

Marine Stewardship Council Assessment

Final Report and Determination

For the

**Regroupement des Pêcheurs Professionnels du Sud de la Gaspésie
(RPPSG)**

Gaspésie lobster (*Homarus americanus*) Trap Fishery

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Glossary

AFR	Atlantic Fishery Regulations (1985)
AFS	Aboriginal Fisheries Strategy
ALSM	Atlantic Lobster Sustainability Measures
B_{lim}	Stock size below which the recruitment would be impaired
B_{MSY}	Stock size that can produce maximum sustainable yield when it is fished at a level equal to F_{MSY}
CAB	Conformity Assessment Body
C&P	Conservation and Protection (DFO Enforcement Unit)
CL	Carapace Length
CoC	Chain of Custody
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CPUE	Catch per Unit Effort
CR	Certification Requirements
CSAS	Canadian Science Advisory Secretariat
CW	Carapace Width
DFO	Fisheries and Oceans Canada
DMP	Dockside Monitoring Program
EAM	Ecosystem Approach Management
EEZ	Exclusive Economic Zone
EPR	Egg production-per-recruit
ESBA	Ecologically and Biologically Significant Areas
ETP	Endangered, Threatened and Protected species
F	Fishing Mortality Rate
F_{lim}	Fishing mortality rate that causes a stock to fall below B_{lim}
F_{MSY}	Fishing mortality rate at the level that would produce maximum sustainable yield from a stock that has size of B_{MSY}
FAO	United Nations Food and Agriculture Organization
FRCC	Fisheries Resource Conservation Council
GOSLIM	Gulf of St. Lawrence Integrated Management project
GSL	Gulf of St. Lawrence
IFMP	Integrated Fisheries Management Plan
HCR	Harvest Control Rule
LCC	Lobster Council of Canada
LFA	Lobster Fishing Area
LPA	Lobster Productivity Area
LRP	Limit Reference Point
MAPAQ	Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec
MLS	Minimum Legal Size
MPA	Marine Protected Area
MSC	Marine Stewardship Council
MSY	Maximum Sustainable Yield, it is the largest average catch that can be continuously taken from a stock under existing environmental conditions
PA	Precautionary Approach

P1	MSC Principle 1
P2	MSC Principle2
P3	MSC Principe 3
PEI	Prince Edward Island
PI	MSC Performance Indicator
RAP	Regional Advisory Process
RBF	MSC's Risk-Based Framework
RPPSG	Regroupement des Pêcheurs Professionnels du Sud de la Gaspésie
SAR	Science Advisory Report
SARA	<i>Species At Risk Act</i>
SFF	Sustainable Fisheries Framework
SG	Scoring Guidepost
SPA	Sequential Population Analysis
UoC	Unit of Certification
yoy	young-of-year

1. MSC Fishery Assessment Report

Fishery Unit	This assessment report under the 'Unit of Certification' (UoC) covers one target species and one method of capture and the resulting scores are for traps landings by registered licence holders. Fishing for this UoC is entirely within the Canadian Exclusive Economic Zone (EEZ) and exclusively in Lobster Fishing Areas (LFAs) 24, 25 and 26A.	
Report Issue	25 th August 2014	• Client Report
	30 th September 2014	• Peer Review
	20 th November 2014	• Public Comment Draft Report
	22 nd January 2015	• Final Report and Determination
		• Public Certification Report
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The aim of this assessment is to determine the degree of compliance of the fishery with the Marine Stewardship Council's (MSC) Principles and Criteria for Sustainable Fishing.

This Final Report and Determination is written for the stakeholders after the site visit, scoring, client review, the peer review, and the stakeholder consultation period on the PCDR and contains:

- The MSC Standard and Certification Requirements (CR) used, MSC Fishery Standard - Principles and Criteria for Sustainable Fishing v1.1 and the MSC CR v1.3
- The scores, weighting and certification outcome (Section 7)
- All intended conditions set and the Client Action Plan in Appendix 1.3

'Conditions provide for agreed further improvement in the fishery and provide one of the bases for subsequent audit. They are intended to improve performance against the MSC Principles'.

- The assessment team certification recommendation.
- The final decision from the Certification Committee on the fishery certification.
- The Peer Reviewers comments and the assessment team's responses in Appendix 2.
- The stakeholder's submissions and the assessment team's responses in Appendix 3.
- The assessment followed the current versions of MSC scheme requirements and these were implemented by SAI Global accredited MSC Procedures.
- Information sources used are provided throughout the report and full references for published, unpublished data and main websites accessed are documented at the end of this report in the reference section.

2. Executive Summary

This report sets out the details of the MSC assessment for the Gaspésie Lobster (*Homarus americanus*) Trap Fishery against the MSC Principles and Criteria for Sustainable Fisheries. The report details the background, results and justification of the fishery, carried out by SAI Global.

