Gaspésie lobster fishery - Yes	Atlantic mackerel – N/A GSL fall spawner herring – N/A Unit 1 redfish – N/A Gaspésie lobster fishery - No

#### Rationale

**Testing** supports **high confidence** that the partial strategy/strategy will work, based on information directly about the fishery and/or species involved.

Bait used (species, amount, and condition) is reported in logbooks. Records show that the amount of bait used shows a general decreasing trend. Regarding the Atlantic mackerel, the RPPSG strongly advocated the improvement of the mackerel fishery management participating in the Mackerel Advisory Committee meetings. Non-target species catches are mandatory to be recorded in logbooks. DFO carried out a bycatch survey during the 2011 fishing season and the bycath composition from logbooks and the DFO survey is similar, and both bycatch data collection methods show a very low level of bycatch with most of the bycatch species accounting for less than 2% of the total catch.

Therefore, the team determines that SG60 and SG80 are met. However, there is no testing specific to the Gaspésie lobster fishery, preventing the fishery from meeting SG100.

Bait used (species, amount, and condition) is reported in logbooks. Stock assessment is carried out for all species used as bait. Note that as per GSA3.4.2 "If bait is purchased and it is main, teams need to assess the management and information PIs for the bait fishery for all scoring isses at the GS60 80 levels". It means that SG100 is not scored for bait species.

#### Atlantic mackerel

The stock assessment suggests that catch levels in recent years have allowed for a slow growth from 2013 to 2016. A slight improvement in age structure has been observed since 2013, with an increase of mackerel of ages 5 and 6, and there were signs that recruitment was higher in 2015 than levels observed in recent years. Therefore, the team determine that SG60 and SG80 are met.

GSL fall spawner herring

The GSL herring fishery is managed under an IFMP, there is a fishing season, a TAC, daily and weekend closures, and a depth restriction. SSB below the upper stock reference level and well above the limit reference point, and overfishing is not occurring. Therefore, the team determine that SG60 and SG80 are met.

#### Unit 1 redfish

The Unit 1 redfish fishing is under a moratorium since 1995. A TAC is established for index fishing since 1999. The harvest strategy includes conservation measures such as a MLS, a bycatch protocol, closure periods to protect redfish mating and spatial closures. Although mature biomasses are still below the limit reference point, the stock being considered to be below the PRI, stock has improved. Prospects are positive due to large cohorst from 2011-2013. There is a significant increase in biomass and recent strong recruitment. Therefore, the team determine that SG60 and SG80 are met.





	Management strategy implementation					
С	Guide post		There is <b>some evidence</b> that the measures/partial strategy is being <b>implemented successfully</b> .	There is clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its overall objective as set out in scoring issue (a).		
	Met?		Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish - Yes	Atlantic mackerel – N/A GSL fall spawner herring – N/A Unit 1 redfish – N/A Gaspésie lobster fishery - Yes		

#### Rationale

There is clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its overall objective as set out in scoring issue (a).

Bait used (species, amount, and condition) is reported in logbooks. Records show that the amount of bait used shows a general decreasing trend. Non-target species catches are mandatory to be recorded in logbooks. DFO carried out a bycatch survey during the 2011 fishing season and the bycath composition from logbooks and the DFO survey is similar, and both bycatch data collection methods show a very low level of bycatch with most of the bycatch species accounting for less than 2% of the total catch.

There is strong scientific evidence that non-target species are release alive with very low post-capture mortality.

As per GSA3.4.3," very low post capture mortality is interpreted as no less than a 90% survival rate. In cases where scientific evidence is not available for the particular fishery, studies pertaining to similar fisheries can be used with appropriate rationales provided."

A collaborative research project, "Bycatch composition and vitality assessment of species caught as bycatch during the lobster fishery in the Southern Gulf of St Lawrence", led by DFO Gulf Region has been implemented in 2015. It was determined that survival of all returned species is very high with 98% of observed individuals had no visible injury, no mortality observed during vitality observations and there is no everted stomach or bloated swim bladder in fish caught. Gaspésie lobster fishery operations are similar to the Southern Gulf of St Lawrence lobster fishery operations, and the bycatch composition is very similar with rock crab, cunner and sculpin accounting for the bulk of bycatch.

Moreover, a comprehensive monitoring, control and surveillance system continues to be implemented in the fishery and compliance to regulations remains very high with a level of recidivism in the fishery to be extremely low.

Therefore, the team determines that SG60, SG80 and SG100 are met.

Note that as per GSA3.4.2 "If bait is purchased and it is main, teams need to assess the management and information PIs for the bait fishery for all scoring isses at the GS60 80 levels". It means that SG100 is not scored for bait species.

#### Atlantic mackerel

The stock assessment suggests that catch levels in recent years have allowed for a slow growth from 2013 to 2016. A slight improvement in age structure has been observed since 2013, with an increase of mackerel of ages 5 and 6, and there were signs that recruitment was higher in 2015 than levels observed in recent years.

Therefore, the team determine that SG60 and SG80 are met.

#### **GSL fall spawner herring**

The GSL herring fishery is managed under an IFMP, there is a fishing season, a TAC, daily and weekend closures, and a depth restriction. SSB below the upper stock reference level and well above the limit reference point, and overfishing is not occurring. Therefore, the team determine that SG60 and SG80 are met.

#### Unit 1 redfish

The Unit 1 redfish fishing is under a moratorium since 1995. A TAC is established for index fishing since 1999. The harvest strategy includes conservation measures such as a MLS, a bycatch protocol, closure periods to protect redfish mating and spatial closures. Although mature biomasses are still below the limit reference point, the stock being considered to be below the PRI,



PI 2.1	L.2	There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch				
stock ha recent s	s improved. trong recruit	Prospects are positive due to large or ment. Therefore, the team determine	cohorst from 2011-2013. There is a s ne that SG60 and SG80 are met.	significant increase in biomass and		
	Shark finni	ng				
d	Guide post	It is <b>likely</b> that shark finning is not It is <b>highly likely</b> that shark taking place.		There is a <b>high degree of</b> <b>certainty</b> that shark finning is not taking place.		
	Met?	NA	NA	NA		
Rationa	le					
There is	s no shark c	aught.				
	Review of alternative measures					
e	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main primary species.	There is a <b>regular</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality of unwanted catch of main primary species and they are implemented as appropriate.	There is a <b>biennial</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality of unwanted catch of all primary species, and they are implemented, as appropriate.		
	Met?	NA	NA	NA		

#### Rationale

There are no unwanted catches of primary species. All primary species are species used as bait that are not caught and landed during lobster fishing but buy from outside the UoA.

#### References

Information on bait used provided by the RPPSG

Brassard, C., Bourdages, H., Duplisea, D., Gauthier, J., and Valentin, A. 2017. The status of the redfish stocks (*Sebastes fasciatus* and *S. mentella*) in Unit 1 (Gulf of St. Lawrence) in 2015. DFO Can. Sci. Advis. Sec. Res. Doc. 2017/023. ix + 53 p. http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2017/2017\_023-eng.html

DFO 2017a. Composition, quantity, and survival of incidental catch during the southern Gulf of St Lawrence lobster (*Homarus americanus*) fishery. Presentation made for the 11<sup>th</sup> International Conference & Workshop on Lobster Biology and Management held in Portland (Maine, US) in June 2017.

DFO 2017b. Assessment of the Atlantic Mackerel Stock for the Northwest Atlantic (Subareas 3 and 4) in 2016. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2017/034.

https://waves-vagues.dfo-mpo.gc.ca/Library/40619576.pdf

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

DFO 2018c. Assessment of the southern Gulf of St. Lawrence (NAFO Div. 4T) spring and fall spawner components of Atlantic herring (*Clupea harengus*) with advice for the 2018 and 2019 fisheries. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2018/029. http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2018/2018 029-eng.html

DFO. 2018d. Assessment of Redfish Stocks (Sebastes mentella and S. fasciatus) in Units 1 and 2 in 2017. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2018/032.



## PI 2.1.2

There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch

https://waves-vagues.dfo-mpo.gc.ca/Library/40713684.pdf

Gendron, L. et C. Duluc. 2012. Bycatch in the lobster fishery in the Gaspé (LFAs 19 and 20) and the Magdalen Islands (LFA 22), Quebec, in 2011. DFO Can. Sci. Advis. Sec. Res. Doc. 2012/100. http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2012/2012 100-eng.html

Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Individual scoring elements		Applicable SGs <u>likely</u> met per individual scoring element			<u>Likely</u> scoring
		SG60	SG80	SG100	element scores
1	Atlantic mackerel fishery	2 of 2	3 of 3	N/A	≥80
2	Fall spawner herring in the GSL fishery	2 of 2	3 of 3	N/A	≥80
3	Redfish in Unit 1 fishery	2 of 2	3 of 3	N/A	≥80
4	Gaspésie lobster fishery	2 of 2	3 of 3	2 of 3	≥80
Draft scoring range		Applicable	Likely overall PI		
		SG60	SG80	SG100	score
		X of x	X of x	X of x	≥80
Information gap indicator		Information sufficient to score PI			

#### **Overall Performance Indicator scores added from Client and Peer Review Draft Report**

Individual scoring elements		Applicable SGs m	Scoring element			
(au sco	ring by elements)	SG60	SG80	SG100	scores	
1	Scoring element 1	X of x	X of x	X of x		
2	Scoring element 2	X of x	X of x	X of x		
3	Scoring element 3	X of x	X of x	X of x		
4	Scoring element 4	X of x	X of x	X of x		
Overall Performance Indicator score		Applica				
		SG60	SG80	SG100	Overall score	
		X of x	X of x	X of x		
Cor	Condition number (if relevant)					



PI 2.1	L <b>.3</b>	Information on the nature and extent of primary species is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage primary species			
Scoring Issue		SG 60	SG 80	SG 100	
	Informat	ion adequacy for assessment of	of impact on main primary spe	ecies	
а	Guide post	Qualitative information is adequate to estimate the impact of the UoA on the main primary species with respect to status. OR If RBF is used to score PI 2.1.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for main primary species.	Some quantitative information is available and is <b>adequate to</b> <b>assess</b> the impact of the UoA on the main primary species with respect to status. <b>OR</b> <b>If RBF is used to score PI 2.1.1 for</b> <b>the UoA:</b> Some quantitative information is adequate to assess productivity and susceptibility attributes for main primary species.	Quantitative information is available and is <b>adequate to</b> <b>assess with a high degree of</b> <b>certainty</b> the impact of the UoA on main primary species with respect to status.	
	Met?	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish – Yes Gaspésie lobster fishery - Yes	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish – Yes Gaspésie lobster fishery - Yes	Atlantic mackerel – N/A GSL fall spawner herring – N/A Unit 1 redfish – N/A Gaspésie lobster fishery - No	

## PI 2.1.3 – Primary species information

#### Rationale

Some quantitative information is available and is **adequate to assess** the impact of the UoA on the main primary species with respect to status.

Main primary species are Atlantic mackerel, GSL fall spawner herring and Unit 1 redfish used as bait. These species are not caught in lobster traps but purchased from outside the UoA. Bait used (species, amount, and condition) is reported in logbooks. Atlantic mackerel, GSL fall spawner herring and Unit 1 redfish stock status is assessed. The amount used as bait during a lobster fishing season is approximately 823 t of mackerel, 110 t of herring and 60 t for redfish.

In addition, an independent research project on bait use was carried out by the Quebec Aquaculture and Fisheries Innovation Center (MERINOV) during the 2012 lobster fishing season. This study concluded that Atlantic mackerel and GSL fall spawner herring were the main species used as bait.

The stock status of species of main primary species is assessed.

Therefore, the team determines that SG60 and SG80 are met. However, the team determines that the information on bait use (species, amount, origin) recorded in lobster logbooks cannot be defined as "high degree of certainty" preventing the fishery from meeting SG100.

Note that as per GSA3.4.2 "If bait is purchased and it is main, teams need to assess the management and information PIs for the bait fishery for all scoring isses at the GS60 80 levels". It means that SG100 is not scored for bait species. Atlantic mackerel

New management measures have been implemented in 2017 in the Southern Gulf of St Lawrence to improve monitoring and reporting of catches in mackerel fisheries. These measures include mandatory hail-in reporting estimated weight of catch for every fishing trip and 25% dockside monitoring coverage for landings.

Atlantic mackerel stock status is assessed.

Therefore, the team determines that SG60 and SG80 are met.

#### **GSL fall spawner herring**

The fishery is subject to 100% dockside monitoring since 2000 in most Herring Fishing Areas. In addition, DFO conduct interviews with herring gillnet fishers.

GSL fall spawner herring stock status is assessed.

Therefore, the team determines that SG60 and SG80 are met.



## PI 2.1.3

Information on the nature and extent of primary species is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage primary species

#### <u>Unit 1 redfish</u>

Redfish conservation measures include 100% dockside monitoring, mandatory radio reports upon departure and arrival, imposition of a level of coverage by observers (25% or 10% with the Vessel Monitoring System (VMS), and the implementation of a bycatch protocol (5% to 15%).

Unit 1 redfish stock status is assessed.

Therefore, the team determines that SG60 and SG80 are met.

#### Information adequacy for assessment of impact on minor primary species

	Met?		Yes
	post		of the UoA on minor primary species with respect to status.
b	Guide		Some quantitative information is adequate to estimate the impact

#### Rationale

There is no minor primary species.

Under licence condition, lobster harvesters are not authorized to keep any groundfish species caught incidentally. All bycatches species must be returned to the water and released in the exact capture location with as little harm as possible. Nonetheless, under the section 55 of the AFR, lobster harvesters are allowed to retain male rock crab without requiring a rock crab licence. Non-target species catches and bait are mandatory to be recorded in logbooks.

An independent research project on bait use was carried out by the Quebec Aquaculture and Fisheries Innovation Center (MERINOV) during the 2012 lobster fishing season. This study concluded that Atlantic mackerel and GSL fall spawner herring were the main species used as bait.

#### Information adequacy for management strategy

C	Guide post	Information is adequate to support <b>measures</b> to manage <b>main</b> primary species.	Information is adequate to support a <b>partial strategy</b> to manage <b>main</b> primary species.	Information is adequate to support a <b>strategy</b> to manage <b>all</b> primary species, and evaluate with a <b>high degree of certainty</b> whether the strategy is achieving its objective.
	Met?	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish – Yes Gaspésie lobster fishery - Yes	Atlantic mackerel – Yes GSL fall spawner herring – Yes Unit 1 redfish – Yes Gaspésie lobster fishery - Yes	Atlantic mackerel – N/A GSL fall spawner herring – N/A Unit 1 redfish – N/A Gaspésie lobster fishery - No

#### Rationale

Information is adequate to support a partial strategy to manage main primary species.

Main primary species are Atlantic mackerel, GSL fall spawner herring and Unit 1 redfish used as bait. These species are not caught in lobster traps but purchased from outside the UoA. Bait used (species, amount, and condition) is reported in logbooks. Atlantic mackerel, GSL fall spawner herring and Unit 1 redfish stock status is assessed.

In addition, an independent research project on bait use was carried out by the Quebec Aquaculture and Fisheries Innovation Center (MERINOV) during the 2012 lobster fishing season. This study concluded that Atlantic mackerel and GSL fall spawner herring were the main species used as bait.

The stock status of species of main primary species is assessed.

Therefore, the team determines that SG60 and SG80 are met. However, the team determines that the information on bait use (species, amount, origin) recorded in lobster logbooks cannot be defined as "high degree of certainty" preventing the fishery from meeting SG100.

Note that as per GSA3.4.2 "If bait is purchased and it is main, teams need to assess the management and information PIs for the bait fishery for all scoring isses at the GS60 80 levels". It means that SG100 is not scored for bait species.



## PI 2.1.3

Information on the nature and extent of primary species is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage primary species

#### Atlantic mackerel

New management measures have been implemented in 2017 in the Southern Gulf of St Lawrence to improve monitoring and reporting of catches in mackerel fisheries. These measures include mandatory hail-in reporting estimated weight of catch for every fishing trip and 25% dockside monitoring coverage for landings.

Atlantic mackerel stock status is assessed.

Therefore, the team determines that SG60 and SG80 are met.

#### **GSL fall spawner herring**

The fishery is subject to 100% dockside monitoring since 2000 in most Herring Fishing Areas. In addition, DFO conduct interviews with herring gillnet fishers.

GSL fall spawner herring stock status is assessed.

Therefore, the team determines that SG60 and SG80 are met.

#### <u>Unit 1 redfish</u>

Redfish conservation measures include 100% dockside monitoring, mandatory radio reports upon departure and arrival, imposition of a level of coverage by observers (25% or 10% with the Vessel Monitoring System (VMS), and the implementation of a bycatch protocol (5% to 15%).

Unit 1 redfish stock status is assessed.

Therefore, the team determines that SG60 and SG80 are met.

#### References

Information on bait used provided by the RPPSG

Brassard, C., Bourdages, H., Duplisea, D., Gauthier, J., and Valentin, A. 2017. The status of the redfish stocks (*Sebastes fasciatus* and *S. mentella*) in Unit 1 (Gulf of St. Lawrence) in 2015. DFO Can. Sci. Advis. Sec. Res. Doc. 2017/023. ix + 53 p. http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2017/2017\_023-eng.html

DFO 2017a. Composition, quantity, and survival of incidental catch during the southern Gulf of St Lawrence lobster (*Homarus americanus*) fishery. Presentation made for the 11<sup>th</sup> International Conference & Workshop on Lobster Biology and Management held in Portland (Maine, US) in June 2017.

DFO 2017b. Assessment of the Atlantic Mackerel Stock for the Northwest Atlantic (Subareas 3 and 4) in 2016. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2017/034.

https://waves-vagues.dfo-mpo.gc.ca/Library/40619576.pdf

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

DFO 2018c. Assessment of the southern Gulf of St. Lawrence (NAFO Div. 4T) spring and fall spawner components of Atlantic herring (*Clupea harengus*) with advice for the 2018 and 2019 fisheries. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2018/029. http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2018/2018 029-eng.html

DFO. 2018d. Assessment of Redfish Stocks (Sebastes mentella and S. fasciatus) in Units 1 and 2 in 2017. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2018/032.

https://waves-vagues.dfo-mpo.gc.ca/Library/40713684.pdf

Laplante, J.F., J. Laurent, M.H. Bénard, A. Kenny 2013. Utilisation des appâts traditionnels dans les pêcheries commerciales de homard des Îles-de-la-Madeleine et de la Gaspésie. MERINOV, Rapport de Recherche-Développement n°13-04. 28 p.

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Individual scoring elements	Applicable SGs <u>likely</u> met per individual scoring element			Likely scoring
	SG60	SG80	SG100	element scores



PI 2.1.3 Information on the nature the UoA and the effective			re and extent of prin eness of the strategy	nary species is ade to manage primary	quate to determine / species	e the risk posed by
1	Atlantic mack	erel fishery	2 of 2	2 of 2	0 of 0	≥80
2	Fall spawner herring in the GSL fishery		2 of 2	2 of 2	0 of 0	≥80
3	Redfish in Uni	it 1 fishery	2 of 2	2 of 2	0 of 0	≥80
4	Gaspésie lobs	ter fishery	2 of 2	2 of 2	2 of 3	≥80
Draft scoring range		Applicable	<u>Likely</u> overall PI			
		SG60	SG80	SG100	score	
		X of x	X of x	X of x	≥80	
Information gap indicator		Information sufficient to score PI				

## **Overall Performance Indicator scores added from Client and Peer Review Draft Report**

Individual scoring elements		Applicable SGs m	Scoring element		
sco	ring by elements)	SG60	SG80	SG100	scores
1	Scoring element 1	X of x	X of x	X of x	
2	Scoring element 2	X of x	X of x	X of x	
3	Scoring element 3	X of x	X of x	X of x	
4	Scoring element 4	X of x	X of x	X of x	
Overall Performance Indicator score		Applica	0		
		SG60	SG80	SG100	Overall score
		X of x	X of x	X of x	
Condition number (if relevant)					



PI 2.2	2.1	The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit				
Scoring Issue		SG 60	SG 80	SG 100		
	Main sec	ondary species stock status				
а	Guide post	Main secondary species are likely to be above biologically based limits. OR If below biologically based limits, there are <b>measures</b> in place expected to ensure that the UoA does not hinder recovery and rebuilding.	Main secondary species are highly likely to be above biologically based limits. OR If below biologically based limits, there is either evidence of recovery or a demonstrably effective partial strategy in place such that the UoA does not hinder recovery and rebuilding. AND Where catches of a main secondary species outside of biological limits are considerable, there is either evidence of recovery or a, demonstrably effective strategy in place between those MSC UoAs that have considerable catches of the species, to ensure that they collectively do not	There is a <b>high degree of</b> <b>certainty</b> that main secondary species are above biologically based limits.		
	Met?	N/A	N/A	N/A		
Rationa	le					
There a	re no main	secondary species.				
	Minor secondary species stock status					
b	Guide post			Minor secondary species are highly likely to be above biologically based limits. OR If below biologically based limits', there is evidence that the UoA does not hinder the recovery and rebuilding of secondary species		
	Met?			Yes		
Rationa	le					

## PI 2.2.1 – Secondary species outcome

The team elected to not score minor secondary species using the RBF. Minor secondary species are listed in Table 10 of section 8.3.1.2.



## PI 2.2.1

The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit

Rock crab constitutes the majority of non-target species catch. According to the last stock startus report, CPUE are stable and size structure and average sizes have improved.

Although the status of minor secondary species related to biologically based limits is unknow, there is evidence that the UoA does not hinder the recovery and rebuilding of secondary species. There is strong scientific evidence that non-target species are release alive with very low post-capture mortality.

As per GSA3.4.3," very low post capture mortality is interpreted as no less than a 90% survival rate. In cases where scientific evidence is not available for the particular fishery, studies pertaining to similar fisheries can be used with appropriate rationales provided."

A collaborative research project, "Bycatch composition and vitality assessment of species caught as bycatch during the lobster fishery in the Southern Gulf of St Lawrence", led by DFO Gulf Region has been implemented in 2015. It was determined that survival of all returned species is very high with 98% of observed individuals had no visible injury, no mortality observed during vitality observations and there is no everted stomach or bloated swim bladder in fish caught. Gaspésie lobster fishery operations are similar to the Southern Gulf of St Lawrence lobster fishery operations, and the bycatch composition is very similar with rock crab, cunner and sculpin accounting for the bulk of bycatch.

As per PF5.3.2.1, if the team has not scored minor species using the PSA analysis (RBF), the final PI score shall not be greater than 80.

#### References

Information provided by DFO

DFO 2017a. Composition, quantity, and survival of incidental catch during the southern Gulf of St Lawrence lobster (*Homarus americanus*) fishery. Presentation made for the 11<sup>th</sup> International Conference & Workshop on Lobster Biology and Management held in Portland (Maine, US) in June 2017.

DFO 2018b. Assessment of rock crab stock status in Quebec in 2016. DFO Can. Sci. Adv Secr., Sci. Adv. 2018/044. http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2018/2018 044-eng.html

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Individual scoring elements		Applicable SGs <u>likely</u> met per individual scoring element			<u>Likely</u> scoring	
		SG60	SG80	SG100	element scores	
1	Minor secondary species	X of x	X of x	1 of 1	≥80	
2	Scoring element 2	X of x	X of x	X of x		
3	Scoring element 3	X of x	X of x	X of x		
4	Scoring element 4	X of x	X of x	X of x		
Draft scoring range		Applicable	<u>Likely</u> overall PI			
		SG60	SG80	SG100	score	
		X of x	X of x	X of x	≥80	
Information gap indicator		More information sought/Information sufficient to score PI				
Overall Performance Indicator scores added from Client and Peer Review Draft Report						
Ind	ividual scoring elements	Applicable SGs met per individual scoring element				



PI 2.2.1		The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit				
(add rows as required; delete if not scoring by elements)			SG60	SG80	SG100	Scoring element scores
1	Scoring element 1		X of x	X of x	X of x	
2	Scoring element 2		X of x	X of x	X of x	
3	Scoring element 3		X of x	X of x	X of x	
4	Scoring element 4		X of x	X of x	X of x	
Overall Performance Indicator score			Applicable SGs/elements met			Overall score
			SG60	SG80	SG100	Overall score
			X of x	X of x	X of x	
Condition number (if relevant)						


PI 2.2.2 There is a strategy in place for managing secondary species that is designed to maintain or to nor rebuilding of secondary species and the UoA regularly reviews and implements measure appropriate, to minimise the mortality of unwanted catch					
Scoring Issue		SG 60	SG 80	SG 100	
	Manager	nent strategy in place			
а	Guide post	There are <b>measures</b> in place, if necessary, which are expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be above biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a <b>partial strategy</b> in place, if necessary, for the UoA that is expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be above biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a <b>strategy</b> in place for the UoA for managing main and minor secondary species.	
	Met?	Yes	Yes	Yes	
Detions	Detionals				

#### PI 2.2.2 – Secondary species management strategy

#### Rationale

There is a **strategy** in place for the UoA for managing main and minor secondary species.