The assessment process began in April 2014. As a requirement of the assessment process (CR 27.9.1), the site visit announcement in French version was advertised in the following Gaspésie local newspaper, *Le Transgaspésien*, as it was felt this was the most appropriate publication for this fishery.

Ce rapport présente les détails de l'évaluation MSC de la Pêcherie au Casier du Homard (*Homarus americanus*) de Gaspésie selon les Principes et Critères pour des Pêcheries Durables de MSC. Le rapport, réalisé par SAI Global, détaille le contexte, les résultats et la justification de la pêche. Le processus d'évaluation a débuté en Avril 2014. Comme l'exige le processus d'évaluation (CR 27.9.1), l'annonce de la visite sur site a été publiée en Français dans le journal local *Le Transgaspésien*.

The MSC Guidelines to Conformity Assessment Body (CAB) specify that the Unit of Certification (UoC) is "The fisheries or fish stock (biologically distinct unit) combined with the fishing method/gear and practice (vessel(s) pursuing the fish of that stock) and management framework". Accordingly, the Gaspésie lobster trap fishery proposed for certification is defined according the UoC:

Les Directives de MSC aux Organismes d'Évaluation de la Conformité (OEC) précisent que l'Unité de Certification (UoC) est "Les Pêcheries ou stock (unité biologiquement distincte) combinées avec la méthode de pêche/engine de pêche, la pratique (navire(s) qui pêche (ent) ce stock), et le cadre de gestion". En conséquence, la Pêcherie au Casier du Homard de Gaspésie proposée pour le certification est définie selon l'UoC:

Species (Espèce)	<i>Homarus americanus</i> , American lobster Homard américain
Geographical Area (Zone Géographique)	Gaspé Peninsula, LFAs 19, 20, and 21, Quebec, Canada Péninsule de Gaspé, ZPHs 19, 20 et 21, Québec, Canada
Stock	Gaspé Peninsula, Péninsule de Gaspé
Method of capture (Méthode de capture)	Baited trap Casier appâté
Management system (Système de gestion)	Fisheries and Oceans (DFO) Quebec Region Pêches et Océans (MPO) Région Québec
Client Group (Groupe Client)	Regroupement des Pêcheurs Professionnels du Sud de la Gaspésie (RPPSG)

This fishery has not previously been assessed against the MSC Principles and Criteria for Sustainable Fishing under any other previous certificate. The current assessment did not require taking into account other assessments led by a CAB to ensure consistency of assessment outcomes as there is no other lobster fishery undergoing certification or any fishery assessments that overlap at present (See Section 5.1).

Cette pêche n'a pas été auparavant évaluée selon les Principes et Critères pour des Pêcheries Durables de MSC sous tout autre certificate precedent. L'évaluation actuelle n'a pas besoins de prendre en compte d'autres évaluation menées par un OEC afin d'assurer la cohérence des résultats d'évaluation, car il n'y a pas d'autres pêcheries certifiées ou en cours d'évaluation qui chevauchent la pêche considérée dans l'évaluation actuelle (Voir la Section 5.1).

The assessment covers Lobster Fishing Areas (LFA) 19, 20 and 21 and its Gaspésie lobster licence holders. A full and up to date active list of fleet licences will be made available by the client group and provided to the SAI Global on an annual basis as a requirement of surveillance conditions. It is to be

interpreted in strict accordance with operational practices, including adherence to the certificate sharing mechanism defined in CR 27.23.1. The Client Sharing Letter can be seen at:

L'évaluation porte sur les Zones de Pêche au Homard (ZPH) 19, 20 et 21 et leurs détenteurs de permis Homard de Gaspésie. Une description complète et à jour de la liste active de la flotilles et des détenteurs de permis sera mise à disposition par le client et fourni à SAI Global annuellement comme l'exigent les conditions de surveillance. Cela doit être interprété en stricte conformité avec les pratiques opérationnelles, y compris l'adhésion au mécanisme de partage de certificate défini par la CR 27.23.1. La Lettre de Partage du Client peut être vue à:

http://www.msc.org/track-a-fishery/fisheries-in-the-program/in-assessment/north-west-atlantic/gaspesie-lobster-trap/assessment-downloads-folder/20140408_Client_Sharing_Letter_LOB455.pdf

2.1 Gaspésie lobster fishery key strengths and weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none"> • Lobster is in high abundance in the GSL • Robust harvest strategy • The fishery is highly unlikely to disrupt key elements underlying ecosystem structure and function • Robust governance and policy • Robust consultation process 	<ul style="list-style-type: none"> • Specific-fishery objectives are not explicit in the fishery management system • Absence of a partial strategy to ensure the Gaspésie lobster fishery does not hinder the recovery and rebuilding of the Canadian mackerel stock