Lobster fishing is limited in time, there is a trap allocation, fishing effort was reduced though a reduction in the number of licences and traps per licence from 1998 to 2005 and after 2009, it is prohibited to haul and bait traps more than once a day... All non-target species, except male rock crab which is allowed to be retained, must be returned to the water and released in the exact capture location with as little harm as possible, escape vents and biodegradable panels are required. Information on non-target species catches is recorded in logbooks.

Therefore, the team determines that SG 60, SG80 and SG100 are met.

#### Management strategy evaluation

b	Guide post	The measures are considered <b>likely</b> to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/species).	There is <b>some objective basis for</b> <b>confidence</b> that the measures/partial strategy will work, based on some information directly about the UoA and/or species involved.	<b>Testing</b> supports <b>high confidence</b> that the partial strategy/strategy will work, based on information directly about the UoA and/or species involved.
	Met?	Yes	Yes	No

#### Rationale

There is some objective basis for confidence that the measures/partial strategy will work, based on some information directly about the UoA and/or species involved.

Non-target species catches are mandatory to be recorded in logbooks. Also, DFO carried out a bycatch survey during the 2011 fishing season. The bycatch composition from logbooks and the DFO survey is similar, and both bycatch data collection methods show a very low level of bycatch with most of the bycatch species accounting for less than 2% of the total catch.

Therefore, the team determines that SG60 and SG80 are met. However, there is no testing specific to the Gaspésie lobster fishery, preventing the fishery from meeting SG100.

#### Management strategy implementation

С

Guide post

There is **some evidence** that the There is **clear evidence** that the measures/partial strategy is partial strategy/strategy is being being implemented successfully. implemented successfully and is

achieving its objective as set out in scoring issue (a).



Yes

PI 2.2.2		There is a strategy in place for managing secondary species that is designed to maintain or to not hinder rebuilding of secondary species and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch				
	Met?		Yes	Yes		

#### Rationale

There is clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its overall objective as set out in scoring issue (a).

Non-target species catches are mandatory to be recorded in logbooks. DFO carried out a bycatch survey during the 2011 fishing season and the bycath composition from logbooks and the DFO survey is similar, and both bycatch data collection methods show a very low level of bycatch with most of the bycatch species accounting for less than 2% of the total catch.

Moreover, a comprehensive monitoring, control and surveillance system continues to be implemented in the fishery and compliance to regulations remains very high with a level of recidivism in the fishery to be extremely low.

Therefore, the team determines that SG80 ad SG100 are met.

	Shark finning					
d	Guide post	It is <b>likely</b> that shark finning is not taking place.	It is <b>highly likely</b> that shark finning is not taking place.	There is a <b>high degree of</b> <b>certainty</b> that shark finning is not taking place.		
	Met?	ΝΑ	NA	NA		

Rationale

Sharks are no caught in lobster traps.

Yes

	Review o	Review of alternative measures to minimise mortality of unwanted catch							
е	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of <b>unwanted</b> catch of main secondary species.	There is a <b>regular</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality of <b>unwanted</b> catch of main secondary species and they are implemented as appropriate.	There is a <b>biennial</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality of <b>unwanted</b> catch of all secondary species, and they are implemented, as appropriate.					

Yes

#### Rationale

Met?

There is a biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of **unwanted** catch of all secondary species, and they are implemented, as appropriate.

Unwanted catches of rock crab discarded, and all other non-target species that must be returned to the sea with less possible harm. Traps are equipped with mandatory escape vents.

The effectiveness of current measures are controlled throughout the season by dockside and at-sea inspections. An annual post-fishing season review is conducted to evaluate the effetiveness of management measures. This post-season review is followed by the Lobster Advisory Committe meeting during which new management measures, including traps modifications and other measures to minimise UoA-related impact of non-target species, can be proposed and discussed. Therefore, the audit team considers that there is a biennial review of the effectiveness of alternative management measures, the fishery meeting SG60, SG80 abd SG100.

#### References

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.



# PI 2.2.2

There is a strategy in place for managing secondary species that is designed to maintain or to not hinder rebuilding of secondary species and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch

Gendron, L. et C. Duluc. 2012. Bycatch in the lobster fishery in the Gaspé (LFAs 19 and 20) and the Magdalen Islands (LFA 22), Quebec, in 2011. DFO Can. Sci. Advis. Sec. Res. Doc. 2012/100.

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2012/2012 100-eng.html

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicabl	<u>Likely</u> overall PI		
Draft scoring range	SG60	SG80	SG100	score
	3 of 3	4 of 4	3 of 4	≥80
Information gap indicator		Information sufficient to score PI		

Information sufficient to score PI

	Applica	Querall coore		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
Condition number (if relevant)				



PI 2.2.3 Information on the nature and amount of secondary species taken is adequate to determine the ris posed by the UoA and the effectiveness of the strategy to manage secondary species				
Scoring	Issue	SG 60	SG 80	SG 100
	Informati	ion adequacy for assessment of	of impacts on main secondary	species
а	Guide post	Qualitative information is adequate to estimate the impact of the UoA on the main secondary species with respect to status. OR If RBF is used to score PI 2.2.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for main secondary species.	Some quantitative information is available and <b>adequate to assess</b> the impact of the UoA on main secondary species with respect to status. OR <b>If RBF is used to score PI 2.2.1 for the UoA:</b> Some quantitative information is adequate to assess productivity and susceptibility attributes for main secondary species.	Quantitative information is available and <b>adequate to assess</b> <b>with a high degree of certainty</b> the impact of the UoA on main secondary species with respect to status.
	Met?	Yes	Yes	No

#### PI 2.2.3 – Secondary species information

#### Rationale

Some quantitative information is available and **adequate to assess** the impact of the UoA on main secondary species with respect to status.

Non-target species catches are mandatory to be recorded in logbooks. Also, DFO carried out a bycatch survey during the 2011 fishing season. The bycatch composition from logbooks and the DFO survey is similar, and both bycatch data collection methods show a very low level of bycatch with most of the bycatch species accounting for less than 2% of the total catch.

There is strong scientific evidence that non-target species are release alive with very low post-capture mortality.

# As per GSA3.4.3," very low post capture mortality is interpreted as no less than a 90% survival rate. In cases where scientific evidence is not available for the particular fishery, studies pertaining to similar fisheries can be used with appropriate rationales provided."

A collaborative research project, "Bycatch composition and vitality assessment of species caught as bycatch during the lobster fishery in the Southern Gulf of St Lawrence", led by DFO Gulf Region has been implemented in 2015. It was determined that survival of all returned species is very high with 98% of observed individuals had no visible injury, no mortality observed during vitality observations and there is no everted stomach or bloated swim bladder in fish caught. Gaspésie lobster fishery operations are similar to the Southern Gulf of St Lawrence lobster fishery operations, and the bycatch composition is very similar with rock crab, cunner and sculpin accounting for the bulk of bycatch.

Therefore the the team determines that SG60 and SG80 are met. However, the team determines that quantitative information is not available and **adequate to assess with a high degree of certainty** the impact of the UoA on main secondary species with respect to status as unreported non-target species catches could occur, preventing the fishery from meeting SG100.

#### Information adequacy for assessment of impacts on minor secondary species

b	Guide post		Some quantitative information is adequate to estimate the impact of the UoA on minor secondary species with respect to status.
	Met?		Yes
Rationa	ale		



#### PI 2.2.3

Information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage secondary species

Some quantitative information is adequate to estimate the impact of the UoA on minor secondary species with respect to status.

Non-target species catches are mandatory to be recorded in logbooks. Also, DFO carried out a bycatch survey during the 2011 fishing season. The bycatch composition from logbooks and the DFO survey is similar, and both bycatch data collection methods show a very low level of bycatch with most of the bycatch species accounting for less than 2% of the total catch.

There is strong scientific evidence that non-target species are release alive with very low post-capture mortality.

As per GSA3.4.3," very low post capture mortality is interpreted as no less than a 90% survival rate. In cases where scientific evidence is not available for the particular fishery, studies pertaining to similar fisheries can be used with appropriate rationales provided."

A collaborative research project, "Bycatch composition and vitality assessment of species caught as bycatch during the lobster fishery in the Southern Gulf of St Lawrence", led by DFO Gulf Region has been implemented in 2015. It was determined that survival of all returned species is very high with 98% of observed individuals had no visible injury, no mortality observed during vitality observations and there is no everted stomach or bloated swim bladder in fish caught. Gaspésie lobster fishery operations are similar to the Southern Gulf of St Lawrence lobster fishery operations, and the bycatch composition is very similar with rock crab, cunner and sculpin accounting for the bulk of bycatch.

Therefore the fishery meets SG100.

#### Information adequacy for management strategy

	post Met?	Yes	Yes	with a high degree of certainty whether the strategy is achieving its objective. No
с	Guide	Information is adequate to support <b>measures</b> to manage <b>main</b> secondary species.	Information is adequate to support a <b>partial strategy</b> to manage <b>main</b> secondary species.	Information is adequate to support a <b>strategy</b> to manage <b>all</b> secondary species, and <b>evaluate</b>

#### Rationale

Non-target species catches are mandatory to be recorded in logbooks. Also, DFO carried out a bycatch survey during the 2011 fishing season. The bycatch composition from logbooks and the DFO survey is similar, and both bycatch data collection methods show a very low level of bycatch with most of the bycatch species accounting for less than 2% of the total catch.

There is strong scientific evidence that non-target species are release alive with very low post-capture mortality.

# As per GSA3.4.3," very low post capture mortality is interpreted as no less than a 90% survival rate. In cases where scientific evidence is not available for the particular fishery, studies pertaining to similar fisheries can be used with appropriate rationales provided."

A collaborative research project, "Bycatch composition and vitality assessment of species caught as bycatch during the lobster fishery in the Southern Gulf of St Lawrence", led by DFO Gulf Region has been implemented in 2015. It was determined that survival of all returned species is very high with 98% of observed individuals had no visible injury, no mortality observed during vitality observations and there is no everted stomach or bloated swim bladder in fish caught. Gaspésie lobster fishery operations are similar to the Southern Gulf of St Lawrence lobster fishery operations, and the bycatch composition is very similar with rock crab, cunner and sculpin accounting for the bulk of bycatch.

Therefore the team determines that SG60 and SG80 are met. However, the team determines that quantitative information is **adequate to assess with a high degree of certainty** whether the strategy is achieving its objectives as unreported non-target species catches could occur, preventing the fishery from meeting SG100.

#### References

Information from logbooks provided by DFO

DFO 2017a. Composition, quantity, and survival of incidental catch during the southern Gulf of St Lawrence lobster (*Homarus americanus*) fishery. Presentation made for the 11<sup>th</sup> International Conference & Workshop on Lobster Biology and Management held in Portland (Maine, US) in June 2017.

Gendron, L. et C. Duluc. 2012. Bycatch in the lobster fishery in the Gaspé (LFAs 19 and 20) and the Magdalen Islands (LFA 22), Quebec, in 2011. DFO Can. Sci. Advis. Sec. Res. Doc. 2012/100.



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P١	2.2.3	

Information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage secondary species

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2012/2012 100-eng.html

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable	<u>Likely</u> overall PI		
Draft scoring range	SG60	SG80	SG100	score
	2 of 2	2of 2	2 of 3	≥80

Information gap indicator

More information sought/Information sufficient to score PI

	Applica	Overall score		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
Condition number (if relevant)				



#### PI 2.3.1 – ETP species outcome

PI 2.3	8.1	The UoA meets national and international requirements for the protection of ETP species The UoA does not hinder recovery of ETP species				
Scoring Issue		SG 60	SG 80	SG 100		
	Effects of	the UoA on population/stock	within national or internatior	al limits, where applicable		
а	Guide post	Where national and/or international requirements set limits for ETP species, the <b>effects</b> <b>of the UoA</b> on the population/ stock are known and <b>likely</b> to be within these limits.	Where national and/or international requirements set limits for ETP species, the <b>combined effects of the MSC</b> <b>UoAs</b> on the population /stock are known and <b>highly likely</b> to be within these limits.	Where national and/or international requirements set limits for ETP species, there is a high degree of certainty that the combined effects of the MSC UoAs are within these limits.		
	Met?	Wolffish – <b>N/A</b> Leatherback turtle - <b>Yes</b> Blue whale - <b>Yes</b> NARW- <b>Yes</b>	Wolffish – <b>N/A</b> Leatherback turtle - <b>Yes</b> Blue whale - <b>Yes</b> NARW- <b>No</b>	Not scored		

#### Rationale

ETP species that may overlap with the Gaspésie lobster trap fishery includes wolffish species, leatherback turtle, blue whale and NARW.

According to GSA3.10 (when there is no international limit set) and MSC 2016 interpretation on cumulative impacts, the team considers the combined impacts of only Canada UoAs certified or assessed using FCR v.2.0 and Standard v.2.01, which are GSL snow crab trap fishery, Scotian Shelf snow crab trap fishery, the Newfoundland & Labrador snow crab trap fishery, the Îles-de-la-Madeleine lobster trap fishery and the AQIP snow crab trap.

SG100 is not scored as per FCP 7.17.7.3.

#### Wolffish species

Not scored for wolffish as there are no national or international requirements that set limits for wolffish species (SA3.10.1.1).

#### Leatherback turtle

The national limit for the protection and rebuilding of the leatherback turtle is a zero-mortality. There is no international limit set through an international agreement for the leatherback turtle.

Incidental entanglement in fishing gear such as pelagic longlines, pot gear and gillnets pose a risk of entanglement to leatherback turtles.

The figure below presents areas of important habitat indicated by satellite telemetry on 70 leatherback turtles. It shows that the relative probability of residency of leatherbacks around Gaspé peninsula is low. Although it was noted that notable areas not sampled by tagged turtles included Gaspésie peninsula, the author of the analysis pointed out that while opportunistic sightings of leatherbacks have occurred in this area, such records are rare relative to those corresponding to the high-use areas identified via satellite telemetry. Catch of leatherback turtle has not been reported in the Gaspésie lobster fishery. Therefore the fishery meets SG60.

Snow crab potting has been identified as potential high risk of leatherback turtle entanglement, somewhat mitigated by the spatial and seasonal distribution of gear. There have been no reported interaction with Maritimes, Gulf and Newfoundland snow crab trap fisheries in SARA sections of logbooks during the period 2005-2011, 2 interactions in snow crab traps in Maritimes region has been reported by observers for the period 2006-2010 and 2 interactions in snow crab trap reported by the NewfoundlandWhale Release and Strandings network during the period 1976-2010.

The assessment team determines that the combined effects of the Canada UoAs certified or assessed using MSC FCR v.2.0 and Standard v.2.01 are highly likely to be within the national limit for the protection and the rebuilding of the leatherback turtle, SG80 is met.





The UoA meets national and international requirements for the protection of ETP species The UoA does not hinder recovery of ETP species



Lonaitude (dearees W)

Areas of important habitat for leatherback turtles in Canadian waters, as indicated by satellite telemetry. Scale represents aggregated residency probability. Red polygons denote areas where aggregated residency probabilities  $\geq$ 0.4 for all satellite tracked turtles. Thick grey line indicates Atlantic Canadian Exclusive Economic Zone boundary; thin grey line indicates 1000 m isobath. Source: M.C. James and I.A. Jonsen unpublished data; as presented in DFO 2012.

#### Blue whale

The national limit for the protection and rebuilding of the blue whale is a zero-mortality. In the U.S., the PBR has been set as a limit and is 0.9 per year for blue whale. There is no international limit set through an international agreement for the blue whale. Accidental entanglements in fishing gear was classified as low risk anthropogenic threats in comparison with whale watching and collisions with vessels which were classified as medium-risk anthropogenic threats, and acoustic environmental degradation and food availability which were classified as high-risk anthropogenic threats.

There have been no reported or observed blue whale inteactions with the Gaspésie lobster trap fishery, the Îles-de-la-Madeleine lobster trap fishery and snow crab trap fisheries in the last decades. Therefore the assessment team determine that both SG60 and SG80 are met.

#### NARW

The national limit for the protection and rebuilding of the NARW is a zero-mortality. In the U.S., the PBR has been set as a limit and is 1 per year for NARW. There is no international limit set through an international agreement for the NARW.

NARW mortality and entanglement incidents involving the Gaspésie lobster trap fishery have not been reported in the last decade. The probability of interaction between the lobster fishey and NARW is very low based on the fishing effort distribution and lobster fishing operations. Lobster traps are set very close to the shore in shallow waters (verified by the assessment team during the initial assessment site visit). The assessment team determines that the effects of the UoA on NARW population are likely to be within the national limit.

In 2017, an unprecedented NARW mortality event occurred in the GSL. Necropsies were performed on 7 of the 12 dead whales, it was confirmed that 2 of the NARW mortalities was caused by an entanglement in commercial snow crab fishing gear. In 2018, mortality of NAWR due to entanglement in fishing gear in Canada waters have not been observed. However, 3 entanglements have been reported among which 2 in the GSL and 1 either form the GSL or the Bay of Fundy.

The team takes into account the injuries from entanglements that may result in mortality and the uncertainty about the condition of one of the NARW released, and determines that the combined effects of the Canada UoAs certified or assessed using FCR v.2.0 or Standard v.2.01 are not highly likely to within the national limit for the protection and the rebuilding of the NARW, SG80 is not met.



PI 2.3	8.1	The UoA meets national and international requirements for the protection of ETP species The UoA does not hinder recovery of ETP species				
	Direct eff	ects				
b	Guide post	Known direct effects of the UoA are likely to not <b>hinder recovery</b> of ETP species.	Direct effects of the UoA are highly likely to not hinder recovery of ETP species.	There is a <b>high degree of</b> <b>confidence</b> that there are no <b>significant detrimental direct</b> <b>effects</b> of the UoA on ETP species.		
	Met?	Wolffish – <b>Yes</b> Leatherback turtle - <b>Yes</b> Blue whale - <b>Yes</b> NARW- <b>Yes</b>	Wolffish – <b>Yes</b> Leatherback turtle - <b>Yes</b> Blue whale - <b>Yes</b> NARW- <b>Yes</b>	Not scored		

Direct effects of the UoA are **highly likely** to not **hinder recovery** of ETP species.

SG100 is not scored as per FCP 7.17.7.3.

#### Wolffish species

Catches of wolfish are presented in Table 11 of section 8.3.1.3. All bycatch of ETP species must be returned to the water and release in the exact capture location with as little harm as possible.

Post-release survival of wolffish caught in lobster traps are considered to be high. A collaborative research project, "Bycatch composition and vitality assessment of species caught as bycatch during the lobster fishery in the Southern Gulf of St Lawrence", led by DFO Gulf Region has been implemented in 2015. It was determined that survival of all returned species is very high with 98% of observed individuals had no visible injury, no mortality observed during vitality observations and there is no everted stomach or bloated swim bladder in fish caught. Gaspésie lobster fishery operations are similar to the Southern Gulf of St Lawrence lobster fishery operations.

Therefore the fishery meets SG60 and SG80.

#### Leatherback turtle

The relative probability of residency of leatherbacks around Gaspé peninsula is low. Although it was noted that notable areas not sampled by tagged turtles included Gaspésie peninsula, the author of the analysis pointed out that while opportunistic sightings of leatherbacks have occurred in this area, such records are rare relative to those corresponding to the high-use areas identified via satellite telemetry. Catch of leatherback turtle has not been reported in the Gaspésie lobster fishery. Therefore the fishery meets SG60 and SG80.

#### Blue whale

Accidental entanglements in fishing gear was classified as low risk anthropogenic threats in comparison with whale watching and collisions with vessels which were classified as medium-risk anthropogenic threats, and acoustic environmental degradation and food availability which were classified as high-risk anthropogenic threats.

There have been no reported or observed blue whale inteactions with the Gaspésie lobster trap fishery. Therefore the assessment team determine that both SG60 and SG80 are met.

#### NARW

NARW mortality and entanglement incidents involving the Gaspésie lobster trap fishery have not been reported in the last decade. The probability of interaction between the lobster fishey and NARW is very low based on the fishing effort distribution and lobster fishing operations. Lobster traps are set very close to the shore in shallow waters (verified by the assessment team during the initial assessment site visit).

Therefore the assessment team determine that both SG60 and SG80 are met.

	Indirect e	effects									
С	Guide post		Indirect e considered thought to b create unac	effects hav for the UoA be <b>highly lik</b> cceptable im	ve been A and are <b>cely</b> to not apacts.	There confide significa effects species.	is a nce t nt do of t	high hat t etrime	deg here ental JoA	gree are indi on	of no rect ETP



PI 2.3	3.1	The UoA meets national and international requirements for the protection of ETP species The UoA does not hinder recovery of ETP species				
	Met?		Wolffish – <b>Yes</b> Leatherback turtle - <b>Yes</b> Blue whale - <b>Yes</b> NARW- <b>Yes</b>	Not scored		
D	. 1 .					

Indirect effects have been considered for the UoA and are thought to be highly likely to not create unacceptable impacts.

SG100 is not scored as per FCP 7.17.7.3.

#### Wolffish species

The lobster trap fishery does not interact with the food sources of wolffish species. Lobster traps are higly unlikely to damage wolffish habitats.

Therefore the fishery meets SG80.

#### Leatherback turtle

The lobster trap fishery does not interact with the food sources of leatherback turtle. Entanglement in fishing gear can limit leatherback turtle's ability to feed, dive, breath or perform other essential behavior. Lobster fishery interactions with leatherback turtle has not been reported in the Gaspésie lobster fishery.

Therefore the fishery meets SG60 and SG80.

#### **Blue whale**

Food availability is classified as one of the high-risk anthropogenic threats. The lobster trap fishery does not interact with the food sources of blue whale. Entanglement in fishing gear can lead to infection, difficulty moving about and feeding to the point where reproduction and survival can be compromised. Accidental entanglements in fishing gear was classified as low risk anthropogenic threats. There have been no reported or observed blue whale inteactions with the Gaspésie lobster trap fishery. Therefore the assessment team determines that SG80 is met.

#### NARW

The lobster trap fishery does not interact with the food sources of NARW. Entanglement in fishing gear can lead to infection, difficulty moving about and feeding to the point where reproduction and survival can be compromised. The probability of interaction between the lobster fishey and NARW is very low based on the fishing effort distribution and lobster fishing operations. Lobster traps are set very close to the shore in shallow waters (verified by the assessment team during the initial assessment site visit).

Therefore the assessment team determines that SG80 is met.

#### References

Information from SARA logbooks provided by DFO.

Daoust, P.-Y., Couture, E.L., Wimmer, T., and Bourque, L. 2017. Incident Report: North Atlantic Right Whale Mortality Event in the Gulf of St. Lawrence, 2017. Collaborative Report Produced by: Canadian Wildlife Health Cooperative, Marine Animal Response Society, and Fisheries and Oceans Canada. 224 pp. December 29<sup>th</sup> 2017, modified from October 5<sup>th</sup> 2017. http://www.cwhc-rcsf.ca/right whales.php

DFO 2012. Using Satellite Tracking Data to Define Important Habitat for Leatherback Turtles in Atlantic Canada. DFO Can. Advis. Sec. Sci. Advis. Rep. 2012/036.

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2012/2012\_036-eng.html

DFO 2017a. Composition, quantity, and survival of incidental catch during the southern Gulf of St Lawrence lobster (Homarus americanus) fishery. Presentation made for the 11<sup>th</sup> International Conference & Workshop on Lobster Biology and Management held in Portland (Maine, US) in June 2017.



#### The UoA meets national and international requirements for the protection of ETP species PI 2.3.1 The UoA does not hinder recovery of ETP species

DFO 2018e. Identification of habitats important to the blue whale in the western North Atlantic. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2018/003.

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2018/2018\_003-eng.html

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Individual scoring elements		Applicable SGs	Likely scoring		
		SG60	SG80	SG100	element scores
1	Wolffish species	1 of 1	2 of 2	0 of 0	≥80
2	Leatherback turtle	2 of 2	3 of 3	0 of 0	≥80
3	Blue whale	2 of 2	3 of 3	0 of 0	≥80
4	NARW	2 of 2	3 of 3	0 of 0	60 – 79
Draft scoring range		Applicabl	<u>Likely</u> overall PI		
		SG60	SG80	SG100	score
		X of x	X of x	X of x	60 – 79
Information gap indicator			Information suff	icient to score PI	

Individual scoring elements		Applicable SGs m	Scoring element		
(au sco	ring by elements)	SG60	SG80	SG100	scores
1	Scoring element 1	X of x	X of x	X of x	
2	Scoring element 2	X of x	X of x	X of x	
3	Scoring element 3	X of x	X of x	X of x	
4	Scoring element 4	X of x	X of x	X of x	
Overall Performance Indicator score		Applica	Querrall essent		
		SG60	SG80	SG100	Overall score
		X of x	X of x	X of x	
Cor	ndition number (if relevant)				



		<b>v</b>	07			
PI 2.3	3.2	<ul> <li>The UoA has in place precautionary management strategies designed to:</li> <li>meet national and international requirements;</li> <li>ensure the UoA does not hinder recovery of ETP species.</li> </ul> Also, the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of ETP species				
Scoring	Issue	SG 60	SG 80	SG 100		
	Manager	nent strategy in place (nationa	al and international requireme	ents)		
а	Guide post	There are <b>measures</b> in place that minimise the UoA-related mortality of ETP species, and are expected to be <b>highly likely to</b> <b>achieve</b> national and international requirements for the protection of ETP species.	There is a <b>strategy</b> in place for managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to be <b>highly likely to</b> <b>achieve</b> national and international requirements for the protection of ETP species.	There is a <b>comprehensive</b> <b>strategy</b> in place for managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to <b>achieve above</b> national and international requirements for the protection of ETP species.		
	Met?	Wolffish – <b>Yes</b> Leatherback turtle - <b>Yes</b> Blue whale - <b>Yes</b> NARW- <b>Yes</b>	Wolffish – <b>Yes</b> Leatherback turtle - <b>Yes</b> Blue whale - <b>Yes</b> NARW- <b>Yes</b>	Wolffish – <b>No</b> Leatherback turtle - <b>No</b> Blue whale - <b>No</b> NARW- <b>No</b>		

#### PI 2.3.2 – ETP species management strategy

#### Rationale

There is a **strategy** in place for managing the UoA's impact on ETP species, including measures to minimise mortality, which is designed to be **highly likely to achieve** national and international requirements for the protection of ETP species.

The lobster fishery harvest strategy and fishing operations can be considered as a strategy for minimising mortality of ETP species. Lobster fishing is limited in time, there is a trap allocation, fishing effort was reduced though a reduction in the number of licences and traps per licence from 1998 to 2005 and after 2009, traps are required to set in lines in sub-areas 20B and 21A, and floating cables are not allowed.

ETP species are subject to recovery strategies. The recovery strategy for the leatherback turtle and wolffish species was published in 2007, for blue whale and NARW in 2009. Recovery strategies include recovery goals and objectives.

#### Wolffish species

All bycatch of ETP species must be returned to the water and release in the exact capture location with as little harm as possible. Banc-des-Américains MPA was designed to also promote the recovey of wolffish.

Fact sheets including tips on how to handle and release woflffish to help increase successful disentanglement and release and improve survival have been published by DFO and distributed to harvesters.

Considering this and the above, the team determines that the fishery meets SG60 and SG80.

#### Leatherback turtle

Fact sheets including tips on how to disentangle leatherback turtles safely to help increase successful disentanglement and release and improve survival have been published by DFO and distributed to harvesters. Considering this and the above, the team determines that the fishery meets SG60 and SG80.

#### Blue whale

Considering the above and the measures implemented for minimizing interactions with the NARW which are considered to benefit to other whale species, the team determines that the fishery meets SG60 and SG80. In addition, Banc-des-Américains MPA was designed to also promote the recovey of at-risk whales.

#### NARW



PI 2.3.2	The UoA has in place precautionary management strategies designed to: meet national and international requirements; ensure the UoA does not hinder recovery of ETP species.
	Also, the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of ETP species

The probability of interaction between the lobster fishey and NARW is very low based on the fishing effort distribution and lobster fishing operations. Lobster traps are set very close to the shore in shallow waters (verified by the assessment team during the initial assessment site visit).

The 2019 measures to minimise interactions with NARW in the GSL were formally announced to fishers by means of a Notice to Fish Harvesters issued on April 12<sup>th</sup>, 2019. The management measures are similar to the ones applied in 2018 and remain focused on preventing entenglements.

The main adjustements for the 2019 season include:

- Adjusting the area closed to snow crab, lobster fisheries and all other non-tended fixed-gear fisheries in Atlantic Canada and Quebec to include the area where 90% of the North Atlantic Right Whale were sighted last year during the prime fishing season. This area is a little less than half the size it was in 2018 and is more elongated North-to-South than in 2018.
- Keeping the overall protection area the same in terms of the combined season-long closure area and the area where temporary 15-day closures may occur for snow crab, lobster fisheries and all other non-tended fixed-gear fisheries from the date when right whales are sighted.
- If a NARW is seen in waters between the 10 and 20 fathom shallow water protocol lines, a temporary closure will occur up to the 10 fathom shallow water protocol line. Licence holders will then be required to move their fishing gear close to the coast and will be allowed to continue fishing in waters shallower than 10 fathoms.
- If a NARW is seen in waters less than the 10 fathom shallow water protocol line, a temporary closure will occur up to the coast.

In addition, Banc-des-Américains MPA was designed to also promote the recovey of at-risk whales. Considering this and the above, the team determines that the fishery meets SG60 and SG80.

The fishery does not meet SG100 for all scoring elements as the strategy cannot be considered as comprehensive.

#### Management strategy in place (alternative)

b	Guide post	There are <b>measures</b> in place that are expected to ensure the UoA does not hinder the recovery of ETP species.	There is a <b>strategy</b> in place that is expected to ensure the UoA does not hinder the recovery of ETP species.	There is a <b>comprehensive</b> <b>strategy</b> in place for managing ETP species, to ensure the UoA does not hinder the recovery of ETP species.
	Met?	Wolffish – <b>NA</b> Leatherback turtle - <b>NA</b> Blue whale - <b>NA</b> NARW- <b>NA</b>	Wolffish – <b>NA</b> Leatherback turtle - <b>NA</b> Blue whale - <b>NA</b> NARW- <b>NA</b>	Wolffish – <b>NA</b> Leatherback turtle - <b>NA</b> Blue whale - <b>NA</b> NARW- <b>NA</b>

#### Rationale

Insert sufficient rationale to support the team's conclusion for each Scoring Guidepost (SG). Scoring issue need not be scored if there are no requirements for protection or rebuilding provided through national ETP legislation or international agreements.

#### Management strategy evaluation

			the strategy will work.
<b>C</b> Guide post	The measures are <b>considered</b> <b>likely</b> to work, based on <b>plausible argument</b> (e.g., general experience, theory or comparison with similar fisheries/species).	There is an <b>objective basis for</b> <b>confidence</b> that the measures/strategy will work, based on <b>information</b> directly about the fishery and/or the species involved.	The strategy/comprehensive strategy is mainly based on information directly about the fishery and/or species involved, and a <b>quantitative analysis</b> supports <b>high confidence</b> that the strategy will work



PI 2.3.2	<ul> <li>The UoA has in place precautionary management strategies designed to:</li> <li>meet national and international requirements;</li> <li>ensure the UoA does not hinder recovery of ETP species.</li> <li>Also, the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of ETP species</li> </ul>			
	Blue whale - <b>Yes</b>	Blue whale - <b>Yes</b>	Blue whale - <b>No</b>	
	NARW- <b>Yes</b>	NARW- <b>Yes</b>	NARW- <b>No</b>	

There is an **objective basis for confidence** that the measures/strategy will work, based on **information** directly about the fishery and/or the species involved.

#### Wolffish species

Post-release survival of wolffish caught in lobster traps are considered to be high. A collaborative research project, "Bycatch composition and vitality assessment of species caught as bycatch during the lobster fishery in the Southern Gulf of St Lawrence", led by DFO Gulf Region has been implemented in 2015. It was determined that survival of all returned species is very high with 98% of observed individuals had no visible injury, no mortality observed during vitality observations and there is no everted stomach or bloated swim bladder in fish caught. Gaspésie lobster fishery operations are similar to the Southern Gulf of St Lawrence lobster fishery operations.

Therefore the fishery meets SG60 and SG80.

#### Leatherback turtle

The relative probability of residency of leatherbacks around Gaspé peninsula is low. Although it was noted that notable areas not sampled by tagged turtles included Gaspésie peninsula, the author of the analysis pointed out that while opportunistic sightings of leatherbacks have occurred in this area, such records are rare relative to those corresponding to the high-use areas identified via satellite telemetry. Catch of leatherback turtle has not been reported in the Gaspésie lobster fishery. Therefore the fishery meets SG60 and SG80.

#### Blue whale

Accidental entanglements in fishing gear was classified as low risk anthropogenic threats in comparison with whale watching and collisions with vessels which were classified as medium-risk anthropogenic threats, and acoustic environmental degradation and food availability which were classified as high-risk anthropogenic threats.

There have been no reported or observed blue whale inteactions with the Gaspésie lobster trap fishery. Therefore the assessment team determine that both SG60 and SG80 are met.

#### NARW

NARW mortality and entanglement incidents involving the Gaspésie lobster trap fishery have not been reported in the last decade. The probability of interaction between the lobster fishey and NARW is very low based on the fishing effort distribution and lobster fishing operations. Lobster traps are set very close to the shore in shallow waters (verified by the assessment team during the initial assessment site visit).

Therefore the assessment team determine that both SG60 and SG80 are met.

The fishery does not meet SG100 for all scoring elements as there is no quantitative analysis specific to the Gaspésie lobster fishery.

	Managen	nent strategy implementation		
d	Guide post		There is some <b>evidence</b> that the measures/strategy is being implemented successfully.	There is <b>clear evidence</b> that the strategy/comprehensive strategy is being implemented successfully and <b>is achieving its</b> <b>objective as set out in scoring</b> <b>issue (a) or (b).</b>
	Met?		Wolffish – <b>Yes</b> Leatherback turtle - <b>Yes</b> Blue whale - <b>Yes</b>	Wolffish – <b>No</b> Leatherback turtle - <b>No</b> Blue whale - <b>No</b>



PI 2.3.2	The UoA has in place precautional meet national and internatio ensure the UoA does not hind Also, the UoA regularly reviews a of ETP species	ry management strategies designed nal requirements; der recovery of ETP species. nd implements measures, as appro	l to: opriate, to minimise the mortality
		NARW- <b>Yes</b>	NARW- <b>No</b>

There is some **evidence** that the measures/strategy is being implemented successfully.

#### Wolffish species

Post-release survival of wolffish caught in lobster traps are considered to be high. A collaborative research project, "Bycatch composition and vitality assessment of species caught as bycatch during the lobster fishery in the Southern Gulf of St Lawrence", led by DFO Gulf Region has been implemented in 2015. It was determined that survival of all returned species is very high with 98% of observed individuals had no visible injury, no mortality observed during vitality observations and there is no everted stomach or bloated swim bladder in fish caught. Gaspésie lobster fishery operations are similar to the Southern Gulf of St Lawrence lobster fishery operations.

Therefore the fishery meets SG80.

#### Leatherback turtle

The relative probability of residency of leatherbacks around Gaspé peninsula is low. Although it was noted that notable areas not sampled by tagged turtles included Gaspésie peninsula, the author of the analysis pointed out that while opportunistic sightings of leatherbacks have occurred in this area, such records are rare relative to those corresponding to the high-use areas identified via satellite telemetry. Catch of leatherback turtle has not been reported in the Gaspésie lobster fishery. Therefore the fishery meets SG80.

#### Blue whale

Accidental entanglements in fishing gear was classified as low risk anthropogenic threats in comparison with whale watching and collisions with vessels which were classified as medium-risk anthropogenic threats, and acoustic environmental degradation and food availability which were classified as high-risk anthropogenic threats.

There have been no reported or observed blue whale inteactions with the Gaspésie lobster trap fishery. Therefore the assessment team determine that both SG80 is met.

#### NARW

NARW mortality and entanglement incidents involving the Gaspésie lobster trap fishery have not been reported in the last decade. The probability of interaction between the lobster fishey and NARW is very low based on the fishing effort distribution and lobster fishing operations. Lobster traps are set very close to the shore in shallow waters (verified by the assessment team during the initial assessment site visit).

Therefore the assessment team determines that SG80 is met.

In addition, a comprehensive monitoring, control and surveillance system continues to be implemented in the fishery and compliance to regulations remains very high with a level of recidivism in the fishery to be extremely low. However, the fishery does not meet SG100 for all scoring elements as evidence is not considered to be clear.

#### Review of alternative measures to minimize mortality of ETP species

e	Guide post	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of ETP species.	There is a <b>regular</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality of ETP species and they are implemented as appropriate.	There is a <b>biennial</b> review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality ETP species, and they are implemented, as appropriate.
	Met?	Wolffish – <b>Yes</b> Leatherback turtle - <b>Yes</b>	Wolffish – <b>Yes</b> Leatherback turtle - <b>Yes</b>	Wolffish – <b>Yes</b> Leatherback turtle - <b>Yes</b>



PI 2.3.2	The UoA has in place precautiona meet national and internatio ensure the UoA does not him Also, the UoA regularly reviews a of ETP species	ry management strategies designed nal requirements; der recovery of ETP species. nd implements measures, as appro	l to: opriate, to minimise the mortality
	Blue whale - Yes	Blue whale - Yes	Blue whale - Yes
	NARW- Yes	NARW- Yes	NARW- Yes

An annual post-fishing season review is conducted to evaluate the effetiveness of management measures. This post-season review is followed by the Lobster Advisory Committee meeting during which new management measures can be proposed and discussed.

#### Wolffish species

A progress report to evaluate the progress of Recovery Strategy implementation was published in 2013. Banc-des-Américains MPA was implemented in 2019 and is designed to also promote the recovey of wolffish. Fact sheets including tips on how to handle and release woflffish to help increase successful disentanglement and release and improve survival have been published by DFO and distributed to harvesters.

Considering this and the above, the team determines that the fishery meets SG60, SG80 and SG100.

#### Leatherback turtle

A progress report to evaluate the progress of Recovery Strategy implementation was published in 2013. The relative probability of residency of leatherbacks around Gaspé peninsula is low. Catch of leatherback turtle has not been reported in the Gaspésie lobster fishery.

Considering this and the above, the team determines that the fishery meets SG60, SG80 and SG100.

#### **Blue whale**

Accidental entanglements in fishing gear was classified as low risk anthropogenic threats in comparison with whale watching and collisions with vessels which were classified as medium-risk anthropogenic threats, and acoustic environmental degradation and food availability which were classified as high-risk anthropogenic threats. A progress report to evaluate the progress of Recovery Strategy implementation was published in 2016. New measures implemented in 2018and 2019 for minimizing interactions with the NARW are considered to benefit to other whale species.

Considering this and the above, the team determines that the fishery meets SG60, SG80 and SG100.

#### NARW

Following the 2017 unprecented NARW entanglements and mortality events, DFO undertook engagement sessions with the fishing industry in different provinces, including Quebec, between October and November 2017 to discuss options of measures to be implemented to reduce risks of interactions with NARW. In addition, a Meeting of the NARW Consortium is held annually and all stakeholders have the opportunity to gather and discuss research, new techniques and management strategies to minimise fishing interactions with NARW.

New measures were implemented in 2018. The effectivenss of these measures have been reviewed and discussed during postseason meetings between lobster industry and DFO. New measures have been implemented for the 2019 fishing season. Considering this and the above, the team determines that the fishery meets SG60, SG80 and SG100.

#### References

Beauchamp, J., Bouchard, H., de Margerie, P., Otis, N., Savaria, J.-Y., 2009. Recovery Strategy for the blue whale (*Balaenoptera musculus*), Northwest Atlantic population, in Canada [FINAL]. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa. 62 pp.

http://www.sararegistry.gc.ca/virtual sara/files/plans/rs blue whale nw atlantic pop 0210 e.pdf

Kulka, D., C. Hood and J. Huntington. 2007. Recovery Strategy for Northern Wolffish (Anarhichas denticulatus) and Spotted Wolffish (Anarhichas minor), and Management Plan for Atlantic Wolffish (Anarhichas lupus) in Canada. Fisheries and Oceans Canada: Newfoundland and Labrador Region. St. John's, NL. x + 103 pp. http://www.sararegistry.gc.ca/virtual sara/files/plans/rs Atlantic Northern and Spotted Wolffish 0208 e.pdf

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PI 2.3.2	The UoA has in place precautionary management strategies designed to: meet national and international requirements; ensure the UoA does not hinder recovery of ETP species.
	Also, the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of ETP species

DFO 2013a. Report on the Progress of Recovery Strategy Implementation for the Leatherback Sea Turtle (*Dermochelys coriacea*) in Canada for the Period 2007-2012. Species at Risk Act Recovery Strategy Report Series. Fisheries and Oceans Canada, Ottawa. http://www.registrelep-sararegistry.gc.ca/virtual sara/files/rs5 tortue luth leatherback atl 1213 e.pdf

DFO 2016b. Report on the Progress of Recovery Strategy Implementation for the Blue Whale (Balaenoptera musculus), Northwest Atlantic population, in Canada for the Period 2009 – 2014. Species at Risk Act Recovery Strategy Report Series. Fisheries and Oceans Canada, Ottawa. ii+ 14 pp.

https://wildlife-species.canada.ca/species-risk-registry/virtual\_sara/files/ProgressReport-BlueWhaleDfo-v00-2016May03-Eng.pdf

DFO 2016c. Report on the Progress of Recovery Strategy Implementation for the North Atlantic Right Whale (Eubalaena glacialis) in Canadian Waters for the Period 2009-2014. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa. iii + 48 pp.

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

DFO 2019b. Announcement of management measures to minise the risk of interaction with the North Atlantic right whale in 2019. Notice to Fish Harvesters. Lobster – 19 to 21 – Gaspe-Lower St Lawrence. April 12<sup>th</sup>, 2019. <u>https://inter-I01.dfo-mpo.gc.ca/applications/opti-opei/notice-avis-detail-</u> <u>eng.php?pub\_id=1851&todo=view&type=1&region\_id=4&sub\_type\_id=5&species=700&area=1862</u>

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Individual scoring elements		Applicable SGs <u>likely</u> met per individual scoring element			Likely scoring	
		SG60	SG80	SG100	element scores	
1	Wolffish species	3 of 3	4 of 4	1 of 4	≥80	
2	Leatherback turtle	3 of 3	4 of 4	1 of 4	≥80	
3	Blue whale	3 of 3	4 of 4	1 of 4	≥80	
4	NARW	3 of 3	4 of 4	1 of 4	≥80	
Draft scoring range		Applicable	<u>Likely</u> overall PI			
		SG60	SG80	SG100	score	
		X of x	X of x	X of x	≥80	
Information gap indicator		Information sufficient to score PI				
Overall Performance Indicator scores added from Client and Peer Review Draft Report						
Ind	ividual scoring elements	Applicable SGs met per individual scoring element				



PI 2.3.2       The UoA has in place precautionary management strategies designed to:         • meet national and international requirements;         • ensure the UoA does not hinder recovery of ETP species.         Also, the UoA regularly reviews and implements measures, as appropriate, to minimise the morta of ETP species				imise the mortality		
(ad sco	d rows as requi ring by elemen <sup>-</sup>	red; delete if not ts)	SG60	SG80	SG100	Scoring element scores
1	Scoring element 1		X of x	X of x	X of x	
2	Scoring element 2		X of x	X of x	X of x	
3	Scoring eleme	ent 3	X of x	X of x	X of x	
4	Scoring eleme	ent 4	X of x	X of x	X of x	
			Applicable SGs/elements met			Querall coore
Overall Performance Indicator score		SG60	SG80	SG100	Overall score	
		X of x	X of x	X of x		
Cor	dition number	(if relevant)				



PI 2.3.3 Relevant information is collected to support the management of UoA impacts on ETP species, in - Information for the development of the management strategy; - Information to assess the effectiveness of the management strategy; and - Information to determine the outcome status of ETP species					
Scoring	slssue	SG 60	SG 80	SG 100	
	Informat	ion adequacy for assessment	of impacts		
а	Guide post	Qualitative information is adequate to estimate the UoA related mortality on ETP species. OR If RBF is used to score PI 2.3.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for ETP species.	Some quantitative information is adequate to assess the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species. OR If RBF is used to score PI 2.3.1 for the UoA: Some quantitative information is adequate to assess productivity and susceptibility attributes for ETP species.	Quantitative information is available to assess with a high degree of certainty the magnitude of UoA-related impacts, mortalities and injuries and the consequences for the status of ETP species.	
	Met?	Yes	Yes	No	

#### PI 2.3.3 – ETP species information

#### Rationale

Some quantitative information is **adequate to assess** the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species.

There is a variety of information sources that provides qualitative and quantitative information to assess the impact of the fishery on ETP species and to determine whether the fishery is a threat to protection and recovery of ETP species. These sources include the SARA logbooks where lobster harvesters must report all incidental captures of ETP species, marine mammal responses networks and the turtles observation network collecting information from opportunistic sightings of marine mammals and turtles strandings and human interactions.

Therefore, the team determines that SG60 and SG80 are met.

However, quantitative information is not available to assess with a high degree of certainty the magnitude of UoA- related impacts, mortalities and injuries and the consequences for the status of ETP species, preventing the fishery form meeting SG100.

#### Information adequacy for management strategy

b	Guide post	Information is adequate to support <b>measures</b> to manage the impacts on ETP species.	Information is adequate to measure trends and support a <b>strategy</b> to manage impacts on ETP species.	Information is adequate to support a <b>comprehensive strategy</b> to manage impacts, minimize mortality and injury of ETP species, and evaluate with a <b>high</b> <b>degree of certainty</b> whether a strategy is achieving its objectives.
	Met?	Yes	Yes	Νο

#### Rationale

Information is adequate to measure trends and support a **strategy** to manage impacts on ETP species. There is a variety of information sources that provides qualitative and quantitative information to assess the impact of the fishery on ETP species and to determine whether the fishery is a threat to protection and recovery of ETP species. These sources include the SARA logbooks where lobster harvesters must report all incidental captures of ETP species, marine mammal



## PI 2.3.3

Relevant information is collected to support the management of UoA impacts on ETP species, including: - Information for the development of the management strategy;

Information to assess the effectiveness of the management strategy; and
 Information to determine the outcome status of ETP species

responses networks and the turtles observation network collecting information from opportunistic sightings of marine mammals and turtles strandings and human interactions.

In addition, following the 2017 NARW mortality and entanglement event, collaborative efforts between DFO, Trnasport Canada and NOAA have been implemented in the form of aerial surveillance, near real time passive acoustic monitoring and ship-based observations.

Therefore, the team determines that SG60 and SG80 are met.

However, the strategy in place is not comprehensive and information is not available to assess with a high degree of certainty to assess whether the strategy is achieving its objectives, preventing the fishery form meeting SG100.

#### References

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable	<u>kely</u> met	<u>Likely</u> overall PI	
Draft scoring range	SG60	SG80	SG100	score
	2 of 2	2 of 2	0 of 2	≥80
Information gap indicator	Information sufficient to score PI			

	SG60	SG80	SG100
	X of x	X of x	X of x
Condition number (if relevant)			



PI 2.4	1.1	The UoA does not cause serious the basis of the area covered by area(s) where the UoA operates	or irreversible harm to habitat stru the governance body(s) responsib	acture and function, considered on le for fisheries management in the
Scoring Issue		SG 60	SG 80	SG 100
	Common	ly encountered habitat status		
а	Guide post	The UoA is <b>unlikely</b> to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.	The UoA is <b>highly unlikely</b> to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.	There is <b>evidence</b> that the UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.
	Met?	Yes	Yes	Νο

#### PI 2.4.1 – Habitats outcome

#### Rationale

The UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.

Commonly encountered habitats are sandy/muddy sediments mixed with gravels.

- Traps are passive gear types that rely on bait to attract the target species, and are generally considered to have slight impacts on the habitat. Eno et al (2001) examined the effects of fishing with crustacean traps on benthic fauna in UK through qualitative and quantitative experiments. This study examined the effects of lobster and crab traps being hauled from rocky substrates in southern England, and found that the habitats and their communities appeared relatively unaffected by potting.
- A study carried out by Chuenpagdee et al (2003) ranked fishing gears regarding their collateral impacts on bycatch and on habitats in U.S. each Fishery Management Council region. They found that traps have low and medium impacts on biological and physical component of habitat, respectively.
- Shester and Micheli (2011) quantify and compare the ecosystem impacts of four gears (lobster traps, fish traps, set gillnets, drift gillnets) used in small-scale fisheries of Baja California, Mexico, using at-sea observations and field experiments. Results indicated that traps caused minimal immediate damage to habitats.

There have been significant efforts to document habitat impacts associated with various fishing gears used in Canadian waters and to implement measures to mitigate negative impacts where possible. Trap fisheries in general are considered to have low impact on habitat structure and function. No habitat impact issues have been identified for Gaspésie lobster fishery and there is no evidence that it is likely to reduce habitat structure and function.

However, while SG80 is met, there is no specific evidence derived from a habitat specific study in relation to the fishery, preventing the fishery from meeting SG100.

#### VME habitat status

~	post	there would be serious or	where there would be serious or	to a point where there would be
	Met?	irreversible harm.	irreversible harm.	serious or irreversible harm.
b	Guide	The UoA is <b>unlikely</b> to reduce structure and function of the VME babitats to a point where	The UoA is <b>highly unlikely</b> to reduce structure and function of the VME babitats to a point	There is <b>evidence</b> that the UoA is highly unlikely to reduce structure and function of the VME habitats

#### Rationale

There is evidence that the UoA is highly unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.

VMEs are coral and sponges areas and eel grass meadows.