Points forts et faiblesses de la pêche au homard de Gaspésie

Points forts	Faiblesses
<ul style="list-style-type: none"> • Homard en forte abondance dans le GSL • Stratégie de capture robuste • Il est hautement invraisemblable que la pêche perturbe les éléments fondamentaux de la structure et fonction de l'écosystème • Gouvernance and politique robustes • Processus de consultation robuste 	<ul style="list-style-type: none"> • Les objectifs spécifiques à la pêche ne sont pas explicites dans le système de gestion de la pêche • Absence d'une stratégie partielle afin de s'assurer que la pêche au homard en Gaspésie ne nuise pas à la récupération et la reconstruction du stock de maquereau Canadien

2.2 Assessment Results

A rigorous assessment against the MSC Principles and Criteria was undertaken by the assessment team and detailed, fully referenced scoring rationale is provided in Appendix 1 of this report.

The UoC achieved the minimum required score of 80 or above on each of the three MSC Principles independently and did not score less than 60 against any Performance Indicator (PI).

Final Principles scores are shown in the table below.

Principle	Score	PASS/FAIL
Principle 1 – Target Species	82.0	PASS
Principle 2 – Ecosystem	85.3	PASS*
Principle 3 – Management System	91.8	PASS*

*Although the assessment team found the overall Principles and Unit of Certification in overall compliance with MSC Standard, it also found the performance of three performance indicators (PI 2.1.1, PI 2.1.2 and PI 3.2.1) to be below the established compliance mark (Score of 80). Full explanation of these conditions is provided in Appendix 1.3.

Résultats de l'évaluation

Une évaluation rigoureuse selon les Principes et Critères de MSC a été réalisée par l'équipe d'évaluation. L'Annexe 1 contient les évidences de notation référencées et détaillées.

L'UoC a obtenu le score minimal requis de 80 ou plus à chacun des trois Principes de MSC et aucun Indice de Performance (IP) n'a obtenu moins de 60. Les scores finaux sont présentés dans le tableau ci-dessous.

Principe	Score	PASSE/ECHOUÉ
Principe 1 – Espèce cible	82.0	PASSE
Principe 2 – Ecosystème	85.3	PASSE*
Principe 3 – Système de gestion	91.8	PASSE*

* Bien que l'équipe d'évaluation ait trouvé que les Principes et l'UoC dans son ensemble soient globalement en conformité avec le Standard de MSC, 3 indices de performance (IPs 2.1.1, 2.1.2 et 3.2.1) ont obtenu un score inférieur au minimal requis de 80. Une condition a été donc assignée à ces IPs, l'explication complète est fournie en Annexe 1.3.

2.3 Conditions for continued certification

Three PIs which contribute to the overall assessment score were assessed as scoring less than the unconditional pass mark, and therefore three conditions were attached to the fishery, which must be addressed within a specified timeframe. The condition is applied to improve performance to at least the 80 level within a period set by the certification body but no longer than the term of the certification. A full explanation of how the Client intends to meet these conditions is provided in the client action plan in Appendix 1.3 of the report. As a standard requirement of the MSC CR, the fishery shall be subject to (as a minimum) annual surveillance audits. These audits shall be publicised and reports made publicly available.

Trois IPs contribuant au score global ont obtenu un score inférieur au score de passage sans condition. Par conséquent, trois conditions ont été assignées à la pêcherie qui doit y répondre dans une période de temps spécifique. Les conditions sont assignées afin d'améliorer la performance de la pêcherie pour atteindre au moins le score de 80 dans un délai fixé par l'organisme de certification, mais sans dépasser le terme de la certification. Une explication complète de comment le RPPSG a l'intention de remplir ces conditions est fournie dans un Plan d'Action du Client dans l'Appendice 1.3 du rapport. Les Exigences de Certification de MSC requièrent que la pêcherie soit sujette à des audits annuels de surveillance. Ces audits sont annoncés publiquement et les reports sont accessibles au public.