## PI 2.4.1

The UoA does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area(s) where the UoA operates

Although trap fisheries are generally considered to have slight impacts on the habitat, traps can impact biogenic structures (e.g. sponges, corals) through crushing or entanglement. Crushing and scouring effects can result if traps are dragged across the bottom during retrieval or during periods of strong currents (e.g. storms, tides).

Significant coral and sponge areas have been mapped and significant areas have been identified in the Gaspésie peninsula. However, these areas are not in the inshore portion of the peninsula where lobster fishing grounds are located.

Eel grass beds are located inside rive mouths where the estuaries form bays, lagoons, and in estuaries and lagoons behind baymouth bars (known as a "barachois" in Québec).

Lobster fishing does not occur in these areas, so there is no overlapping between eel grass beds and lobster fishing grounds. The team determines that there is evidence that the UoA is highly unlikely to reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm, SG100 is met.



#### Rationale

There is no minor habitats.

#### References

Map of the geographical distribution of the lobster average annual landed value and significant coral and sponge areas (blue) in the GSL. Source: <u>http://www.qc.dfo-mpo.gc.ca/golfe-gulf/coraux-eng.html</u>

Martel, M.-C., Provencher, L., Grant, C., Ellefsen, H.-F. and Pereira, S. 2009. Distribution and description of eelgrass beds in Québec. DFO Can. Sci. Advis. Sec. Res. Doc. 2009/050. Viii + 37 p.

http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2009/2009 050-eng.htm

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Individual scoring elements		Applicable SGs	Likely scoring		
		SG60	SG80	SG100	element scores
1	Commonly encountered habitats	1 of 1	1 of 1	0 of 1	≥80
2	Coral and sponge areas	1 of 1	1 of 1	1 of 1	≥80
3	Eel grass meadows	1 of 1	1 of 1	1 of 1	≥80
		Applicable	<u>Likely</u> overall PI		
Draft scoring range		SG60	SG80	SG100	score
		X of x	X of x	X of x	≥80
Information gap indicator		More information sought/Information sufficient to score PI			



# PI 2.4.1

The UoA does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area(s) where the UoA operates

Individual scoring elements (add rows as required; delete if not scoring by elements)		Applicable SGs m	Scoring element		
		SG60	SG80	SG100	scores
1	Scoring element 1	X of x	X of x	X of x	
2	Scoring element 2	X of x	X of x	X of x	
3	Scoring element 3	X of x	X of x	X of x	
4	Scoring element 4	X of x	X of x	X of x	
Overall Performance Indicator score		Applica	0 "		
		SG60	SG80	SG100	Overall score
		X of x	X of x	X of x	
Cor	ndition number (if relevant)				



PI 2.4	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	slssue	SG 60	SG 80	SG 100		
	Manager	nent strategy in place				
а	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?	Yes	Yes	Yes		

### PI 2.4.2 – Habitats management strategy

#### Rationale

There is a strategy in place for managing the impact of all MSC UoAs/non-MSC fisheries on habitats.

To address threats to fish from habitat loss/degradation and changes to natural flow regimes, the Fisheries Protection Program (formerly the Habitat Protection Program) administered the habitat protection provisions of the Fisheries Act. Until 2012, the habitat protection provisions included two principal prohibitions :

- a prohibition against of the destruction of fish by means other than fishing (Section 32);
- a prohibition against the harmful alteration, disruption or destruction of fish habitat, informally called the HADD prohibition (Section 35)

The Fisheries Act was amended in 2012/2013. A key amendment was the replacement of the two prohibitions in the former Act with one new prohibition (also numbered Section 35) against "the carrying on of a work, undertaking or activity that results in serious harm to fish that are part of or support a commercial recreational or Aboriginal fishery."

In the amended Act, "serious harm to fish" is defined as: "the death of fish or the permanent alteration to, or destruction of, fish habitat," with fish habitat defined as "spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes."

Through the FPPS, DFO objectives are to provide consistent guidance through regulations, standards and directives, and to make regulatory decisions in a timely manner. In this way, proponents will have the necessary information and direction to avoid, mitigate and offset harmful impacts to fish and fish habitat so that they will meet the goal of this policy, and thereby comply with the fisheries protection provisions of the Fisheries Act. The prohibition against serious harm to fish applies to fish and fish habitat that are part of or support commercial, recreational or Aboriginal fisheries.

In 2009, DFO published the Policy for Managing the Impact of Fishing on Sensitive Benthic Areas under the auspices of the Sustainable Fisheries Framework in response to the 2006 United Nations Resolution 61/10530. The purpose policy is to help DFO manages fisheries to mitigate impacts of fishing on sensitive benthic habitats or avoid impacts of fishing that are likely to cause serious or irreversible harm to sensitive marine habitat, communities and species. This national policy applies to all commercial, recreational and Aboriginal fishing activities licenced and/or managed pursuant to the Fisheries Act and the Coastal Fisheries Protection Act, including fishing inside and outside of Canada's EEZ. A key tool for use in the implementation of the policy is the Ecological Risk Assessment Framework, which outlines a process for identifying the level of ecological risk of fishing activity and its impacts as sensitive benthic areas in the marine environment. DFO has developed this framework specifically for use in managing cold-water corals and sponge-dominated communities.

In December 2017, 11 coral and sponge conservation areas have been implemented in the Estuary and Gulf of St Lawrence. Fisheries management measures have been implemented and were effective on 15<sup>th</sup> December 2017 with the release of the Quebec Region Variation Order 2017-Q-104<sup>12</sup>. Lobster traps, and all other bottom-contact fishing gears, are prohibited in these conservation areas.

In March 2019, DFO announced the establishment of Banc-des-Américains MPA, an area of 1,000 km<sup>2</sup> located off the coast of the Gaspé Peninsula<sup>13</sup>. The MPA is designed to conserve and protect benthic and pelagic habitats and the associated species. Anchoring, commercial and recreational fishing activities are prohibited in Zone 1 of the MPA.

<sup>&</sup>lt;sup>12</sup> http://www.qc.dfo-mpo.gc.ca/peches-fisheries/commerciale-commercial/documents/2017-Q-104\_EN.pdf

<sup>&</sup>lt;sup>13</sup> https://www.canada.ca/en/fisheries-oceans/news/2019/03/a-new-marine-protected-area-at-the-eastern-tip-of-the-gaspe-peninsula.html



# 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

There are also two National Parks includind a marine area in Gaspésie: Forillon National Park and National Park of Îles de Bonaventure and of Rocher Percé.

Impacts on habitats are limited by restricting the number and size of traps in use, the number of fishermen and a limited fishing season. It is not authorized to haul the traps more than once per day. Moreover, the strategy of fishing effort reduction adopted by DFO and the RPPSG from 1998 to 2005 and after 2009 also reduce the impacts on habitats.

#### Management strategy evaluation

b Guide post Guide argument (e.g. general experience, theory or comparison with similar UoAs/habitats). Confidence that the that the partial strategy/strated will work, based on information directly about the UoA and/or habitats involved.		Met?	Met? Yes	Yes	No
b Guide post Guide argument (e.g. general experience, theory or work, based on information directly about the UoA and			comparison with similar UoAs/habitats).	directly about the UoA and/or habitats involved.	habitats involved.
<b>b</b> Guide likely to work, based on plausible argument (e.g. general measures/partial strategy will will work, based on information information in the strategy will will work, based on information information in the strategy will will work, based on information information in the strategy will will work based on information information in the strategy will will work based on infor		post	post experience, theory or	work, based on information	directly about the UoA and/or
<b>likely</b> to work, based on <b>confidence</b> that the that the partial strategy/stra	b	Guide	Guide plausible argument (e.g. general	measures/partial strategy will	will work, based on information
The measures are <b>considered</b> . There is some <b>objective basis for Testing</b> supports <b>high confide</b>			The measures are <b>considered</b> <b>likely</b> to work, based on	There is some objective basis forconfidencethatthatthe	Testing supports high confidence that the partial strategy/strategy

#### Rationale

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.

Traps are passive gear types that rely on bait to attract the target species, and are generally considered to have slight impacts on the habitat. Significant coral and sponge areas have been mapped and significant areas have been identified in the Gaspésie peninsula. However, these areas are not in the inshore portion of the peninsula where lobster fishing grounds are located. There is no overlapping between eel grass beds and lobster fishing grounds.

However while there has been considerable effort to document habitat impacts associated with various fishing gears used in Canadian waters, there is not testing that supports high confidence that the strategy will work based on information directly about the UoA and/or habitats involved, preventing the fishery from meeting SG100.

	Management strategy implementation										
с	Guide post		There is evidence measures/p being imple	some tha partial emented	<b>quantit</b> at strategy success	the the y is fully.	There evidence strategy implem achievir in scorin	is <b>e</b> <i>i</i> /stra entec ng its ng iss	clear that tegy d succe objecti ue (a).	quan the is essfully ve, as c	titative partial being and is outlined
	Met?		Yes				No				

#### Rationale

There is **some quantitative evidence** that the measures/partial strategy is being implemented successfully.

- Eno et al (2001) examined the effects of fishing with crustacean traps on benthic fauna in UK through qualitative and quantitative experiments. This study examined the effects of lobster and crab traps being hauled from rocky substrates in southern England, and found that the habitats and their communities appeared relatively unaffected by potting.
- A study carried out by Chuenpagdee et al (2003) ranked fishing gears regarding their collateral impacts on bycatch and on habitats in U.S. each Fishery Management Council region. They found that traps have low and medium impacts on biological and physical component of habitat, respectively.
- Shester and Micheli (2011) quantify and compare the ecosystem impacts of four gears (lobster traps, fish traps, set gillnets, drift gillnets) used in small-scale fisheries of Baja California, Mexico, using at-sea observations and field experiments. Results indicated that traps caused minimal immediate damage to habitats.

The UoA has a harvest strategy including management measures that minimise the impacts on habitats : permanent fishing spatial closures to protect fish habitats and VMEs, gear restrictions (size), trap allocation, season (number of days, fishing not allowed on certain days and in time windows).



# 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

A comprehensive monitoring, control and surveillance system continues to be implemented in the fishery and compliance to regulations remains very high with a level of recidivism in the fishery to be extremely low.

However, it cannot be said that there is clear quantitative evidence, presenting the fishery from meeting SG100.

Compliance with management requirements and other MSC UoAs'/non-MSC fisheries' measures to protect VMEs

d	Guide post	There is <b>qualitative 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?	Yes	Yes	No

#### Rationale

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.

In December 2017, 11 coral and sponge conservation areas have been implemented in the Estuary and Gulf of St Lawrence. Fisheries management measures have been implemented and were effective on 15<sup>th</sup> December 2017 with the release of the Quebec Region Variation Order 2017-Q-104. Lobster traps, and all other bottom-contact fishing gears, are prohibited in these conservation areas.

In March 2019, DFO announced the establishment of Banc-des-Américains MPA, an area of 1,000 km<sup>2</sup> located off the coast of the Gaspé Peninsula. The MPA is designed to conserve and protect benthic and pelagic habitats and the associated species. Anchoring, commercial and recreational fishing activities are prohibited in Zone 1 of the MPA.

There are also two National Parks includind a marine area in Gaspésie: Forillon National Park and National Park of Îles de Bonaventure and of Rocher Percé.

The UoA has a harvest strategy including management measures that minimise the impacts on habitats : permanent fishing spatial closures to protect fish habitats and VMEs, gear restrictions (size), trap allocation, season (number of days, fishing not allowed on certain days and in time windows).

A comprehensive monitoring, control and surveillance system continues to be implemented in the fishery and compliance to regulations remains very high with a level of recidivism in the fishery to be extremely low.

Therefore the team determines that SG60 and SG80 are met. However, the team does not considered there is clear quantitative evidence, preventing the fishery from meeting SG100.

#### References

Fisheries Protection Provisions of the Fisheries Act http://www.dfo-mpo.gc.ca/pnw-ppe/changes-changements/index-eng.html

Map of the geographical distribution of the lobster average annual landed value and significant coral and sponge areas (blue) in the GSL. Source: <u>http://www.qc.dfo-mpo.gc.ca/golfe-gulf/coraux-eng.html</u>

Map of areas identified for coral and sponge conservation in the GSL. Source: <u>http://www.qc.dfo-mpo.gc.ca/golfe-gulf/coraux-eng.html</u>.

Martel, M.-C., Provencher, L., Grant, C., Ellefsen, H.-F. and Pereira, S. 2009. Distribution and description of eelgrass beds in Québec. DFO Can. Sci. Advis. Sec. Res. Doc. 2009/050. Viii + 37 p.

http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2009/2009\_050-eng.htm

Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Draft scoring range

Applicable SGs/elements likely met



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						
		SG60	SG80	SG100	<u>Likely</u> overall PI score		
		3 of 3	3 of 3 4 of 4 3 of 4 ≥80				
Information gap indicator		More information sought/Information sufficient to score PI					

	Applica	Overall score		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
Condition number (if relevant)				



PI 2.4	4.3	Information is adequate to detern the strategy to manage impacts o	nine the risk posed to the habitat b n the habitat	y the UoA and the effectiveness of
Scoring	Issue	SG 60	SG 80	SG 100
	Informat	ion quality		
а	Guide post	The types and distribution of the main habitats are <b>broadly</b> <b>understood</b> . <b>OR</b> <b>If CSA is used to score PI 2.4.1</b> <b>for the UoA:</b> Qualitative information is adequate to estimate the types and distribution of the main habitats.	The nature, distribution and vulnerability of the main habitats in the UoA area are known at a level of detail relevant to the scale and intensity of the UoA. OR If CSA is used to score PI 2.4.1 for the UoA: Some quantitative information is available and is adequate to estimate the types and distribution of the main habitats.	The distribution of all habitats is known over their range, with particular attention to the occurrence of vulnerable habitats.
	Met?	Yes	Yes	Yes

#### PI 2.4.3 – Habitats information

#### Rationale

The distribution of all habitats is known over their range, with particular attention to the occurrence of vulnerable habitats.

Coastal and epipelagic habitats of the estuary and Gulf of St Lawrence, including the Gaspésie peninsula have been mapped. DFO Sustainable Fisheries Framework (SFF) provides the basis for ensuring Canadian fisheries are conducted in a manner which supports conservation and sustainable use. As part of the SFF, DFO published the Policy on Managing the Impacts of Fishing on Sensitive Benthic Areas (the Policy) in 2009 to provide a more systematic, transparent, and consistent approach to mitigate fishery impacts on benthic habitats, species, and communities.

A SAR (DFO 2010) previously provided the foundation for the delineation of concentrations of coldwater corals and sponges in Canadian waters by providing maps of known locations. Further refinement of the delineation of aggregations of coldwater coral and sponge have been published in 2010 and 2017.

Eel grass meadows have also been mapped.

Therefore the fishery meets SG100.

#### Information adequacy for assessment of impacts

b	Guide post	Information is adequate to broadly understand the nature of the main impacts of gear use on the main habitats, including spatial overlap of habitat with fishing gear. OR	Information is adequate to allow for identification of the main impacts of the UoA on the main habitats, and there is reliable information on the spatial extent of interaction and on the timing and location of use of the fishing gear.	The physical impacts of the gear on all habitats have been quantified fully.
		If CSA is used to score PI 2.4.1 for the UoA: Qualitative information is adequate to estimate the consequence and spatial attributes of the main habitats.	OR <b>If CSA is used to score PI 2.4.1</b> <b>for the UoA:</b> Some quantitative information is available and is adequate to	



PI 2.4	4.3	Information is adequate to determine the risk posed to the habitat by the UoA and the effectiveness o the strategy to manage impacts on the habitat				
			estimate the consequence and spatial attributes of the main habitats.			
	Met?	Yes	Yes	No		

Information is adequate to allow for identification of the main impacts of the UoA on the main habitats, and there is reliable information on the spatial extent of interaction and on the timing and location of use of the fishing gear.

There have been significant efforts to document habitat impacts associated with various fishing gears used in Canadian waters. Trap fisheries in general are considered to have low impact on habitat structure and function. No habitat impact issues have been identified for the lobster fishery and there is no evidence that it is likely to reduce habitat structure and function. Habitats, including VMEs, have been mapped as well as the lobster fishing effort spatial distribution. Lobster fishing is timely limited with a fishing season.

Therefore the fishery meets SG60 and SG80. However, SG100 is not met as physical impacts of the lobster traps on all habitats have not been fully quantified.

	Monitoring					
с	Guide post		Adequate information continues to be collected to detect any increase in risk to the main habitats.	Changes in all habitat distributions over time are measured.		
	Met?		Yes	No		

#### Rationale

Adequate information continues to be collected to detect any increase in risk to the main habitats.

There has been and will continue to be an ongoing focus on habitat changes as part of Canada's commitment to ecosystem based management, especially in the Gulf of St. Lawrence. The distribution of lobster fishing effort continues to be monitored. As part of Canada's commitment to implementation of an ecosystem approach to management, habitat impact of fishing activity continues to be researched and monitored. DFO C&P staff continues to control lobster harvesters and monitor lobster harvesters' compliance with management measures for fishing spatial and temporal closures, trap allocation and trap characteristics. A SAR (DFO 2010) previously provided the foundation for the delineation of concentrations of coldwater corals and sponges in Canadian waters by providing maps of known locations. Further refinement of the delineation of aggregations of coldwater coral and sponge have been published in 2010 and 2017.

Therefore the team determines that SG80 is met. However, it is not considered that all habitats distribution over time are measured, preventing the fishery from meeting SG100.

#### References

DFO. 2010. Occurrence, susceptibility to fishing, and ecological function of corals, sponges, and hydrothermal vents in Canadian waters. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2010/041.

http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2010/2010\_041-eng.html

DFO. 2017c. 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. http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2017/2017\_007-eng.html

Dutil J.-D., S. Proulx, P. S. Galbraith, J. Chassé, N. Lambert and C. Laurian 2012. Coastal and epipelagic habitats of the estuary and Gulf of St. Lawrence. Can. Tech. Rep. Fish. Aquat. Sci. 3009: ix + 87 pp



# PI 2.4.3 Information is adequate to determine the risk posed to the habitat by the UoA and the effectiveness of the strategy to manage impacts on the habitat

Kenchington, E., Lirette, C., Cogswell, A., Archambault, P., Archambault, P., Benoît, H., Bernier, D., Brodie, B., Fuller, S., Gilkinson, K., Lévesque, M., Power, D., Siferd, T., Treble, M., and Wareham, V. 2010. Coral and sponge concentrations in the biogeographic regions of the East Coast of Canada using spatial analyses. DFO Can. Sci. Advis. Sec. Res. Doc. 2010/041. Vi + 202 pp. http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2010/2010\_041-eng.htm

Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Applicable	<u>Likely</u> overall PI		
SG60	SG80	SG100	score
2 of 2	3 of 3	2 of 3	≥80
	Applicable SG60 2 of 2	Applicable SGs/elements lillSG60SG802 of 23 of 3	Applicable SGs/elements likely metSG60SG80SG1002 of 23 of 32 of 3

More information sought/Information sufficient to score PI

#### **Overall Performance Indicator scores added from Client and Peer Review Draft Report**

	Applica	Overall score		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
Condition number (if relevant)				

Information gap indicator



PI 2.5.1		The UoA does not cause serious or irreversible harm to the key elements of ecosystem structure and function			
Scoring Issue		SG 60	SG 80	SG 100	
	Ecosyste	m status			
а	Guide post	The UoA is <b>unlikely</b> to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	The UoA is <b>highly unlikely</b> to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	There is <b>evidence</b> that the UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	
	Met?	Yes	Yes	Yes	

#### PI 2.5.1 – Ecosystem outcome

#### Rationale

There is evidence that the fishery is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.

Larvae lobster are omnivorous, they feed on zooplankton (copepods, crab la rvae, eggs) and phytoplankton (diatoms, dinoflagellates and filamentous algae). Juveniles and adults are mainly carnivorous and prey on crab, small sea stars, lobster, marine worms, molluscs and fish. Rock crab is a key food resource for lobster.Grabowski et al (2009) examined the diet and growth of lobsters at different sites in Maine, U.S. and New Brunswick, Canada. The results suggested that the bottom-up forcing (food limitation) can have important consequence for lobster population dynamics and the productivity of lobster fisheries. At the contrary, a study based on local ecological knowledge (interviews of fishermen) suggested a top-down (predation) control mechanism of lobster populations in the Gulf of Maine. There is a large amount of literature that describing undesired effects of fishing on marine ecosystems. Fishing impacts include changes in size composition of target species, impacts on benthic communities, loss of diversity, disequilibrium of food web and impacts on habitats.

The assessment team could not find any concern indicating that the Gaspésie lobster fishery causes any disruption of the key elements underlying ecosystem structure and function. The main impact of the fishery on target, primary, secondary and ETP species, and habitat are identified and there is no indication that the fishery causes disruption to the ecosystem main structure and function. There is a comprehensive assessment of the target species, non-target species catch is monitored, information is available to show the fishery impacts on ETP species is slow, and there is no indication that the fishery causes serious or irreversible harm to habitats.

Therefore the team determines that SG100 is met.

#### References

Boudreau S.A. and B. Worm 2010. Top-down control of lobster population in the Gulf of Maine: insights from local ecological knowledge and research surveys. Marine Ecology Progress Series 403: 181-191.

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

Grabowski J.H., J. Gaudette, E.J. Clesceri, P.O. Yund 2009. The role of food limitation in lobster population dynamics in coastal Maine, United States, and New Brunswick, Canada. New Zealand Journal of Marine and Freshwater Research 43: 185-193.

Hanson, J.M. 2009. Predator-prey interactions of American lobster (*Homarus americanus*) in the Southern Gulf of St. Lawrence, Canada. New Zealand Journal of Marine and Freshwater Research 43: 69-88.

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Draft cooring range	Applicable SGs/elements likely met			<u>Likely</u> overall PI
Drait scoring range	SG60	SG80	SG100	score



PI 2.5.1	The UoA does not cause serious or irreversible harm to the key elements of ecosystem structure and function				
		1 of 1	1 of 1	1 of 1	≥80
Information gap indicator		Information sufficient to score PI			
Overall Performance Indicator scores added from Client and Peer Review Draft Report					
Overall Performance Indicator score		Applicable SGs/elements met			Quarallessora
		SG60	SG80	SG100	Overall score
		X of x	X of x	X of x	
Condition number (if relevant)					



PI 2.5.2		There are measures in place to ensure the UoA does not pose a risk of serious or irreversible harm to ecosystem structure and function			
Scoring Issue		SG 60	SG 80	SG 100	
	Manager	nent strategy in place			
а	Guide post	There are <b>measures</b> in place, if necessary which take into account the <b>potential impacts</b> of the UoA on key elements of the ecosystem.	There is a <b>partial strategy</b> in place, if necessary, which takes into account <b>available</b> <b>information and is expected to</b> <b>restrain impacts</b> of the UoA on the ecosystem so as to achieve the Ecosystem Outcome 80 level of performance.	There is a <b>strategy</b> that consists of a <b>plan</b> , in place which contains measures to <b>address all main</b> <b>impacts of the UoA</b> on the ecosystem, and at least some of these measures are in place.	
	Met?	Yes	Yes	Yes	

#### PI 2.5.2 – Ecosystem management strategy

#### Rationale

There is a strategy that consists of a plan, in place which contains measures to address all main impacts of the UoA on the ecosystem, and at least some of these measures are in place.

Under the Oceans Act and the Policy and Operational Framework for Integrated Management of Estuarine, Coastal and Marine Environments in Canada, DFO is committed to the development of large-scale and local integrated management plans for all of Canada's oceans. This includes implementation by DFO of an Ecosystem Approach to management in all activities for which it has management responsibility. Canada has developed a SFF which builds on existing fisheries management practices to form a foundation for implementing an ecosystem approach in the management of its fisheries to ensure continued health and productivity while protecting biodiversity and fisheries habitat. The primary goal of the SFF is to ensure that Canada's fisheries are environmentally sustainable, while supporting economic prosperity. It is designed to foster a more rigorous, consistent, and transparent approach to decision making across all key fisheries in Canada. Overall, the SFF provides the foundation of an ecosystembased and precautionary approach to fisheries management in Canada.

On November 2016, Canada lauched a national Ocean Protection Plan that aims to protect Canada's marine environment. One of the objectives of this Plan is Preserving and Restoring marine ecosystems by protecting marine mammals, restoring coastal ecosystems and addressing abandoned, derelict and wreched vessels.

The IFMP for the Gaspésie lobster fishery adopted in 2018 includes a section on short and long-term objectives related, among other, to the lobster stok productivity, habitats and ecosystem considerations.

Management measures in place for the lobster fishery includes : traps size restrictions, a lobster fishing season, fishing spatial closures to protect VMEs and fish habitats, MLS for lobster, mandatory escape vents and biodegradable panels, other non-target species except male rock crab are allowed to be retained and must be discarded with less possible harm and new mesaures to minime the risk of interactions with the NARW.

Therefore, the assessment team determines that SG100 is met.

#### Management strategy evaluation

b	Guide post	The <b>measures</b> are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar UoAs/ ecosystems).	There is <b>some objective basis for</b> <b>confidence</b> that the measures/ partial strategy will work, based on some information directly about the UoA and/or the ecosystem involved.	<b>Testing</b> supports <b>high confidence</b> that the partial strategy/ strategy will work, based on information directly about the UoA and/or ecosystem involved.
	Met?	Yes	Yes	Νο
Rationa	le			



# PI 2.5.2 There are meas

There are measures in place to ensure the UoA does not pose a risk of serious or irreversible harm to ecosystem structure and function

There is **some objective basis for confidence** that the measures/ partial strategy will work, based on some information directly about the UoA and/or the ecosystem involved.

No issues with the Gaspésie lobster fishery have been identified and there is no indication that the fishery causes any form of ecosystem disruption or harm to ecosystem structure and function. The assessment team could not find any concern indicating that the fishery causes any disruption of the key elements underlying ecosystem structure and function. Given the generalist role of lobster in the ecosystem, as well as the range of other benthic and bentho-pelagic predators and scavengers present in the stock area, it is likely that functional group composition, community distribution and trophic dynamics would be virtually unchanged from natural background levels. The main impact on target, primary, secondary and ETP species, and habitat are identified and there is no indication that the fishery causes disruption to the ecosystem main structure and function. There is a comprehensive assessment of the target species, non-target species catch is monitored, information is available to show the fishery impacts on ETP species is slow, and there is no indication that the fishery causes serious or irreversible harm to habitats. Thefore SG80 is met. However, there is not testing that supports high confidence that the strategy will work based on information directly about the UoA and/or ecosystem involved, preventing the fishery from meeting SG100.

#### Management strategy implementation

С	Guide post	There is <b>some evidence</b> that the measures/partial strategy is being <b>implemented successfully</b> .	There is <b>clear evidence</b> that the partial strategy/strategy is being <b>implemented successfully and is</b> <b>achieving its objective as set out</b> <b>in scoring issue (a).</b>
	Met?	Yes	No

#### Rationale

There is **some evidence** that the measures/partial strategy is being **implemented successfully**.

No issues with the Gaspésie lobster fishery have been identified and there is no indication that the fishery causes any form of ecosystem disruption or harm to ecosystem structure and function

Management measures in place for the lobster fishery includes : traps size restrictions, a lobster fishing season, fishing spatial closures to protect VMEs and fish habitats, MLS for lobster, mandatory escape vents and biodegradable panels, other non-target species except male rock crab are allowed to be retained and must be discarded with less possible harm and new mesaures to minime the risk of interactions with the NARW.

A comprehensive monitoring, control and surveillance system continues to be implemented in the fishery and compliance to regulations remains very high with a level of recidivism in the fishery to be extremely low.

Therefore, SG80 is met. However, it cannot be said that there is clear evidence, presenting the fishery from meeting SG100.

#### References

DFO 2018a. Integrated Management Plan for Lobster in Areas 19, 20 and 21. Quebec Region, Gaspé-Lower St Lawrence. Approved June 8, 2018.

#### Canada Ocean Protection Plan

http://www.tc.gc.ca/eng/oceans-protection-plan.html

Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable	<u>Likely</u> overall PI		
Draft scoring range	SG60	SG80	SG100	score
	2 of 2	3 of 3	2 of 3	≥80
Information gap indicator	Information sufficient to score PI			



PI 2.5.2	There are measures in place to ensure the UoA does not pose a risk of serious or irreversible harm to ecosystem structure and function				
Overall Performance Indicator score		Applicable SGs/elements met			Querell see re
		SG60	SG80	SG100	Overall score
		X of x	X of x	X of x	
Condition number (if relevant)					



PI 2.5.3		There is adequate knowledge of the impacts of the UoA on the ecosystem			
Scoring Issue		SG 60	SG 80	SG 100	
	Informat	ion quality			
а	Guide post	Information is adequate to <b>identify</b> the key elements of the ecosystem.	Information is adequate to <b>broadly understand</b> the key elements of the ecosystem.		
	Met?	Yes	Yes		

#### PI 2.5.3 – Ecosystem information

#### Rationale

Information is adequate to **broadly understand** the key elements of the ecosystem.

There is considerable information available with regards to key biotic and abiotic elements of the Gulf of St Lawrence. There is a substantial programme of environmental monitoring undertaken by DFO and Universities. In 2000, the GOSLIM project was created to develop and implement a management plan for ocean resources in the Gulf. The initial goal of GOSLIM was to describe the Gulf of St. Lawrence ecosystem and to identify activities and issues from a broad Gulf-wide perspective. It provides detailed information and description of the biotic aspect including plankton, fish communities, benthic communities, and marine mammals. The GOSLIM plan was published in 2013.

Therefore, the team determines that SG60 and SG80 are met.

# bInvestigation of UoA impactsbMain impacts of the UoA on<br/>these key ecosystem elements<br/>can be inferred from existing<br/>information, but have not been<br/>investigated in detail.Main impacts of the UoA on<br/>these key ecosystem elements<br/>can be inferred from existing<br/>information, and some have<br/>been investigated in detail.Main impacts of the UoA on<br/>these key ecosystem elements<br/>can be inferred from existing<br/>information, and some have<br/>been investigated in detail.Main impacts of the UoA on<br/>these key ecosystem elements<br/>can be inferred from existing<br/>information, and have<br/>been investigated in detail.Main impacts of the UoA on<br/>these key ecosystem elements<br/>can be inferred from existing<br/>information, and have<br/>been investigated in detail.Main impacts of the UoA on<br/>these key ecosystem elements<br/>can be inferred from<br/>existing information, and have<br/>been investigated in detail.Met?YesYesNo

#### Rationale

Main impacts of the UoA on these key ecosystem elements can be inferred from existing information, and **some have been investigated in detail**.

Serious or irreversible harm to ecosystem structure and function would be indicated by trophic cascade, depletion of top predators, severely truncated size structure of target species and non-target species, changes in species biodiversity which have not been observed.

However it cannot conclude that the main interactions between the UoA and these ecosystem elements have been investigated in details, preventing the fishery from meeting SG100.

#### Understanding of component functions

C	Guide post	The main functions of the components (i.e., P1 target species, primary, secondary and ETP species and Habitats) in the ecosystem are <b>known</b> .	The impacts of the UoA on P1 target species, primary, secondary and ETP species and Habitats are identified and the main functions of these components in the ecosystem are <b>understood</b> .
	Met?	Yes	Yes

#### Rationale

The impacts of the UoA on lobster, primary, secondary and ETP species and Habitats are identified and the main functions of these components in the ecosystem are known and understood.


# PI 2.5.3 There is adequate knowledge of the impacts of the UoA on the ecosystem

Information is available to understand the main functions of lobster, species used as bait, non-target speies, ETP species and habitats. Information on lobster and non-target species catch and stock status, on interaction with ETP species and ETP species population trend, and on the spatial extent of interaction with habitats are available. Therefore, SG80 and SG100 are met.

	Information relevance							
d	Guide post		Adequate available on t UoA on thes allow some consequences to be inferred.	information the impacts of e components of the n for the ecosys	is the s to nain tem	Adequate available on UoA on the elements to consequences to be inferred	information the impacts of components allow the s for the ecosys I.	is the <b>and</b> main stem
	Met?		Yes			No		

#### Rationale

Adequate information is available on the impacts of the UoA on these components to allow some of the main consequences for the ecosystem to be inferred.

Information on lobster and non-target species catch and stock status, on interactions with ETP species and ETP species population trend, and on the spatial and temporal extent of overlapping with habitats are available, SG80 is met. However, SG100 is not met since there is no information on impacts on all elements of the ecosystem.

	Monitori	Monitoring						
e	Guide post		Adequate data continue to be collected to detect any increase in risk level.	Information is adequate to support the development of strategies to manage ecosystem impacts.				
	Met?		Yes	Yes				

# Rationale

Information is adequate to support the development of strategies to manage ecosystem impacts.

The lobster stock is formally assessed every three years; however, stock indicators are monitored annually. Non-target species catches are reported in logbooks; primary species stock status is assessed; interaction with ETP are reported in the SARA logbooks and by marine mammals networks and turtle observation network; and habitats including VMEs and fishing effort spatial distribution are mapped. Biotic and abiotic elements of the Gulf of St Lawrence Large Ocean Management Area continue to be monitored.

The assessment team determines that the fishery meets SG80 and SG100 as the information available and the ongoing montoring is adequate to detecte any increase in risk level and to support the development of strategies to manage ecosystem impacts.

#### References

DFO 2013b. Gulf of St Lawrence Integrated Management Plan. Ocean Management Division, DFO Quebec, Gulf and Newfoundland and Labrador regions, DFO/2013-1898. https://waves-vagues.dfo-mpo.gc.ca/Library/356406.pdf

Information on non-target catches, bait and ETP species interactions form logbooks provided by DFO

Map of the geographical distribution of the lobster average annual landed value and significant coral and sponge areas (blue) in the GSL. Source: <u>http://www.qc.dfo-mpo.gc.ca/golfe-gulf/coraux-eng.html</u>

Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Draft scoring range

Applicable SGs/elements likely met



PI 2.5.3	There is adequate knowledge of the impacts of the UoA on the ecosystem						
		SG60	SG80	SG100	<u>Likely</u> overall PI score		
		2 of 2	5 of 5	2 of 4	≥80		
Information gap in	dicator	More inform	nation sought/Info	ormation sufficien	t to score PI		
<b>Overall Performan</b>	nce Indicator scores adde	ed from Client and	Peer Review Draf	t Report			
Overall Performance Indicator score		Applica	0				
		SG60	SG80	SG100	Overall score		
		X of x	X of x	X of x			
Condition number	(if relevant)						



# 8.4 Principle 3

# 8.4.1 Principle 3 background

The Gaspésie commercial lobster fishery consists of the established boundaries of LFAs 19, 20 and 21 of NAFO Division 4T and FAO Fishing Area 21. The LFAs were divided into smaller sub-LFAs beginning with the 2015 fishing season (Figure 10). LFA 19 was further divided into smaller management units 19A-1A to 19A-1D in 2018 to facilitate the issuance of 4 experimental lobster licences so that lobster abundance and distribution in unexploited areas of northern Gaspé could be assessed.

The UoA operates entirely in the Canada EEZ therefore in a single jurisdiction and is no subject to any internationale management.



**Figure 10.** Representation of Lobster fishing sub-areas in Gaspésie: LFA 19 (19A1 to 19A3, 19B, 19C1 and 19C2), LFA 20 (20A1 to 20A10 and 20B1 to 20B8) and LFA 21 (21A and 21B). Source: DFO 2018a.

# 8.4.1.1. Legal and/or Customary Framework

The management regime of the fishery is established as a single jurisdiction with indigenous component (per MSC Fisheries Standard v2.01, SA4.1.1, 31<sup>st</sup> August 2018). As such, it remains the exclusive responsibility of the federal Department of Fisheries, Oceans and the Canadian Coast Guard (represented as DFO) and is exercised through various statutes including the *Fisheries Act*, the *Oceans Act*, the *Species-at-Risk Act*, and the *Navigable Waters Protection Act* and associated regulations including the *Atlantic Fishery Regulations*, the *Aboriginal Communal Fishing Licences Regulations*, the *Fishery (General) Regulations*, the *Marine Mammal Regulations*, and the *Aquatic Invasive Species Regulations*.

The legal and/or customary framework is also defined by a suite of departmental strategic policies that guide the decision-making processes in pursuing sustainable fisheries. Key policies include: (i) the precautionary approach, (ii) the development of rebuilding plans, (iii) growing stocks out of the critical zone, (iv) managing the impacts of fishing on sensitive benthic areas, (v) managing bycatch; (vi) managing aboriginal food, social and ceremonial fishing; (vii) administering commercial licensing activities; (viii) protecting species-at-risk; and (ix) designating and regulating activities in marine protected areas and marine refuges.



The Assessment team is aware that important statutory and regulatory changes to DFO's legal and policy frameworks are under active consideration at this time. These include significant amendments to the *Fisheries Act* (Bill C-68) which are at an advanced stage and may be gazetted in 2019. The amended Act will have implications for several of DFO's programs, including its fisheries, habitat and oceans management regimes. DFO's Forward Regulatory Plan 2018-2020<sup>14</sup> includes several anticipated regulatory changes or actions, such as to:

- Section 115.2 of the *Atlantic Fishery Regulations (1985)* that will prohibit any person from leaving fishing gear unattended in the water for more than 72 consecutive hours. The purpose of the regulation is to minimize loss of fishing gear, incidental mortality, the potential for gear conflict and spoilage of catch;
- Schedules of the *Contraventions Regulations* pursuant to the *Fisheries Act* to expand and update the use of ticketing to cover minor fisheries offences in regions not currently covered; and
- Biodiversity Protection Provisions under Section 43.3 of the *Fisheries Act* (in Bill C-68) to provide the Minister with authority to establish long term spatial restrictions to fishing activities, specifically for the purpose of conserving and protecting marine biodiversity.

A number of changes to DFO's policy framework are also included in the Forward Regulatory Plan. The first two policies (below) have consequential implications (largely positive) for commercial lobster fish harvesters in LFAs 19-21:

- Amendments aimed at preserving the independence of commercial inshore and coastal licence holders;
- Professionalization (regulatory amendments for fish harvester registration); and
- Regulations regarding rebuilding plans and the listing of major fish stocks.

The Assessment team anticipates that the comprehensive national legal system will continue to operate during the re-assessment certification period in much the same manner as it has during the initial certification period.

# 8.4.1.2. Eligible fishers and vessel list

All commercial lobster fish harvesters who are authorized to fish in LFAs 19-21 continue to be members of the Client Group for the purpose of the re-assessment of the fishery. The Group includes aboriginal commercial communal lobster fish harvesters who operate pursuant to the *Aboriginal Communal Commercial Licensing Regulations*.

The list of all vessels that was compiled at the initial assessment in March 2015 may no longer be current due to the reassignment of licences between fish harvesters (e.g. when the enterprise is reissued to a new eligible recipient) or to the replacement of a fishing vessel (e.g. damaged or new construction).

In the updated MSC Fisheries Certification Process v2.1 which became effective on 28<sup>th</sup> February 2019, a vessel list is no longer required to be maintained and submitted when the entire fleet is certified, such as is the case with this fishery. However, SAI Global has been provided with an updated list of fishing vessel included in the certificate.

# 8.4.1.3. Consultations processes

Zonal Lobster Advisory Committee

The revised and implemented IMP (DFO 2018a) describes the formal consultation process that is in place for the Gaspésie commercial lobster fishery in LFAs 19-21. Although the mandate and activities of this zonal committee are not formally described in Terms of Reference, the views expressed by the committee's

<sup>&</sup>lt;sup>14</sup> <u>http://www.dfo-mpo.gc.ca/acts-lois/initiatives-eng.htm</u>



representatives during the initial site visit discussions were positive in regard to (i) how and when meetings were scheduled, (ii) their ability to contribute to the formulation of the agendas, (iii) the quality of the background information on items discussed, (iv) the collegial nature of the discussions, (v) a resolve to collaborate in solving issues, and (vi) finding ways and means to reach consensus on new or evolving changes to the fishery's management measures. Meetings of the commitee have always been open to the public.

As reported in the initial assessment report, the DFO Quebec Region's approach to consultation was influenced by its regional policy which enshrined the principles of (i) process consistency and transparency, (ii) industry responsibility, and (iii) respect; and the key objectives of (i) optimal information sharing, (ii) consensus seeking, (iii) well-documented decision-making.

The committee's core membership consists of representatives of DFO's regional programs, the harvester and onshore processing sectors, aboriginal communities, and the provincial department of MAPAQ. Discussions are largely centered on a mix of current or emerging issues including (i) stock assessment outcomes and recommendations), (ii) proposed new policy and regulatory initiatives, (iii) the performance of the fishery, (iv) protection measures for species-at-risk, (v) fishery-related partnerships and new ventures, and (vi) changes to management measures of the fishery (e.g. opening and closing dates, fishing gear adjustments, reporting requirements etc.). Other matters may be discussed if they have implications for the harvesting sector such as (i) proposed changes to the status of marine species under the SARA listing protocol, (ii) proposed creations of new marine protected areas or marine refuges, and (iii) other ocean use activities.

The committee's meetings are open to the public. It meets every three years; it last met on 26<sup>th</sup> March 2019. Meeting minutes were not available at the time of this report.

# Regional Assessment Process (RAP)

The RAP is a DFO Science focussed peer review and advisory process that results in the best possible science advice to the Minister, managers, stakeholders and the public. It is a component of the Canadian Science Advisory Secretariat (CSAS). Participants in the process are encouraged to question, comment and constructively challenge the science presented; as well as seeking consensus on conclusions during the meeting. The Science peer review process is evidence-based, objective, impartial and respectful. Participation to DFO science peer-review meetings is by invitation only.

The RAP's governance system<sup>15</sup> consists of various policies on participation; documentation submission, translation and publication; and consensus and decision-making.

A listing of the CSAS-published reports in 2018 includes (i) Science Advisory Reports, (ii) Research Documents, (iii) Proceedings, and (iv) Science Responses is available at: <u>http://www.isdm-gdsi.gc.ca/csas-sccs/applications/events-evenements/result-eng.asp?year=2018</u>.

Non-formal engagement opportunities

DFO Quebec Region personnel are also regularly engaged in other, less formal engagement activities such as community-based workshops and web-based mediums to solicit comments from the general public and special interests groups on program and policy initiatives that extend beyond the harvesting measures for the fishery.

The effectiveness of these consultation fora is underscored by the consistency inherent in how the processes are structure, scheduled and delivered throughout the current certification cycle, and even prior to. The turnover rate amongst representatives of the provincial government, harvesters and processors has been low. This includes adhoc working groups that may be established to provide input on very specifc initiatives under the *Oceans Act*, the *Species-at-Risk Act*, or the *Canada Shipping Act*.

<sup>&</sup>lt;sup>15</sup> <u>http://www.dfo-mpo.gc.ca/csas-sccs/process-processus/index-eng.html</u>



The Assessment team anticipates that these consultation fora and engagement activities will continue to operate during the re-assessment certification period in much the same manner as they have during the initial certification period.

#### 8.4.1.4. Decision-making processes

The decision-making processes associated with the management of the LFAs 19-21 lobster fishery and associated science-based stock assessment remain as described in the initial certification report. Essentially, the previously-noted Zonal Lobster Advisory Committee continues to be the principle industry forum of engagement with harvester and processor sector representatives, aboriginal communities, other governmental organizations and stakeholders, and members of the general public. The committee generates advice and recommendations for consideration by DFO's executive management team who have delegated authority to make decisions and oversee the implementation of the fishery's measures within a jurisdictional setting that does not involve other DFO administrative regions or provinces.

An important distinction arises when decisions are required for measures that have a broader application beyond the local LFA. For example, measures that were introduced in 2018 aimed at better protecting the NARW population were applied across eastern Canada, and mirrored somewhat those that were under consideration for U.S. Atlantic waters. In this example, decisions were taken at the federal level by the DFO Minister (for entanglements) and the Minister of Transport Canada (for shipping restrictions). Similarly, decisions associated with the listings of species-at-risk and the creation of marine protected areas and marine refuges are the purview of a small number of federal Ministers, including the DFO Minister.

The Assessment team anticipates that these decision-making processes will continue to operate during the reassessment certification period in much the same manner as they have during the initial certification period.

Resource management decisions are closely aligned with DFO's long-established Precautionary Approach (PA) framework<sup>16</sup> specifically and to its Sustainable Fisheries Framework generally.<sup>17</sup> The PA framework is also the foundation of a number of DFO policies that incorporate Ecosystem-based approaches into fisheries management decisions.<sup>18</sup> The manner in which the elements of these frameworks have been adapted to the LFAs 19-21 IFMP are described at Sections 2 (Stock assessment), 4 (Management issues), 5 (Objectives) and 7 (Management measures) of the plan.<sup>19</sup>

The procedures and suite of administrative policies that govern DFO's Science-based RAP process remain as described in the initial certification report, as are the types of reports that are publicized. The most recent formal stock assessment for the LFAs 19-21 lobster fishery<sup>20</sup> also incorporates elements of the PA framework in defining the stock's reference points (p.11).

In assessing the decision-making features of the fishery, the Assessment team is required to consider the extent to which transparency and accountability is embedded within the fishery-specific management system. This includes public access to information on the fishery's performance and fisheries data; the availability of information to stakeholders on actions taken by management that have implications for sustainable use of fisheries resources, and the transparency of the decision-making process so that it is clear to all stakeholders that decisions were arrived at based on available evidence and due process.

<sup>&</sup>lt;sup>16</sup> <u>http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/precaution-eng.htm</u>

<sup>&</sup>lt;sup>17</sup> <u>http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/overview-cadre-eng.htm</u>

<sup>&</sup>lt;sup>18</sup> <u>http://www.dfo-mpo.gc.ca/reports-rapports/regs/sff-cpd/ecosys-back-fiche-eng.htm</u>

<sup>&</sup>lt;sup>19</sup> http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/lobster-homard/index-eng.htm

<sup>&</sup>lt;sup>20</sup> https://waves-vagues.dfo-mpo.gc.ca/Library/40595432.pdf



The fishery-specific information and data associated with the LFAs 19-21 lobster fishery are collected from both fishery-dependent and fishery-independent sources (e.g. stock surveys, at-sea/port sampling, harvester logbooks, enforcement activities, partnerships etc.). They are used to generate a variety of reports from stock assessments and advice to managers, to in-season and post-season monitoring of the performance of the fishery, to harvester compliance with regulations, and to undertake economic analyses and studies. Other than certain types of information and data that cannot be disclosed publicly for reasons of confidentiality, the vast majority of what is collected can be found in public documents that are available from the DFO website or upon request. The outcomes of decisions taken are similarly posted on the website either as press releases or Notices to Harvesters. Proposed statutory changes that may have direct and indirect impacts on the fishery (i.e. creation of marine protected areas, SARA listings) are subjected to a rigorous process of public disclosure and input, and impact analyses before being registre in the *Canada Gazette*.

# 8.4.1.5. Long-term objectives

PI 3.1.3 relates to the long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach within management policy. Interpretive guidance provided in the standard (FSv2.01, SA4.5.1) stipulates that "management policy" shall be interpreted to mean outside the specific UoA (i.e. at a higher level or within a broader context than the fishery-specific management system).

The following frameworks include clear long-term objectives that are both implicit and explicit within and required by management policy.

The **Atlantic Fisheries Policy Framework** (2004)<sup>21</sup> provides policy direction for the management of fisheries on the Atlantic coast over the long term. It advocates a broad, inclusive approach to fisheries management while managing in a manner consistent with the constitutional protection provided to Aboriginal and treaty rights. The framework identifies two core objectives and two supporting objectives. These four objectives describe the outcomes that Fisheries and Oceans Canada will strive to achieve in collaboration with resource users and others who have an interest in the Atlantic fisheries. The principles that underpin these objectives and strategies are outlined below.<sup>22</sup>

# The two core objectives are:

# Conservation and Sustainable Use

Conservation of marine resources and habitat, and rebuilding of resources and restoration of habitat where necessary, will remain the highest priority for the management of all fisheries. Within the limits of available knowledge, all fishing activities will be conducted in a manner that leads to sustainable levels of resource use.

# Self-reliance

Self-reliant fisheries and collaboration among all orders of government will contribute to the well-being of coastal communities. To be more self-reliant, resource users will have more flexibility to make decisions about their own economic and social objectives.

# The two supporting objectives are:

# Shared Stewardship

Participants will be effectively involved in fisheries management decision-making processes at appropriate levels; they will contribute specialized knowledge and experience, and share in accountability for outcomes. Achieving shared stewardship requires:

<sup>&</sup>lt;sup>21</sup> <u>http://www.dfo-mpo.gc.ca/fm-gp/policies-politiques/afpr-rppa/framework-cadre-eng.htm</u>

<sup>&</sup>lt;sup>22</sup> Supporting policies and strategies in support of the AFPR objectives and principles are described in the aforementioned footnote.



# Stable and Transparent Access and Allocation Approach

The access and allocation of fisheries resources will be more stable and predictable, and decisions will be made and conflicts resolved through fair, transparent and rules-based processes. The principles that underpin these objectives and strategies are outlined below. They are intended to guide decision making on management of the Atlantic fisheries. They will also serve as a tool for evaluating future fisheries management policies and decisions and ensuring their coherence with the framework's objectives. There are nine principles:

- 1. **Conservation of fisheries resources and habitat** defined as sustainable use that safeguards ecological processes and genetic diversity for present and future generations is the first priority of fisheries management decision making;
- 2. The fishery is a **common property resource** to be managed for the benefit of all Canadians, consistent with conservation objectives, the constitutional protection afforded Aboriginal and treaty rights, and the relative contributions that various uses of the resource make to Canadian society;
- 3. The **Minister** of Fisheries and Oceans, on behalf of all Canadians, **retains authority** for the sustainable use of fisheries resources and their habitat, and for the access and allocation thereof;
- 4. DFO recognizes the **historic and continued importance of commercial fisheries** on the Atlantic Coast as well as the legitimacy and importance of other users, such as recreational fishers and aquaculturists;
- 5. Governments, resource users and others with an interest in the fisheries **share responsibility** for the sustainable use and economic viability of fisheries;
- 6. Fisheries management decision-making processes will provide opportunities for **increased Aboriginal participation and involvement**;
- 7. Fisheries management **decision-making processes** must be, and must be seen to be, fair, transparent and subject to clear and consistent rules and procedures;
- 8. Fisheries management **decision-making processes** will be more inclusive so that resource users and others will have appropriate opportunities to participate; and
- 9. **Operational decision making** affecting specific fisheries will normally be made as close to those fisheries as possible and will primarily involve resource users.

DFO's **Sustainable Fisheries Framework**<sup>23</sup> provides the basis for ensuring Canadian fisheries are conducted in a manner which support conservation and sustainable use. It incorporates existing fisheries management policies with new and evolving policies. The framework also includes tools to monitor and assess those initiatives geared towards ensuring an environmentally sustainable fishery, and identifies areas that may need improvement. Overall, the Framework provides the foundation of an ecosystem-based and precautionary approach to fisheries management in Canada.

The Framework comprises two main elements: (1) conservation and sustainable use policies, and (2) planning and monitoring tools.

(1) Conservation and Sustainable Use policies incorporate precautionary and ecosystem approaches into fisheries management decisions to ensure continued health and productivity of Canada's fisheries and healthy fish stocks, while protecting biodiversity and fisheries habitat. Combined, these policies demonstrate Canada's commitment to the principles of ecosystem-based fisheries management. These policies include:

- A Fishery Decision-Making Framework Incorporating the Precautionary Approach (April 2009);
- Managing Impacts of Fishing on Benthic Habitat, Communities and Species (April 2009);
- Ecological Risk Assessment Framework (ERAF) for Coldwater Corals and Sponge Dominated Communities (April 2013); and
- Policy on New Fisheries for Forage Species (April 2009)

<sup>&</sup>lt;sup>23</sup> <u>http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overview-cadre-eng.htm</u>



(2) The application of the sustainable use policies will be implemented into the fisheries management process through various **Planning and Monitoring Tools**. Integrated Fisheries Management Plans identify goals related to conservation, management, enforcement, and science for individual fisheries; and they describe access and allocations among various fish harvesters and fleet areas. The plans also incorporate biological and socio-economic considerations that are factored into harvest decisions. Integrated Fisheries Management Plans are an important reporting tool, and a valuable source of information on a given fishery for fisheries managers, industry, and other resource users. They also include a requirement to conduct a regular review of the fishery against the plan's objectives. In addition, self-diagnostic tools like the Fishery Checklist (a tool for internal use) can help the Department monitor improvements that support sustainable fisheries, and identify areas of weakness that require further work.

DFO has developed additional strategic policy frameworks such as for Integrated Fisheries Resource Management, Fisheries Sustainability, Species-at-Risk, Integrated Ocean Management, Aquatic Invasive Species, and Sensitive Benthic Habitats. These also contain long-term objectives with implications for the broader management policy context.

# **Regional Framework**

DFO Quebec Region's fisheries management programs are informed by five overarching strategic objectives which embrace an Ecosystem Approach to Management (EAM). These have been tailored to reflect the management policy for the LFAs 19-21 Lobster fishery as described at Section 5 (Objectives) and Section 7 (Decision-making) of the IMP. The regional EAM's framework of long-term objectives include:

#### Conservation objectives

- Productivity: Do not cause unacceptable reduction in productivity so that components can play their role in the functioning of the ecosystem.
- Biodiversity: Do not cause unacceptable reduction in biodiversity in order to preserve the structure and natural resilience of the ecosystem.
- Habitat: Do not cause unacceptable modification to habitat in order to safeguard both physical and chemical properties of the ecosystem.

# Social, cultural and economic objectives

- *Culture and Sustenance*: Respect Aboriginal and treaty rights to fish.
- *Prosperity*: Create the circumstances for economically prosperous fisheries.

The conservation objectives require consideration of the impact of the fishery not only on the target species but also on non-target species and habitat. The social, cultural and economic objectives reflect the Aboriginal right to fish for food, social and ceremonial purposes. They also recognize the economic contribution that the fishing industry makes to Canadian businesses and many coastal communities. While the economic viability of the commercial fisheries depends on the industry itself, DFO is committed to managing the fisheries in a manner that helps participants be economically successful while using the ocean's resources in an environmentally sustainable manner.

The EAM approach to the region's management policy requires that all resource users, other stakeholders and DFO collaborate to develop objectives, strategies and review standards designed to meet the following criteria:

- Establish measurable, clearly stated management objectives and strategies;
- Consider biological, economic and social factors;
- Utilize a precautionary approach to risk management on an ecosystem based scale to promote sustainable resource utilization, and;
- Develop a structured and systematic approach to fisheries management.



The Assessment team anticipates that these long-term objectives will continue to guide decision-making during the re-assessment certification period in much the same manner as they have during the initial certification period.

# 8.4.1.6. Fishery-specific objectives

The MSC's Fisheries Standard provides interpretive guidance for evaluating this PI and its lone component. Specifically, SA 4.7.1 requires that the Assessment team verify that the individual harvest or management strategies that are scored in PIs under P1 and P2 are consistent with the fishery-specific objectives being scored under P3. SA 4.7.2 requires that the team interpret "measurable" at the SG 100 to mean that in addition to setting fishery-specific objectives that make broad statements, objectives are operationally defined in such a way that the performance against the objectives can be measured.

The fishery-specific objectives for the LFAs 19-21 lobster fishery are set out in Section 5 of the IFMP (DFO 2018a). They include:

# **1.** Ensure sustainable harvesting of lobster

The stock assessment in 2016 concluded that high abundance, productivity and landings indicate that the Gaspé lobster stock is in good condition and in the healthy zone according to the Precautionary Approach. However, in Area 20, the small average size of commercial lobsters and the high exploitation rate suggest that the work already undertaken to reduce fishing effort must be continued.

With the electronic logbook, reliable data about fisheries can be gathered, on which science management and processes are based. However, it is necessary to acquire fishery-independent data to support implementation of the Precautionary Approach, as part of a sustainable strategy for fishery management activities.

Initiatives must be put forward to adopt a comprehensive approach when making management and conservation decisions regarding fishing areas in the same breeding grounds, taking into account population connectivity.

# **Objectives**

- Keep stock abundance in the healthy zone
- Protect reproductive potential
- Reduce waste from ghost fishing and the impact of releases
- Consider population connectivity when establishing conservation and management measures
- Obtain reliable information on fisheries to support management and science processes
- Educate all industry stakeholders on conservation issues

# 2. Develop and apply an ecosystem approach for the lobster fishery <sup>24</sup>

Establishment of an ecosystem approach is consistent with integration of the Sustainable Fisheries Framework into fisheries management. Since habitat quality is a determining factor in successful benthic development and lobster recruitment, the interrelations between various fishing activities (other than the lobster fishery) and other activities (for instance, aquaculture, dredging deposits, etc.) that have an impact on the seabed and on lobster populations must be taken into consideration when establishing management measures for the diverse species or activities.

<sup>&</sup>lt;sup>24</sup> The contextual information presented here was condensed by the Assessment team strictly to improve readability.



The impact of the lobster fishery on other species, especially on species at risk, must be assessed to minimize the risk of serious harm to non- targeted species. A follow-up on the evaluation of predation is necessary to better describe the impacts on lobster populations in the Gaspé. In terms of climate change, it is important to continue monitoring environmental conditions to identify and analyze the effects that these changes could have on lobster stocks.

# **Objectives**

- Protect lobster habitat.
- Assess the risk of the fishery causing serious harm to habitat andvulnerable benthic communities
- Assess the risk of the fishery causing serious harm to non-targeted species stocks
- Assess bait needs and the risk of the fishery causing serious harm to bait species stocks, while adopting a comprehensive approach to management
- In the context of climate change, monitor environmental conditions and identify the effects on lobster stocks and the ecosystem
- Assess and consider the impact of the species that prey on lobster

# 3. Improve compliance with fisheries regulations

The Conservation and Protection (C&P) branch of DFO continues to dedicate a large portion of its resources to monitoring the commercial fishery. Over the last few years, several strategies were developed to ensure compliance with critical measures.

All fishery stakeholders, as well as the public, need to be educated about the importance of adopting practices to ensure resource conservation and motivated to do so. In addition, given the resource's proximity and how easy it is to access, the public should be the first target of any strategy seeking to reduce the intensity of poaching activities.

**Objectives** 

- Develop a comprehensive approach involving all fishing industry participants to reduce illicit activity
- Adopt more deterrents to encourage compliance with regulations
- Continue the monitoring plan that addresses the critical management measures
- Within the limits of DFO's mandates and responsibilities, increase compliance monitoring with buyers, processors and sellers
- Educate and engage the public on the importance of complying with resource conservation regulations
- Standardize management measures across regions for fishing areas in the same production area

# 4. Foster economic prosperity<sup>25</sup>

The industry develops through various marketing and fisheries diversification strategies that require DFO's support. Among other considerations, management decisions must take into account the costs of lobster harvesting and the accessibility of fishing businesses to the next generation.

# **Objectives**

- When making decisions, take into account the potential increase in operating costs associated with lobster management measures and keep them as low as possible
- Establish management measures that take into account the situation in the industry and support profitability for fishing businesses
- Within the limits of DFO's mandates and resources, support industry initiatives related to traceability, eco-certification and other marketing and fisheries diversification strategies:

<sup>&</sup>lt;sup>25</sup> The initiatives listed here are identified as Industry driven, and are not the responsibility of DFO.



- Industry should implement initiatives related to traceability, eco-certification and other marketing and fisheries diversification strategies
- Promote accessibility of fishing businesses to the next generation

# **5.** Encourage the active participation of First Nations in the lobster fishery and the development of their capacities

Aboriginal communities, the industry and DFO have highlighted the importance of maintaining ongoing communications and a collaborative approach fostering participation of First Nations in decision-making processes. It is also crucial to help First Nations develop their capacities to create a prosperous and sustainable lobster fishery by providing financial leverage to communities.

# **Objectives**

- Support First Nations' participation in the lobster fishery and the development of their capacities
- Foster a prosperous and sustainable fishery by providing financial leverage to communities
- Foster First Nations' participation in decision making
- Encourage communication between Aboriginal and non-Aboriginal peoples
- Educate the non-Aboriginal population on the importance of the food, social and ceremonial fishery
- Gather data on Aboriginal traditional knowledge and traditional ecological knowledge of lobster biology and population status

# 6. Improve governance

It is necessary to maintain the existing consultation processes and implement a governance model that allows for active participation of fish harvesters and a comprehensive approach with coordination among all fisheries management decision makers.

# **Objectives**

- Foster a local approach to fisheries management
- Maintain ongoing communication with associations and First Nations and ensure their involvement in decision making
- Encourage orderly use of fishing grounds
- Develop a collaborative, coherent management approach involving all levels of government

The IMP sets out the sub-objectives and performance indicators for each of the plan's 6 objectives (Table 16). These were developed over a period of several years and involved considerable discussions with and contributions from stakeholders. The plan notes that the responsibility for achieving the "fostering economic properity" objective is assigned to the RPPSG.

Objectives	Sub-objectives	Indicators
5.1 Ensure sustainable harvesting of lobster	5.1.1 Keep stock abundance in the healthy	Keep stock status indicators in the healthy zone; Monitoring programs to obtain reliable, fisheries- independent indicators are developed.
5.1.2 Protect reproductive potential		The minimum and maximum catch sizes are enforced in all areas and adjusted based on the reproductive characteristics of the stocks
	5.1.3 Reduce waste from ghost fishing and the impact of releases	Biodegradable panels and escape vents are 100% compliant. Rot cords are smaller; A system for managing the tracking of lost traps is put in place;

Table 17. LFAs 19-21 IFMP Objectives, Sub-objectives and Indicators. Source: DFO 2018a.



	5.1.4 Consider population connectivity when establishing conservation and management measures	Good release practices are applied by all fishers, and work and initiatives related to good release practices reduce the impact of releases. The connectivity of lobster populations is considered when establishing management and conservation measures; Work and initiatives on population connectivity are undertaken.
	information on fisheries to support management and science processes	in progress; The implementation of electronic logbooks allows the Department integrates the data collected using logbooks into the national database
	5.1.6 Educate all industry stakeholders on conservation issues	Fishery officers undertake the initiatives of awareness and compliance monitoring initiatives with fish processors and dealers.
Objectives	Sub-objectives	Indicators
5.2 Develop and apply an ecosystem approach	5.2.1 Protect lobster habitat.	Work on identifying important habitats and critical lobster habitat are in progress and activities affecting these habitats are identified; The artificial reef project is continued; Work and initiatives, in consultation with industry, related to the Marine Protected Area (MPA) Strategy are progressing.
	5.2.2 Assess the risk of the fishery causing serious harm to habitat and vulnerable benthic communities.	The impacts of lobster and ghost fishing on habitats, species and benthic communities are assessed and documented; Initiatives are put in place to identify habitats of importance for vulnerable benthic species and protection measures are in place; The risks of the identified fisheries impacts are taken into account in the recommendations and decision making.
	5.2.3 Assess the risk of the fishery causing serious harm to non- targeted species stocks.	The RPPSG's system for managing the tracking of lost traps is maintained, and the data are sent to DFO; A system for managing the tracking of lost traps is implemented through electronic logbooks; The data collected supports decision-making and scientific processes; Data on marine mammal entanglements are collected and analyzed and new mitigation measures are put in place; Cases of marine mammal entanglement in lobster trap ropes are recorded and decrease from year to year; Bycatch is reported in electronic logbooks; Work and initiatives are undertaken to document the impact of the fishery on bycatch; Bycatch reduction strategies are put in place; The catch of rock crab by lobster harvesters are taken into account in the rock crab stocks assessment.



	5.2.4 Assess bait needs and the risk of the fishery causing serious harm to bait species stocks, while adopting a comprehensive approach to management.	Implementation of a partial strategy to ensure that the lobster fishery does not hinder the recovery and rebuilding of the Canadian mackerel stock and all pelagic species; Work meeting held with the various regions to develop a joint management strategy for bait species; The initiatives in place reduce the use of rock crab and mackerel as bait; The development of fishery-independent indicators of rock crab stock trends supports management and conservation decisions and science processes.
	5.2.5 In the context of climate change, monitor environmental conditions and identify the effects on lobster stocks and the ecosystem.	Progress in work to monitor environmental conditions and identify the effects of climate change on lobster stocks and the ecosystem.
	5.2.6 Assess and consider the impact of the species that prey on lobster.	Implementation of collaborative initiatives among the different levels of government to manage the striped bass.
Objectives	Sub-objectives	Indicators
5.3 Improve compliance with fisheries regulations	<ul> <li>5.3.1 Develop a comprehensive approach involving all fishing industry participants to reduce illicit activity.</li> <li>5.3.2 Adopt more deterrents to encourage compliance with regulations.</li> <li>5.3.3 Continue the monitoring plan that addresses the critical management measures.</li> </ul>	Maintenance, throughout the year, of advisory committee meetings, workshops, and ongoing communications between the RPPSG, First Nations and DFO; Management is by sub-area. Continued work on initiatives to allow contravention records to be issued pursuant to the <i>Contraventions Act</i> . Number of hours allocated to the lobster fishery; Compliant use of electronic logbooks is 100%.
	5.3.4 Increase compliance monitoring with buyers, processors and sellers.	Number of compliance check activities with buyers, processors and sellers.
	5.3.5 Educate and engage the public on the importance of complying with resource conservation regulations.	Number of information meetings in schools (number of students met); Number of individuals intercepted while poaching during the current year compared to previous years.
	5.3.6 Standardize management measures across regions for fishing areas in the same production area.	Work meetings are held between regions for fishing areas in the same production area, and initiatives to standardize management measures are implemented.
Objectives	Sub-objectives	Indicators



5.4 Foster economic prosperity	5.4.1 When making decisions, take into account the potential increase in operating costs associated with lobster management measures and keep them as low as possible. 5.4.2 Establish management measures that take into account the situation in the industry and support	Impact of new initiatives associated with lobster fishery management on the operating costs of lobster harvesters taken into account. Number of businesses that take advantage of flexibility measures (temporary and permanent merger, traps transfer).
	profitability for fishing businesses.5.4.3AspossiblewithDFOmandatesandresources,supportindustryinitiativesrelated to traceability,eco-certificationandothermarketingfisheriesdiversificationstrategies	Progress in work carried out by DFO to support the industry; Achievement and maintenance of MSC sustainable fishery certification conditions.
	5.4.4 Industry should implement initiatives related to traceability, eco-certification and other marketing and fisheries diversification strategies.	Progress in initiatives related to traceability and eco- certification; Commercial tourist fishery is developed.
	accessibility of fishing businesses to the next generation.	facilitate the facilitate access to fishing business for the next generation.
Objectives	Sub-objectives	Indicators
5.5 Encourage the active participation of First Nations	5.5.1 Support First Nations' participation in the lobster fishery and the development of their capacities.	First Nations are supported in terms of their technical and financial needs, development of their capacities, and in the implementation of various programs and CHPs.
	5.5.2 Foster a prosperous and sustainable fishery by providing financial leverage to communities	Percentage of harvesting performed by an Aboriginal crew using equipment belonging to the communities; Marketing initiatives are put in place.
	5.5.3 Foster First Nations' participation in decision making.	Initiatives to increase First Nations participation in advisory processes are implemented.
	5.5.4 Support communication between Aboriginal and non-Aboriginal peoples.	Non-native fisheries stakeholders participate in Aboriginal Fisheries Workshops.



	<ul> <li>5.5.5 Educate the non- Aboriginal population on the importance of the food, social and ceremonial fishery.</li> <li>5.5.6 Gather data on Aboriginal traditional knowledge and traditional ecological knowledge of lobster biology and population status.</li> </ul>	Awareness initiatives about the food, social and ceremonial fishery are implemented. Aboriginal traditional knowledge and traditional ecological knowledge of lobster biology and population status are considered when making management decisions and in scientific processes.
Objectives	Sub-objectives	Indicators
5.6 Improve governance	5.6.1 Foster a local approach to fisheries management.	Management of the lobster fishery is maintained by area and sub- area.
	5.6.2 Maintain ongoing communication with associations and First Nations and ensure their involvement in decision making.	Communications between RPPSG, First Nations and DFO are maintained throughout the year through advisory committees and workshops.
	5.6.3 Encourage orderly use of fishing grounds.	Measures to minimize conflicts between lobster harvesters and other fishing activities are developed and implemented.
	5.6.4 Develop a collaborative, coherent management approach involving all levels of government.	Meetings are held with different levels of government regarding common issues.

The Assessment team anticipates that these fishery-specific objectives will remain consistent with achieving the outcomes expressed by MSC's Principles 1 and 2 and explicit within the fishery-specific managment system throughout the re-assessment certification period.

# 8.4.1.7. Compliance and Enforcement

# National Framework

DFO's National Conservation and Protection (C&P) Program promotes and maintains compliance with legislation, regulations, and management measures implemented to achieve the conservation and sustainable use of Canada's aquatic resources and the protection of species at risk, fish habitat, and oceans. The program is delivered through a balanced regulatory management and enforcement approach, including the promotion of compliance through education and shared stewardship; monitoring, control and surveillance (MCS) activities; and the management of major cases/special investigation related to complex compliance issues.

The MCS program consists of a number of traditional compliance and enforcement activities aimed at detecting and deterring illegal activities. Monitoring fishing and other activities provides an oversight function to determine participants' compliance with the legislation, regulations, and management measures in effect. Surveillance activities are supported by the use of modern technology such as vessel monitoring systems (VMS), electronic log record keeping, as well as partnerships and joint operations with other enforcement agencies. The general public assists in reporting violations through Crime Stoppers and "observe, record and report" initiatives).



The Assessment team is aware that DFO has undertaken work associated with two new C&P initiatives for which we have no information. The initiatives are: National Joint Performance Evaluation, and Enhanced Compliance Monitoring Initiative. The team will continue to seek information relating to these initiatives.

#### Regional Program Components

Quebec-based C&P Fishery Officers carry out a number of compliance activities for the LFAs 19-21 lobster fishery, including:

- Land-based patrols: catch inspections, fishing gear inspections, licence checks, both overt and covert patrols, amd monitoring buy/sell operations;
- Sea patrols: fishing gear and catch inspections, logbook and licence documentations;
- Aerial patrols: surveillance of closed areas and periods, and investigating unauthorized activities;
- Detachment Supervisors: prepare annual work plans in which they allocate human, materiel and financial resources, and establish priorities; and
- Program staff assists in making recommendations and /or proposing solutions to issues that arise during the fishing season.

C&P staff also participate in the region's shared stewardship initiatives and interactions with key stakeholders. Examples of activities undertaken include:

- Interactions with fishers and members of the aboriginal communities on the wharves, their fishing vessels and communities;
- Participation in community events and school visits;
- Community volunteering outside work hours; and
- Participation in internal regional post-season reviews and analyses to assess the effectiveness of enforcement activities and to adjust operational plans in response to emerging issues.

#### Compliance strategy

The strategy is described at Section 9.6 of the IMP (2018) and is intended to address enforcement priorities associated with the LFAs 19-21 lobster fishery. Essentially, collaboration between C&P officers and the industry will be promoted at meetings of the LFA Advisory Committee (every 3 years) and at workshops for inbetween years.

Dockside and at-sea monitoring will be more targeted by taking into account the information received and the fish harvesters' records. Random checks conducted by fishery officers will ensure that critical management measures are monitored, including compliance with the use of the electronic logbook (first piloted in 2012).

The *Poaching Alert* program allows citizens to anonymously report illegal practices. Alleged poaching cases which may become major cases will be prioritized by fishery officers. Furthermore, over the next few years, compliance awareness and monitoring activities with processors and fish dealers will be increased. Lastly, fishery officers will also continue their information and education activities in schools and businesses in the region to raise awareness about resource conservation.

The Assessment team anticipates that the Conservation and Protection Program for the fishery will continue to demonstrate an ability to enforce relevant management measures, strategies and/or rules; sanctions will continue to be consistently applied; fishers will continue to comply with the management system; and there will continue to be no evidence of systematic non-compliance.



# 8.4.1.8. Monitoring and management performance evaluation

The IFMP describes at Section 10 (Performance Review) the approach to be taken in monitoring and evaluating the fishery's objectives as defined at Section 5 (refer to Table 9). The indicators listed are intended to guide how the fishery will be monitored and how the performance of its management system will be evaluated. The Plan stipulates that the indicators will be updated annually to account for progress made. <u>It is unclear how an</u> <u>annual review will be met if a forum like the LFAs 19-21 Advisory Committee meets only every 3 years</u>.

The relevant parts of the fishery-specific management system that may be included in the review are defined by the MSC's Guidance to the Fisheries Standard v2.01, GSA 4.10 (below):

- The decision-making process
- Data collection
- Scientific research
- Monitoring, Control and Surveillance
- Collaboration in and initiating a research plan
- Responding to feedback and response, and
- Monitoring systems as required in P1 and P2

The Assessment team anticipates that monitoring and evaluation of the performance of the fishery-specific mangement system will continue during the re-assessment certification period and they might be more robust now that objectives have been defined and formally incorporated in the IFMP.



# 8.4.2 Principle 3 Performance Indicator scores and rationales PI 3.1.1 – Legal and/or customary framework

PI 3.1	1.1	The management system exists within an appropriate legal and/or customary framework which ensures that it:         Is capable of delivering sustainability in the UoA(s);         Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and         Incorporates an appropriate dispute resolution framework						
Scoring	Scoring Issue SG 60 SG 80 SG 100							
а	Compatil	Compatibility of laws or standards with effective management						
	Guide post	There is an effective national legal system <b>and a framework for cooperation</b> with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2	There is an effective national legal system and <b>organised and effective cooperation</b> with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2.	There is an effective national legal system and <b>binding procedures</b> <b>governing cooperation with</b> <b>other parties</b> which delivers management outcomes consistent with MSC Principles 1 and 2.				
	Met?	Yes	Yes	Yes				

#### Rationale

There is an effective national legal system and **binding procedures governing cooperation with other parties** which delivers management outcomes consistent with MSC Principles 1 and 2.

The national legal system consists of a comprehensive and modern suite of federal statutes and regulations that are amended when necessary to account for changes to the management regime for commercial, recreational and indigenous fisheries, new strategic policy frameworks, and judicial decisions. A well-defined parliamentary/public consultation process is triggered when statutory changes are contemplated for the purpose of promoting organized and effective cooperation with affected or interested parties. Additionally, DFO Quebec Region has specific consultation fora in place to inform and seek effective collaboration on a wide range of fisheries programs and related outcomes consistent with MSC Principles 1 and 2 i.e. management measures, enforcement and compliance, oceans and ecosystems, species-at-risk, and stock assessments. Accordingly, **SG 60 and 80 are met**.

The LFAs 19-21 lobster fishery is not subject to international cooperation for management of the stock, or other fisheries under the same management framework. An exception exists with respect to aboriginal rights to fish for Food, Social and Ceremonial (FSC) purposes and to pursue a moderate livelihood from the Communal Commercial (CC) fishery where binding (legal) imperatives have been defined by the Courts and are recognized by the lobster fishery's management system. Accordingly, **SG 100 is met.** 

	Resolutio	n of disputes				
b	Guide post	The management system incorporates or is subject by law to a <b>mechanism</b> for the resolution of legal disputes arising within the system.	The management system incorporates or is subject by law to a <b>transparent mechanism</b> for the resolution of legal disputes which is <b>considered to be</b> <b>effective</b> in dealing with most issues and that is appropriate to the context of the UoA.	The management system incorporates or is subject by law to a <b>transparent mechanism</b> for the resolution of legal disputes that is appropriate to the context of the fishery and has been <b>tested</b> <b>and proven to be effective</b> .		
	Met?	Yes	Yes	Yes		
Rationale						



PI 3.1.1	<ul> <li>The management system exists within an appropriate legal and/or customary framework which ensures that it:</li> <li>Is capable of delivering sustainability in the UoA(s);</li> <li>Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and</li> <li>Incorporates an appropriate dispute resolution framework</li> </ul>
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The management system incorporates or is subject by law to a **transparent mechanism** for the resolution of legal disputes that is appropriate to the context of the fishery and has been **tested and proven to be effective**. The Canadian judicial system provides for the resolution of legal disputes that is both appropriate to the context of the LFAs 19-21 lobster fishery and has been tested and proven to be effective. Most but not all legal disputes involving the fishery are argued at the provincial and federal court levels; plaintiffs also can apply for judicial review of a federal government decision and/or launch legal action up to the Supreme Court. In addition, DFO has had a longstanding independent, quasi-administrative tribunal process in place whereby licence holders can seek to have certain departmental licensing decisions reviewed. The tribunal process provides recommendations to the Minister who has the authority to render a final decision. The Assessment team believes that very few legal disputes are filed annually with the Courts across Eastern Canada.

#### Accordingly, SG 60, SG 80 and SG 100 are met.

#### Respect for rights

	Met?	Yes	Yes	Yes
C	Guide post	The management system has a mechanism to <b>generally respect</b> the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.	The management system has a mechanism to <b>observe</b> the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.	The management system has a mechanism to <b>formally commit</b> to the legal rights created explicitly or established by custom of people dependent on fishing for food and livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.

#### Rationale

The management system has a mechanism to **formally commit** to the legal rights created explicitly or established by custom of people dependent on fishing for food and livelihood in a manner consistent with the objectives of MSC Principles 1 and 2. In the Gaspésie like elsewhere in eastern Canada, Indigenous Peoples have a constitutionally-affirmed and protected right to fish for FSC purposes as a result of the Supreme Court of Canada's decision in *Sparrow*. Additionally, the Supreme Court's decision in *Marshall* confirmed that the Mi'gmaq and Maliseet First Nations hold a communal right to access the commercial fisheries for the purpose of pursuing a moderate livelihood from fishing.

FSC fishing access is subject to management measures linked to the fishery's conservation requirements. Consultations between First Nations and the Federal Government must comply with binding legal requirements stipulated by the Supreme Court. Fishery management measures for communal commercial (CC) fishing are well defined and generally consistent with regulations and policies in effect for non-indigenous commercial fishing. All Gaspésie-located aboriginal communities have access to the LFA 19-21 lobster fishery for both FSC and CC fishing.

Accordingly, SG 60, SG 80 and SG 100 are met.

#### References

Departmental Acts: <u>http://www.dfo-mpo.gc.ca/acts-lois/acts-lois/eng.htm</u> Departmental Regulations: <u>http://www.dfo-mpo.gc.ca/acts-lois/regulations-reglements-eng.htm</u> Aboriginal Fisheries: <u>http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/afs-srapa-eng.htm</u> Departmental Fisheries Policies and Frameworks: <u>http://www.dfo-mpo.gc.ca/reports-rapports/regs/policies-politiqueseng.htm</u>.

Integrated Management Plan for LFAs 2019-21 (2018): Sections 4.5 and 5.5.

A Guide to the Atlantic Fisheries Licence Appeal Process: <u>http://www.dfo-mpo.gc.ca/fm-gp/policies-politiques/licences-permis/aflap-pappa/pamphlet\_e.pdf</u>

Draft scoring range and information gap indicator added at Announcement Comment Draft Report



PI 3.1.1	<ul> <li>The management system exists within an appropriate legal and/or customary framework which ensures that it:</li> <li>Is capable of delivering sustainability in the UoA(s);</li> <li>Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and</li> <li>Incorporates an appropriate dispute resolution framework</li> </ul>				
Draft scoring range		Applicable	e SGs/elements <u>lik</u>	<u>ely</u> met	<u>Likely</u> overall PI
		SG60	SG80	SG100	score
		3 of 3	3 of 3	3 of 3	≥80
Information gap in	dicator	Information sufficient to score PI			
<b>Overall Performar</b>	ce Indicator scores adde	d from Client and I	Peer Review Draft	Report	
Overall Performance Indicator score		Applicable SGs/elements met			o "
		SG60	SG80	SG100	Overall score
		X of x	X of x	X of x	
Condition number (if relevant)					



PI 3.1	1.2	The management system has effective consultation processes that are open to interested and affected parties The roles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties				
Scoring Issue		SG 60	SG 80	SG 100		
	Roles and responsibilities					
а	Guide post	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are <b>generally</b> <b>understood</b> .	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are <b>explicitly</b> <b>defined and well understood for</b> <b>key areas</b> of responsibility and interaction.	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are <b>explicitly</b> <b>defined and well understood for</b> <b>all areas</b> of responsibility and interaction.		
	Met?	Yes	Yes	Yes		

# PI 3.1.2 – Consultation, roles and responsibilities

### Rationale

Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are **explicitly defined and well understood for all areas** of responsibility and interaction.

The LFAs 19-21 Lobster Advisory Committee continues to be the focal point of discussion between DFO, industry representatives and other stakeholders on all matters of relevance to the management of the fishery (i.e. policy development, management measures, science-based imperatives, program performance, new initiatives etc.). Deliberations are informed by well established principles and objectives dating to 2004. Committee membership has remained largely the same with minimal personnel turnover; representatives have acknowledged that they fully understand their roles and responsibilities; the functional aspects of the committee's business have evolved in keeping with the scope of the fishery and the emergence of new policy and regulatory schemes.

#### Accordingly, SG 60, 80 and 100 are met.

#### Consultation processes

b	Guide post	The management system includes consultation processes that <b>obtain relevant</b> <b>information</b> from the main affected parties, including local knowledge, to inform the management system.	The management system includes consultation processes that <b>regularly seek and accept</b> relevant information, including local knowledge. The management system demonstrates consideration of the information obtained.	The management system includes consultation processes that <b>regularly seek and accept</b> relevant information, including local knowledge. The management system demonstrates consideration of the information and <b>explains how it is used or not</b> <b>used</b> .
	Met?	Yes	Yes	Yes

#### Rationale

As noted in the main report, the management system is committed to an open sharing of information and data of relevance to the commitee's business. This extends beyond the formal meetings of the committee (every 3 years) and includes workshops and local community interactions. The client group (RPPSG) is thus able to share the same information with their members, and, in the process, obtain important advice on formulating its views and recommendations. Both DFO and the client group place considerable importance on local knowledge in developing new policies and guidelines (e.g. protection measures for the NARW, designation of new MPAs).

DFO's longstanding practice of timely communicating its fisheries management decisions to stakeholders, the media and general public through press releases, notices to harvesters, and now various social media platforms provides it with the



# PI 3.1.2

The management system has effective consultation processes that are open to interested and affected parties

The roles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties

opportunity to explain how information was used or not used. As well, local and regional media outlets are generally well informed of the management system's evolving measures.

The RAP remains an important science-based peer review forum for generating the best available scientific advice in support of the fishery's management system. As indicated, it has a well-defined and longstanding set of governance principles that revolve primarily around structure and scope. While its discussions are not open to the public, a representative of the client group would be invited to participate in the review process but not in the capacity of an advocate for the group. The forum considers all available information and perspectives in formulating its analysis and advice. Its peer-reviewed reports are posted on the CSAS website.

#### Accordingly, SG 60, 80 and 100 are met.

	Participation					
с	Guide post		The consultation process <b>provides opportunity</b> for all interested and affected parties to be involved.	The consultation process provides opportunity and encouragement for all interested and affected parties to be involved, and facilitates their effective engagement.		
	Met?		Yes	Yes		

#### Rationale

The consultation process provides **opportunity and encouragement** for all interested and affected parties to be involved, and **facilitates** their effective engagement.

LFAs 19-21 lobster harvesters are strongly engaged in the affairs of the RPPSG and contribute positively to the group's perspectives at meetings of the committee. Other interested parties, such as environmental associations and individuals, can attend meetings and participate in the discussions at hand. DFO and/or RPPSG-initiated workshops provide an excellent opportunity for interested and affected parties to acquire and share information, and exchange perspectives.

Meetings of the LFAs 19-21 committee are facilitated by simultaneous translation services and dial-ins for those who cannot attend in person. Documents are forwarded to participants in advance of the Committee meetings to facilitate preparations and encourage constructive exchanges.

#### Accordingly, SG 80 and SG 100 are met.

#### References

IFMP (2018): Section 5 (objectives), Section 8 (Shared Stewardship) and Section 9 (Consultation)

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable	<u>Likely</u> overall PI		
Draft scoring range	SG60	SG80	SG100	score
	2 of 2	3of 3	3 of 3	≥80
Information gap indicator	Information sufficient to score PI			

#### **Overall Performance Indicator scores added from Client and Peer Review Draft Report**

Overall Performance Indicator score	Applica	Overall score	
	SG60	SG80	SG100



PI 3.1.2	The management system parties The roles and responsibil process are clear and und	has effective consul ities of organisatior erstood by all releva	tation processes that ns and individuals w nt parties	at are open to inte vho are involved	erested and affected in the management
		X of x	X of x	X of x	
Condition number (if relevant)					

Condition number (if relevant)



PI 3.1	L.3	The management policy has clear long-term objectives to guide decision-making that are consistent vith MSC Fisheries Standard, and incorporates the precautionary approach			
Scoring Issue		SG 60	SG 80	SG 100	
	Objective	25			
а	Guide post	Long-term objectives to guide decision-making, consistent with the MSC Fisheries Standard and the precautionary approach, are <b>implicit</b> within management policy.	<b>Clear</b> long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach are <b>explicit</b> within management policy.	<b>Clear</b> long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach, are <b>explicit</b> within <b>and required by</b> management policy.	
	Met?	Yes	Yes	Yes	

# PI 3.1.3 – Long term objectives

#### Rationale

**Clear** long-term objectives that guide decision-making, consistent with MSC Fisheries Standard and the precautionary approach, are **explicit** within **and required by** management policy.

DFO's management policy at the national level consists of a comprehensive suite of frameworks of clear long-term objectives that guide decision-making consistent with MSC Fisheries Standard and the precaurtionary approach, and are explicit within and required by management policy. The Assessment team notes that when Bill C-68 receives royal accent in 2019, many of the underlying management policy long-term objectives described herein could be enshrined in the new Fisheries Act.

Policy frameworks have been developed for DFO's Fisheries Management, Science, and Ecosystem and Oceans sectors and all are posted on the department's national website. Science-based frameworks have been peer-reviewed where required. In several instances, guidance and planning and monitoring tools have been developed to ensure associated decision-making within management policy meets the long-term objectives. DFO's Sustainability Fisheries Framework and supporting policy guidance best reflects the requirements of MSC Principles and Criteria. It lays the foundation for an ecosystem-based and precautionary approach to fisheries management in Canada. In 2010, DFO Science initiated work on identifying those indicators that would best serve as reference points for the eventual design and implementation of the precautionary approach for the various lobster stocks of Atlantic Canada and Québec.

Accordingly, SG 60, SG 80 and SG 100 are met.

#### References

A Framework for the Application of Precaution in Science-based Decision-Making about Risk http://www.pco.bcp.gc.ca/index.asp?lang=eng&page=information&sub=publications&doc =precaution/precaution e.htm DFO's Oceans Management Approach http://www.dfo-mpo.gc.ca/oceans/management-gestion/index-eng.htm A New Ecosystem Science Framework in Support of Integrated Management http://www.dfo-mpo.gc.ca/science/Publications/Ecosystem/index-eng.htm **Ecosystem Considerations in Fisheries Management** http://www.dfo-mpo.gc.ca/fgc-cgp/documents/parsons e.pdf Guidelines on Evaluating Ecosystem Overviews and Assessments http://www.dfo-mpo.gc.ca/csas/Csas/status/2005/SAR-AS2005 026 e.pdf Policy for Managing the Impact of Fishing on Sensitive Benthic Areas http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/benthi-backfiche-eng.htm Canada's Ocean Strategy – Policy and Operational Framework http://www.dfo-mpo.gc.ca/oceans/publications/cosframework-cadresoc/pdf/im-gieng.pdf Sustainable Fisheries Framework http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overviewcadre-eng.htm



# PI 3.1.3

The management policy has clear long-term objectives to guide decision-making that are consistent with MSC Fisheries Standard, and incorporates the precautionary approach

A Fishery Decision-Making Framework Incorporating the Precautionary Approach <u>http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precautioneng.htm</u> Policy on Managing Bycatch <u>http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/bycatch-policyprise-access-eng.htm</u> Application of the Sustainable Fisheries Framework through the Integrated Fisheries Management Planning Process <u>http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/ifmp-pgip-backfiche-eng.htm</u>

# Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable	<u>Likely</u> overall PI		
Draft scoring range	SG60	SG80	SG100	score
	1 of 1	1 of 1	1 of 1	≥80
Information gap indicator	Information sufficient to score PI			

# **Overall Performance Indicator scores added from Client and Peer Review Draft Report**

	Applica	Overall score		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
Condition number (if relevant)				



PI 3.2	2.1	The fishery-specific management system has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2				
Scoring Issue		SG 60	SG 80	SG 100		
	Objective	25				
а	Guide post	<b>Objectives</b> , which are broadly consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are <b>implicit</b> within the fishery-specific management system.	Short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are <b>explicit</b> within the fishery-specific management system.	Well defined and measurable short and long-term objectives, which are demonstrably consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are <b>explicit</b> within the fishery-specific management system.		
	Met?	Yes	Yes	Yes		

# PI 3.2.1 – Fishery-specific objectives

# Rationale

Well defined and measurable short and long-term objectives, which are demonstrably consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are **explicit** within the fishery-specific management system.

The fishery-specific objectives for the LFAs 19-21 lobster fishery have been established and inserted in the IMP (2018) for the fishery. This was not the case when the fishery underwent the initial assessment resulting in a PI score of 60. A Condition was created at that time to improve the PI's performance to at least the SG 80 level.

The fishery includes 6 specific objectives that are identified in the plan as being both short and long-term. The Assessment team has determined that the objectives are consistent with achieving the MSC's Principle 1 outcomes (i.e. stock status, harvest strategy, harvest control rules and tools, information/monitoring, and assessment of stock status) and Principle 2 outcomes (i.e. primary and secondary species, ETP species, habitats, and ecosystem). The team has also determined that the fisher-specific objectives meet the MSC's interpretation of "explicit" as found at SA 4.2 of the Fisheries Standard in that (i) they are documented management measures and mechanisms, (ii) the measures are established in the UoA, (iii) the measures are well understood and applied by users within the UoA, and (iv) the measures are considered to be durable and unambiguous. Accordingly, **SG 60 and SG 80 are met.** 

Objectives are defined in a way that the performance against the objectives can be measured. Section 10 of the IFMP defines quantitative and qualitative indicators that serve to assess progress in reaching the objectives, these indicators are listed in section 8.4.1.6 Table 9. Accordingly, **SG 100 is not met** 

#### References

FAs 19-21 lobster fishery's Integrated Fishery Management Plan (DFO 2018a)

#### Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable SGs/elements <u>likely</u> met			<u>Likely</u> overall PI	
Draft scoring range	SG60	SG80	SG100	score	
	1 of 1	1 of 1	1 of 1	≥80	
Information gap indicator	Information sufficient to score PI				
Overall Performance Indicator scores added from Client and Peer Review Draft Report					
Overall Performance Indicator score	Applicable SGs/elements met			Overall score	



PI 3.2.1	The fishery-specific management system has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2					
		SG60	SG80	SG100		
		X of x	X of x	X of x		
Condition number (if relevant)						



PI 3.2.2 The fishery-specific management system includes effective decision-making processes that result measures and strategies to achieve the objectives, and has an appropriate approach to actual displaying the fishery							
Scoring Issue		SG 60	SG 80	SG 100			
	Decision-	ecision-making processes					
а	Guide post	There are <b>some</b> decision-making processes in place that result in measures and strategies to achieve the fishery-specific objectives.	There are <b>established</b> decision- making processes that result in measures and strategies to achieve the fishery-specific objectives.				
	Met?	Yes	Yes				

# PI 3.2.2 – Decision-making processes

#### Rationale

There are **established** decision-making processes that result in measures and strategies to achieve the fishery-specific objectives.

The management system's specific objectives for the LFAs 19-21 lobster fishery are supported by federal statutes and regulations and a broad array of strategic policy frameworks that are designed to achieve positive conservation outcomes for the target stock and associated habitat and marine ecosystems.

There are also well-established DFO decision-making processes in place that result in measures and strategies to achieve the fishery-specific objectives. With the exception of the IMP's objective of "fostering economic prosperity", all other objectives listed in the IMP for which decision-making is required is delegated to the region's senior management cadre. The DFO Minister is generally responsible for fisheries decisions that are international, interregional or interprovincial in scope. The adoption of new measures in 2018 and 2019 to protect the NARW population from entanglements is an example of a decision that was taken by the DFO Minister and may have implicated the Federal Cabinet given the international dimension of the issue. Accordingly, **SG 60 and SG 80 are met.** 

# Responsiveness of decision-making processes

b	Guide post	Decision-making processes respond to <b>serious issues</b> identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take some account of the wider implications of decisions.	Decision-making processes respond to <b>serious and other</b> <b>important issues</b> identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.	Decision-making processes respond to <b>all issues</b> identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.
	Met?	Yes	Yes	No

#### Rationale

Decision-making processes respond to **serious and other important issues** identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.

It is important to note that there has been a general absence of serious/systemic issues that would compromise the objectives established for the LFAs 19-21 lobster fishery for which the DFO has jurisdictional responsibility and authority.

That said, the decision-making processes for the fishery are conditioned to operate effectively, transparently, and in a timely manner in the event that serious and other issues arise that would affect the management system and its fishery-specific objectives. The aforementioned decision to introduce urgent protection measures for the Right Whale population that



# PI 3.2.2

The fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives, and has an appropriate approach to actual disputes in the fishery

frequents the Gulf of St. Lawrence is an example of a decision-making process that was transparent, timely and adaptive and took into account the wider (Canada-U.S.) implications of the decision.

The Canadian decision-making processes described in the main report operate on a continuous cycle of internal in-season and post-season reviews, stakeholder input, scientific research, and compliance monitoring. An ongoing partnership with the RPPSG contributes to the effectiveness of the fishery's management system through monitoring, evaluation and consultation. Accordingly, **SG 60 and SG 80 are met.** 

While the decision-making processes have been shown to be generally effective, transparent and timely, they are not necessarily structured to be responsive to all issues that arise, particularly in terms of timeliness. This is especially true of integrated ocean use issues which, by their nature, are complex, require extensive scientific research and monitoring, involve multiple stakeholders with competing interests, and a mix of government agencies and perhaps jurisdictions. Accordingly, **SG 100 is not met.** 

	Use of precautionary approach					
С	Guide post		Decision-making processes use the precautionary approach and are based on best available information.			
	Met?		Yes			

#### Rationale

Decision-making processes use the precautionary approach and are based on best available information. DFO's decision-making processes have a strong and well-established link to the suite of policy frameworks listed in the main report, and, as such, reflect the precautionary approach and a reliance on the best available information. Accordingly, **SG 80 is met.** 

#### Accountability and transparency of management system and decision-making process

d	Guide post	Some information on the fishery's performance and management action is generally available on request to stakeholders.	Information on the fishery's performance and management action is available on request, and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.	Formal reporting to all interested stakeholders provides comprehensive information on the fishery's performance and management actions and describes how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.
	Met?	Yes	Yes	Yes

#### Rationale

Formal reporting to all interested stakeholders **provides comprehensive information on the fishery's performance and management actions** and describes how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.

A variety of Information on the fishery's performance is available to stakeholders and interested parties either on request or from DFO's regional and national websites including from press releases and social media platforms. Information generated by DFO typically includes stock status reports, research survey activities and results, economic analyses of conditions and trends affecting the fishery and industry, enforcement and compliance outcomes, fisheries management policy changes, regulatory



# PI 3.2.2

The fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives, and has an appropriate approach to actual disputes in the fishery

amendments, species at risk assessments and recovery plans, habitat protection initiatives, and ecosystem interactions with and from the lobster fishery.

Members of the LFAs 19-21 lobster advisory committee regularly receive comprehensive information during and between committee meetings on the fishery's management system and performance from resource managers, enforcement officers, economists, and biologist. The associated interactions provide all parties with knowledge and responses on relevant recommendations and findings emerging from research, monitoring, evaluation, and review activities. DFO and/or Industry-led community-based workshops provide similar access to relevant information and responses.

Accordingly, SG 60, SG 80 and SG 100 are met.

Approach to disputes

e	Guide post	Although the management authority or fishery may be subject to continuing court challenges, it is not indicating a disrespect or defiance of the law by repeatedly violating the same law or regulation necessary for the sustainability for the fishery.	The management system or fishery is attempting to comply in a timely fashion with judicial decisions arising from any legal challenges.	The management system or fishery acts proactively to avoid legal disputes or rapidly implements judicial decisions arising from legal challenges.
	Met?	Yes	Yes	Yes

#### Rationale

The management system or fishery acts proactively to avoid legal disputes or rapidly implements judicial decisions arising from legal challenges.

The management authority or the fishery is not subjected to continuing court challenges, and respects court decisions that are handed down. On occasion, DFO will consider appealing a provincial or federal lower court decision if, for example, it has been determined that a serious error has arisen or if the decision has the potential to seriously fetter the Minister's discretionary powers under the federal *Fisheries Act*. The management system or fishery does comply in a timely fashion with judicial decisions arising from any legal challenges.

In the majority of cases, the management system or fishery acts proactively to avoid legal disputes or rapidly implements judicial decisions arising from legal challenges. DFO's formal and informal consultation and engagement processes have been effective in minimizing potential legal disputes involving other levels of government, industry stakeholders and the general public. Of note, Fishery Officers have the authority to intervene to resolve certain types of conflicts between fishers outside of the legal system.

#### Accordingly, SG 60, SG 80 and SG 100 are met.

#### References

LFAs 19-21 Lobster Advisory Committee meeting minutes and backgrounders

DFO Science - Reports and Publications: <u>http://www.dfo-mpo.gc.ca/science/Publications/index-eng.htm</u>

DFO Marine Protected Areas: <u>http://www.dfo-mpo.gc.ca/oceans/mpa-zpm/index-eng.html</u>

DFO Program Reports (multiple types): http://www.dfo-mpo.gc.ca/reports-rapports-eng.htm

DFO Reports – Aquatic Species: <u>http://www.dfo-mpo.gc.ca/species-especes/publications/index-eng.html</u>

MInistère de l'Agriculture, des Pêcheries et de l'Alimentation (MAPAQ) Publications (multiple types):

https://www.mapaq.gouv.qc.ca/fr/md/Publications/Pages/Publications.aspx

Standing Committee on Fisheries and Oceans (Studies): <u>https://www.ourcommons.ca/Committees/en/FOPO/Work</u>

# Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Draft scoring range

Applicable SGs/elements likely met



PI 3.2.2	The fishery-specific management system includes effective decision-making processes that result in measures and strategies to achieve the objectives, and has an appropriate approach to actual disputes in the fishery					
		SG60	SG80	SG100	<u>Likely</u> overall PI score	
		4 of 4	5 of 5	2 of 3	≥80	
Information gap indicator Information sufficient to score PI						
Overall Performance Indicator scores added from Client and Peer Review Draft Report						

	Applica	Quarallesara		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
Condition number (if relevant)				



# PI 3.2.3 – Compliance and enforcement

PI 3.2	2.3	Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with				
Scoring Issue		SG 60	SG 80	SG 100		
	MCS imp	MCS implementation				
а	Guide post	Monitoring, control and surveillance <b>mechanisms</b> exist, and are implemented in the fishery and there is a reasonable expectation that they are effective.	A monitoring, control and surveillance <b>system</b> has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.	A <b>comprehensive</b> monitoring, control and surveillance system has been implemented in the fishery and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.		
	Met?	Yes	Yes	Yes		

#### Rationale

A **comprehensive** monitoring, control and surveillance system has been implemented in the fishery and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.

Throughout the course of the initial assessment period of the LFAs 19-21 lobster fishery, DFO's Conservation and Protection Program has implemented a comprehensive suite of MCS mechanisms that have demonstrated a consistent ability to enforce relevant management measures, strategies and rules. There is no evidence to indicate that the program's funding levels have been reduced such that they would impact that ability of staff to implement the program's objectives and strategies over the medium term.

The Gaspé sector's C&P program for the fishery is highlighted in the IFMP and includes a synopsis of prevailing enforcement issues, strategies and performance indicators. The Assessment team reviewed the enforcement activities and associated outputs of the C&P program as reported during the annual surveillance audits for the LFAs 19-21 lobster fishery. The information indicates that the enforcement activities continued to be conducted by a combination of land, at-sea and air operations aimed at monitoring the harvesters' compliance with regulations and licence conditions. Where non-compliance issues were detected, Fishery Officers issued warnings or recommended the laying of formal charges. Conviction rates appear to have remained high, suggesting that Officers were well trained in the legal imperatives and professional in their approaches.

#### Accordingly, SG 60, SG 80 and SG 100 are met.

	Sanctions						
b	Guide post	Sanctions to deal with non- compliance exist and there is some evidence that they are applied.	Sanctions to deal with non- compliance exist, <b>are</b> <b>consistently applied</b> and thought to provide effective deterrence.	Sanctions to deal with non- compliance exist, are consistently applied and <b>demonstrably</b> provide effective deterrence.			
	Met?	Yes	Yes	Νο			

#### Rationale

Sanctions to deal with non-compliance exist, **are consistently applied** and thought to provide effective deterrence. Available sanctions for the LFAs 19-21 lobster fishery consist of a range of legal and administrative sanctions, including licence suspension, catch and equipment seizures and forfeitures, monetary fines, and incarceration for the most serious offences. Federal prosecutors are experienced in prosecuting fisheries charges, and magistrates have a good understanding of fisheries law. Data provided by DFO during the annual surveillance audits indicate that monetary fines and licence suspensions are the most common sanctions issued by the courts, and are generally thought to provide effective deterrence. Media reporting of fisheries prosecutions and DFO's practice of reporting



# PI 3.2.3 Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with

out on the outcomes of legal proceedings on the regional website also serve to reinforce deterrence. Accordingly, SG 60 and SG 80 are met.

In the absence of any analysis of the impacts of sanctions and other penalties levied relative to deterrence, the team concludes that the requirements of SG 100 have not been demonstated. Accordingly, **SG 100 is not met.** 

### Compliance

c	Guide post	Fishers are <b>generally thought</b> to comply with the management system for the fishery under assessment, including, when required, providing information of importance to the effective management of the fishery.	<b>Some evidence exists</b> to demonstrate fishers comply with the management system under assessment, including, when required, providing information of importance to the effective management of the fishery.	There is a <b>high degree of</b> <b>confidence</b> that fishers comply with the management system under assessment, including, providing information of importance to the effective management of the fishery.
	Met?	Yes	Yes	Yes

#### Rationale

There is a **high degree of confidence** that fishers comply with the management system under assessment, including, providing information of importance to the effective management of the fishery.

An examination of available data and third party opinions suggest that the vast majority of LFAs 19-21 lobster licence holders comply with the management system for the fishery, and are diligent in their reporting of information of importance for the effective management of the fishery. The moderate level of infractions and likely low level of recidivism further suggest that some evidence exists to demonstrate compliance with the requirements of the management system. Industry fleet representatives routinely provide information of importance to the effective management of the fishery through their participation in a variety of formal and informal advisory and assessment processes, as well as through their ongoing stewardship activities with DFO. Accordingly, **SG 60 and SG 80 are met**.

The RPPSG has played an important role in the design and performance of the fishery's management system, including the decision-making process. It also continues to collaborate with DFO Science on various research-related projects. Guidance provided in the MSC Fisheries Standard (v2.01) at SA 4.9.1 for scoring issue (c) indicates that the team should consider whether "fishers cooperate, where necessary, with management authorities in the collection of catch, discard and other information that is of importance to the effective management of the resources and the fishery" as one of the elements that should influence scoring. The team is satisfied that sufficient information exists to demonstrate that fishers do cooperate with authorities in the suggested areas. Accordingly, **SG 100 is met** 

#### Systematic non-compliance

d	Guide post	There is systematic	no non-co	evidence ompliance.	of	
	Met?	Yes				

#### Rationale

There is no evidence of systematic non-compliance.

The MCS data provided at the time of the initial assessment and at the annual surveillance audits as well as the opinions of industry stakeholders and DFO staff indicate no evidence of systematic non-compliance by licence holders/operators in the fishery.

#### Accordingly, SG 80 is met.

#### References

LFAs 19-21 IMP: Enforcement and Compliance Strategy and Objectives.

DFO Enforcement and Compliance statistics: initial assessment report and annual surveillance audits.



# PI 3.2.3

Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with

# Draft scoring range and information gap indicator added at Announcement Comment Draft Report

	Applicable SGs/elements likely met			<u>Likely</u> overall PI		
Draft scoring range	SG60	SG80	SG100	score		
	3 of 3	4 of 4	2 of 3	≥80		
Information gap indicator	Information sufficient to score PI					
Overall Performance Indicator scores added from Client and Peer Review Draft Report						
	Applicable SGs/elements met			Overall score		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score		
	X of x	X of x	X of x			
Condition number (if relevant)						



PI 3.2	2.4	There is a system of monitoring and evaluating the performance of the fishery-specific management system against its objectives There is effective and timely review of the fishery-specific management system				
Scoring Issue		SG 60	SG 80	SG 100		
а	Evaluation coverage					
	Guide post	There are mechanisms in place to evaluate <b>some</b> parts of the fishery-specific management system.	There are mechanisms in place to evaluate <b>key</b> parts of the fishery-specific management system.	There are mechanisms in place to evaluate <b>all</b> parts of the fishery- specific management system.		
	Met?	Yes	Yes	Yes		

# PI 3.2.4 – Monitoring and management performance evaluation

#### Rationale

There are mechanisms in place to evaluate **all** parts of the fishery-specific management system.

MSC Guidance to the Fisheries Standard (v2.01, GSA 4.10) indicates that this PI is intended to focus on whether (i) the management system has a process of monitoring and evaluating management performance appropriate to the cultural context, scale and intensity of the fishery, and (ii) relevant to fishery-specific management and supporting structures that are able to effect change. This PI intends to evaluate if the management syste itself is reviewed, not to re-assess the efficiency of the previous PIs.

Section 10 of the IFMP for the LFAs 19-21 lobster fishery lists the management system's objectives that are subject to evaluation. Appendix 2 further captures the most recent post-season outcomes as of May 2018. The post-season review of the IFMP's management system includes an assessment internal to DFO with input from the RPPSG, and typically involves two primary processes: the Science-based RAPs and the Fisheries Management-led Advisory Committee. The RAP and stock status update processes are aligned to evaluate the performance and effectiveness of the strategies and tactics associated with the productivity, biodiversity and habitat EAM-based objectives for the fishery. More broadly, the Science-based CSAS program is also used to evaluate the performance of those components of the fishery-specific management system that are defined by P1 and P2, and to generate proposals for future changes. Performance monitoring and evaluation undertaken by the Advisory Committee is generally focused on the operational elements of the management system, including compliance with regulations, licence conditions and other measures. The Team understands that additional departmental supportive evaluations are triggered on an opportunistic basis, such as (i) climate change impacts, (ii) MPA-created impacts, and (iii) economic outcomes.

#### Accordingly, SG 60, SG 80 AND SG 100 are met.

	Internal and/or external review					
b	Guide post	The fishery-specific management system is subject to <b>occasional internal</b> review.	The fishery-specific management system is subject to regular internal and occasional external review.	The fishery-specific management system is subject to <b>regular internal and external</b> review.		
	Met?	Yes	Yes	Yes		

#### Rationale

The fishery-specific management system is subject to **regular internal and external** review.

At SG 80 and SG 100, "external review" means external to the fisheries management system, but not necessarily international. Depending on the scale and intensity of the fishery, it could be by: (i) another department within an agency, (ii) another agency or organization within the country, (iii) a Government audit that is external to the fisheries management agency; (iv) a peer organization nationally or internationally, and (v) external expert reviewers.


# PI 3.2.4

There is a system of monitoring and evaluating the performance of the fishery-specific management system against its objectives There is effective and timely review of the fishery-specific management system

Having paid considerable attention over many years as to how this PI has performed in a number of other Atlantic Canadian MSC assessments and audits, the Assessment team is satisfied that there is appropriate available evidence to conclude that the fishery-specific management system is subject to regular internal and external review, in accordance with the scale and intensity of the fishery. Examples are include in the Reference section (below).

Accordingly, SG 60, SG 80 and SG 100 are met. A scoring adjustment is proposed to scoring issue (b) from SG 80 (at the initial assessment) to SG 100 (this assessment).

References

Internal reviews: MP (2018) for LFAs 19-21 DFO CSAS Science publications (e.g. stock assessment, ecosystem, habitat, species-at-risk): <u>http://www.dfo-mpo.gc.ca/science/Publications/index-eng.htm</u>

## External reviews:

DFO Internal Audits and Evaluations (pre-2016, 2016-17 to 2018-19): <u>http://www.dfo-mpo.gc.ca/rpp/2016-17/SupplementaryTables/iae-eng.html#b2</u>

Standing Committee of Fisheries and Oceans (42<sup>nd</sup> Parliament, 1<sup>st</sup> Session) - Past Work (e.g. licensing system, speciesat-risk): <u>http://www.ourcommons.ca/Committees/en/FOPO/Work</u>

FederalAuditor-GeneralReports–FisheriesandOceans:<a href="http://www.oag-bvg.gc.ca/internet/English/parl\_lpf\_e\_1205.html">http://www.oag-bvg.gc.ca/internet/English/parl\_lpf\_e\_1205.html</a>

Commissioner for the Environment and Sustainable Development – Fisheries and Oceans (e.g. IMPs, rebuilding strategies): <u>http://www.oag-bvg.gc.ca/internet/English/parl\_lp\_e\_901.html</u>

Oceana Canada: https://www.oceana.ca/en/press-center/press-releases

Oceans North: <u>https://oceansnorth.org/en/our-work/where-we-are-working</u>

Draft scoring range and information gap indicator added at Announcement Comment Draft Report

Draft scoring range	Applicable	<u>Likely</u> overall PI			
	SG60	SG80	SG100	score	
	2 of 2	2 of 2	2 of 2	≥80	
Information gap indicator	Moro inform	ation cought / Inf	ormation sufficia	nt to score DI	

Information gap indicator More information sought / Information sufficient to score PI

**Overall Performance Indicator scores added from Client and Peer Review Draft Report** 

	Applica	Quarall score		
Overall Performance Indicator score	SG60	SG80	SG100	Overall score
	X of x	X of x	X of x	
Condition number (if relevant)				



# 9 References

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DFO News Release: Convictions under the Fisheries Act

https://www.canada.ca/en/fisheries-oceans/news/2019/03/convictions-under-the-fisheries-act-gaspe-and-lower-st-lawrence.html

DFO News Release: Marine Protected Area - Banc-des-Américains

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# 10 Appendices

# **10.1** Assessment information

## **10.1.1 Previous assessments – delete if not applicable**

The Gaspésie lobster trap fishery was previously assessed and certified in 5<sup>th</sup> March 2015. The Public Certification report and all surveillance audits reports are available on the MSC website: <u>https://fisheries.msc.org/en/fisheries/gaspesie-lobster-trap-fishery/@@view</u>

Three conditions were raised during the initial assessment as presenting in Table 18.

Table 18. Summary of previous assessment conditions.						
Condition	PI(s)	Year closed	Justification			
Condition 1 The client must provide evidence that a partial strategy of demonstrably effective management measures is in place such that the Gaspésie lobster fishery does not hinder the recovery and rebuilding of the mackerel stock.	2.1.1	Closed at 3 <sup>rd</sup> surveillance audit in 2018	The audit team has been provided with evidence that the amount of mackerel used as bait is monitored since 2015 being recorded in logbooks. Data from logbooks provided clearly show a significant decrease in the amount of mackerel used as bait. Improvement in mackerel fisheries management have been implemented with new management measures to better monitor and report mackerel catches. DFO has undertaken a number of activities to improve stock assessment methodology and management. The Northwest Atlantic mackerel stock assessment was carried out in March 2017 and the stock assessment report has been published in August 2017. The censored statistical catch-at-age model takes into account uncertainties due to unrecorded catches. There is evidence of recovery and rebuilding of mackerel stock.			
Condition 2 The client must provide evidence that a partial strategy of demonstrably effective management measures is in place such that the Gaspésie lobster fishery does not hinder the recovery and rebuilding of the mackerel stock.	2.1.2	Closed at 3 <sup>rd</sup> surveillance audit in 2018	The audit team has been provided with evidence that the amount of mackerel used as bait is monitored since 2015 being recorded in logbooks. Data from logbooks provided clearly show a significant decrease in the amount of mackerel used as bait. Improvement in mackerel fisheries management have been implemented with new management measures to better monitor and report mackerel catches. DFO has undertaken a number of activities to improve stock assessment methodology and management. The Northwest Atlantic mackerel stock assessment was carried out in March 2017 and the stock assessment report has been published in August 2017. The censored statistical catch-at-age model takes into account uncertainties due to unrecorded catches. There is evidence of recovery and rebuilding of mackerel stock.			

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## **10.1.2** Small-scale fisheries

To help identify small-scale fisheries in the MSC program, the CAB should complete the table below for each Unit of Assessment (UoA). For situations where it is difficult to determine exact percentages, the CAB may use approximations e.g. to the nearest 10%.

#### Table 19. Small-scale fisheries.

Unit of Assessment (UoA)	Percentage of vessels with length <15m	Percentage of fishing activity completed within 12 nautical miles of shore
Gaspésie lobster trap	100%	Fishing activity is concentrated between the shore and about 20 nautical miles offshore, approximately 60%.



# **10.2** Evaluation processes and techniques

#### To be drafted at Client and the Peer Review Report stage

#### 10.2.1 Site visits

The report shall include:

- An itinerary of site visit activities with dates.
- A description of site visit activities, including any locations that were inspected.
- Names of individuals contacted.

Reference(s): FCP v2.1 Section 7.16

## 10.2.2 Stakeholder participation

The report shall include:

- Details of people interviewed: local residents, representatives of stakeholder organisations including contacts with any regional MSC representatives.
- A description of stakeholder engagement strategy and opportunities available.

Reference(s): FCP v2.1 Section 7.16

### **10.2.3** Evaluation techniques

The report shall include:

- Justification for how public announcements were developed.
- Methodology used, including sample-based means of acquiring a working knowledge of the management operation and sea base.
- Details of the scoring process e.g. group consensus process.
- The decision rule for reaching the final recommendation e.g. aggregate principle-level scores above 80.

If the RBF was used for this assessment, the report shall include:

- The justification for using the RBF, which can be copied from previous RBF announcements, and stakeholder comments on its use.
- The RBF stakeholder consultation strategy to ensure effective participation from a range of stakeholders including any participatory tools used.
- A summary of the information obtained from the stakeholder meetings including the range of opinions.
- The full list of activities and components that have been discussed or evaluated in the assessment, regardless of the final risk-based outcome.

The stakeholder input should be reported in the stakeholder input appendix and incorporated in the rationales directly in the scoring tables.

Reference(s): FCP v2.1 Section 7.16, FCP v2.1 Annex PF Section PF2.1



# **10.3** Peer Review reports

### To be drafted at Public Comment Draft Report

The report shall include unattributed reports of the Peer Reviewers in full using the relevant templates. The report shall include explicit responses of the team that include:

- Identification of specifically what (if any) changes to scoring, rationales, or conditions have been made; and,
- A substantiated justification for not making changes where peer reviewers suggest changes, but the team disagrees.

Reference(s): FCP v2.1 Section 7.14



# **10.4** Stakeholder input

## To be drafted at Client and Peer Review Draft Report To be completed at Public Certification Report

The CAB shall use the stakeholder input template to include all written stakeholder input during the stakeholder input opportunities and provide a summary of verbal stakeholder input received during the site visit. Using the stakeholder input template, the team shall respond to all written stakeholder input identifying what changes to scoring, rationales and conditions have been made in response, where the changes have been made, and assigning a 'CAB response code'. The team may respond to the verbal summary.

Reference(s): FCP v2.1 Section 7.15



# **10.5 Conditions – delete if not applicable**

### To be drafted from Client and Peer Review Draft Report

The report shall document all conditions in separate tables. The CAB shall include rationale for exceptional circumstances in the summary of conditions in the Client and Peer Review Draft Report and all subsequent reports.

For reassessments, the CAB shall note:

- If and how any of the new conditions relate to previous conditions raised in the previous assessment or surveillance audits.
- If and why any conditions that were raised and then closed in the previous assessment are being raised again in the reassessment.
- If any conditions are carried over from a previous assessment, including an explanation of:
  - Which conditions are still open and being carried over.
  - Why those conditions are still open and being carried over.
  - Progress made in the previous assessment against these conditions.
  - Why recertification is being recommended despite outstanding conditions from the previous assessment.
- If any previous conditions were closed after the 4<sup>th</sup> Surveillance Audit and reassessment site visit (i.e. in Year 5), including the rationale for re-scoring and closing out of the condition.

Reference(s): FCP v2.1 Section 7.18

### Table 20. Condition x of x (add as required).

Performance Indicator	
Score	State score for Performance Indicator
Justification	Cross reference to page number containing scoring template table or copy justification text here. If condition relates to a previous condition or one raised and closed in the previous assessment include information required here
Condition	State condition
Milestones	State milestones and resulting scores where applicable
Consultation on condition	Include details of any verification required to meet requirements in FCP v2.1 7.19.8

## **10.6** Client Action Plan

#### To be added from Public Comment Draft Report

The report shall include the Client Action Plan from the fishery client to address conditions.

Reference(s): FCP v2.1 Section 7.19



# **10.7** Surveillance

# To be drafted from Client and Peer Review Draft Report

The report shall include the program for surveillance, timing of surveillance audits and a supporting rationale.

Reference(s): FCP v2.1 Section 7.28

#### Table 21. Fishery surveillance program.

Surveillance level	Year 1	Year 2	Year 3	Year 4
e.g. Level 5	e.g. On-site surveillance audit	e.g. On-site surveillance audit	e.g. On-site surveillance audit	e.g. On-site surveillance audit & re-certification site visit

#### Table 22. Timing of surveillance audit.

Year	Anniversary date of certificate	Proposed date of surveillance audit	Rationale
e.g. 1	e.g. May 2018	e.g. July 2018	e.g. Scientific advice to be released in June 2018, proposal to postpone audit to include findings of scientific advice

### Table 23. Surveillance level rationale.

Year	Surveillance activity	Number of auditors	Rationale
e.g.3	e.g. On-site audit	e.g. 1 auditor on-site with remote support from 1 auditor	e.g. From client action plan it can be deduced that information needed to verify progress towards conditions 1.2.1, 2.2.3 and 3.2.3 can be provided remotely in year 3. Considering that milestones indicate that most conditions will be closed out in year 3, the CAB proposes to have an on-site audit with 1 auditor on-site with remote support – this is to ensure that all information is collected and because the information can be provided remotely.



## **10.8** Harmonised fishery assessments – delete if not applicable

To be drafted at Announcement Comment Draft Report stage

#### To be completed at Public Certification Report stage

Fisheries highlighted in light orange were/are assessed by SAI Global. Fisheries assessed by other CAB are highlighted in light grey.

Table 24. Overlapping fisheries						
Fishery name	Certification status and date	Performance Indicators to harmonise				
Îles-de-la-Madeleine lobster	Re-certified on 12 <sup>th</sup> October 2018 using FCR v2.0	PIs 2.1.1, 2.3.1, 2.3.2 PIs 3.1.1, 3.1.2 and 3.1.3				
Prince Edward lobster (PEI) trap	Certified on 6 <sup>th</sup> November 2014 using Standard v.1.3. 4 <sup>th</sup> surveillance audit (Review of Information) announced on 11 <sup>th</sup> April 2019	Given that fisheries are assessed under different versions of the Standard, harmoniation to Principle 2 PIs is not feasible. PIs 3.1.1, 3.1.2 and 3.1.3				
Bay of Fundy, Scotian Shelf and Southern Gulf of St Lawrence lobster trap	Certified on 22 <sup>nd</sup> May 2015 using Standard v.1.3. 4 <sup>th</sup> surveillance audit announced on 10 <sup>th</sup> April 2019	Given that fisheries are assessed under different versions of the Standard, harmoniation to Principle 2 PIs is not feasible. PIs 3.1.1, 3.1.2 and 3.1.3				
Eastern Canada offshore lobster	Re-certified on 30 <sup>th</sup> June 2015 using Standard v.1.3. 4 <sup>th</sup> surveillance audit announced on 15 <sup>th</sup> February 2019	Given that fisheries are assessed under different versions of the Standard, harmoniation to Principle 2 PIs is not feasible. PIs 3.1.1, 3.1.2 and 3.1.3				
Gulf of St Lawrence snow crab trap	Re-certified on 10 <sup>th</sup> October 2017 using FCR v.2.0. Suspended sicne March 2018. 1 <sup>st</sup> surveillance report posted on 4 <sup>th</sup> March 2019.	Pls 2.3.1 Pls 3.1.1, 3.1.2 and 3.1.3				
Scotian Shelf snow crab trap	Re-certified on 15 <sup>th</sup> September 2017 using FCR v.2.0. 1 <sup>st</sup> surveillance report posted on 28 <sup>th</sup> February 2019.	Pls 2.3.1 Pls 3.1.1, 3.1.2 and 3.1.3				
Newfoundland & Labrador snow crab	Re-certified on 21 <sup>st</sup> August 2018 using FCR v.2.0.	Pls 2.3.1 Pls 3.1.1, 3.1.2 and 3.1.3				
AQIP snow crab trap	Full assessment announced on 18 <sup>th</sup> December 2018.	PIs 2.3.1 PIs 3.1.1, 3.1.2 and 3.1.3				

#### Table 25. Overlapping fisheries – Harmonisation activities.

#### Supporting information

Almost all of overlapping fisheries are/were assessed by SAI Global facilitating the harmonisation process. Many fisheries are still under v.1.3 of the Standard which means that harmoniation to Principle 2 PIs is not feasible.

Was either FCP v2.1 Annex PB1.3.3.4 or PB1.3.4.5 applied when harmonising?	Νο
Date of harmonisation meeting	NA
If applicable, describe the meeting outcome	



Table 26. Overlapping fisheries – Scoring differences.									
Performance Indicators (PIs)	Gaspésie lobster (likely score)	Îles-de-la- Madeleine lobster	PEI losbter	Bay of Fundy, Scotian Shelf and Southern Gulf of St Lawrence lobster	Eastern Canada offshore Iobster	Gulf of St Lawrence snow crab trap	Scotian Shelf snow crab trap	Newfoundland & Labrador snow crab	AQIP snow crab trap
PI 2.1.1	≥80	85	85 (re-scored at 3 <sup>rd</sup> surveillance audit)	85 for UoA 1 80 for UoAs 2-4 (re-scored at 3 <sup>rd</sup> surveillance audit)	80	100	100	100	-
PI 2.3.1	60-79	75	100	85	85	< 60	75	75	-
PI 2.3.2	≥80	85	95	85	95	< 60	70	70	-
PI 3.1.1	≥80	85	90	90	95	90	90	90	-
PI 3.1.2	≥80	100	90	90	100	85	85	85	-
PI 3.1.3	≥80	100	90	90	100	90	90	90	-

Table 27. Overlapping fisheries – Rationale for scoring differences.

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

Given that fisheries are assessed under different versions of the Standard, harmoniation to Principle 2 PIs is not feasible between v.1.3 fisheries and v.2.0/v.2.01 fisheries.

The GSL snow crab fishery score less than 60 thus is suspended as the know effect of the fishery are likely to hinder the recovery of the NARW. Other snow cra fisheries score less than 80 for 2.3.2 as there is yet no evidence that the strategy in place to minimise interactions with the NARW will work.

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



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# **10.9 Objection Procedure – delete if not applicable**

## To be added at Public Certification Report stage

The report shall include all written decisions arising from a 'Notice of Objection', if received and accepted by the Independent Adjudicator.

Reference(s): FCP v2.1 Annex PD



# **11** Template information and copyright

This document was drafted using the 'MSC Reduced Reassessment Reporting Template v2.1'. Note amendments have been made to formatting in order to comply with SAI Global's corporate identity; however, content and structure follow that of the original template.

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#### **Template version control**

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Version	Date of publication	Description of amendment
1.0	08 October 2014	Date of first release
1.0 Erratum	8 April 2015	Appendix 1.1 & 1.2 – amendments made in line with April 2015 release of FCR v2.0 erratum
2.0	17 December 2018	Release alongside Fisheries Certification Process v2.1
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A controlled document list of MSC program documents is available on the MSC website (www.msc.org).

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