Condition number	Condition	Performance Indicator	Related to previously raised condition? (Y/N/A)
1	<p>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 Canadian mackerel stock.</p> <p>Le client doit fournir des preuves qu'une stratégie partielle, faite de mesures reconnues et efficaces, est mise en place pour s'assurer que la pêcherie au homard en Gaspésie ne nuise pas à la récupération et la reconstruction du stock de maquereau Canadien.</p>	2.1.1	NA
2	<p>The client must provide evidence that a partial strategy is in place to ensure the Gaspésie lobster fishery does not hinder the recovery and rebuilding of the Canadian mackerel stock. Also, the client must provide some evidence that the partial strategy is being implemented successfully.</p> <p>Le client doit fournir des preuves qu'une stratégie partielle est mise en place pour s'assurer que la pêcherie au homard en Gaspésie ne nuise pas à la récupération et la reconstruction du stock de maquereau Canadien. De plus, le client doit fournir certaines preuves que la stratégie partielle est mise en place avec succès.</p>	2.1.2	NA
3	<p>The client must provide evidence that short and long-term objectives which are consistent with achieving the outcomes expressed by MSC's Principle 1 and 2 are explicit within the fishery's management system. To do so, the client must provide evidence that the IFMP under development, identifying the lobster fishery-specific objectives, has been finalized and adopted for use for the fishery.</p> <p>Le client doit fournir des preuves que des objectifs à court et long terme en accord avec les objectifs des Principes 1 et 2 du MSC sont explicitement définis à l'intérieur du système de gestion de la pêcherie.</p> <p>Pour y arriver, le client doit fournir la preuve que le Plan de Gestion Intégrée de la Pêcherie (PGIP) qui est en élaboration et qui identifie des objectifs spécifiques à la pêcherie du homard, est bel et bien terminé, adopté et utilisé par la pêcherie</p>	3.2.1	NA

2.4 Certification Recommendation

On completion of the assessment and scoring process, the assessment team has recommended that the Gaspésie Lobster Trap Fishery is eligible to be certified according to the MSC Principles and Criteria for Sustainable Fishing.

Recommandation de Certification

Après l'achèvement de l'évaluation et le processus de notation, l'équipe d'évaluation a recommandé que la Pêcherie au casier du homard de Gaspésie soit éligible pour être certifiée selon les Principes et Critères pour des Pêches Durables de MSC.

2.5 Assessment Process

The assessment followed set procedures as described in the MSC CR v1.3. Key stages of the assessment were:

- **Stage 1: Fishery Announcement and Assessment Team Formation**
 - Stakeholder Notification: Fishery enters full assessment – 10th April 2014
 - Stakeholder Notification: Assessment team nominated – 10th April 2014
 - Stakeholder Notification: Assessment team confirmation - 22nd April 2014
- **Stage 2: Building the Assessment Tree**
 - Stakeholder Notification: Use of the default assessment tree – 24th April 2014
 - Stakeholder Notification: Use of the Risk Based Framework (RBF) – 24th April 2014
- **Stage 3: Information gathering, stakeholder meetings and scoring**
 - Stakeholder Notification: Site Visit scheduled – 24th April 2014
- **Stage 4: Client and peer review**
 - Stakeholder Notification: Peer reviewers proposed – 18th September 2014
 - Stakeholder Notification: Peer reviewers confirmation – 30th September 2014
- **Stage 5: Public review of the draft assessment report**
 - Stakeholder Notification: Public Comment Draft Report released – 20th November 2014
- **Stage 6: Final Report and Determination**
 - Stakeholder Notification: Revised Timeline – 6th January 2015
 - Stakeholder Notification: Final Report and Determination released – 22nd January 2015

3. Authorship and Peer Reviewers

3.1 Assessment team

Dr. Géraldine Criquet (Lead Assessor, Responsibilities on Principle 2)

Géraldine manages technical functions of SAI Global's MSC Fishery Program and is an approved MSC Fishery Team Leader. Géraldine holds a PhD in Marine Ecology (École Pratique des Hautes Études, France) which focused on coral reef fisheries management, Marine Protected Areas and fish ecology. She has also been involved during 2 years in stock assessments of pelagic resources in the Biscay Gulf, collaborating with IFREMER. 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 during 2 years a monitoring program of catches and fishing effort in the Marine Natural Reserve of Cerbère-Banyuls (France). Geraldine joined SAI Global in August 2012 as Fisheries Assessment Officer and is involved in FAO RFM and MSC fisheries assessments.

Dr. Jean-Claude Brêthes (Assessor, Responsibilities on Principle 1)

Jean-Claude is a fisheries biology professional at the Institut des Sciences de la Mer at the Université du Québec at 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 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.

Jacques Fréchette (Assessor, Responsibilities on Principle 3, and Traceability expert)

Jacques Fréchette has more than 28 years in Quebec Government as a marine biologist in fishery research and management, as a senior counsellor in fishery and aquaculture. He coordinated also the creation of a fishery and aquaculture network that resulted in the setting of a strategic planning; he worked many years inside this special association as executive secretary. Jacques Fréchette had also the opportunity to participate in some projects in Morocco and Bénin, Africa in the fields of fishery development and organization planning. He developed especially professional skills in crustacean stock research, fisheries organization, strategic planning, political and programs elaboration, partnership network. As a consultant, he was involved in different projects, mainly in the realization of manpower profiles for fishery and fresh water aquaculture and in the organization of a Colloquium on Nordic Shrimp as secretary. He especially got involved as a representative of the Quebec and New-Brunswick industry in the process of MSC certification of the shrimp population of the Gulf of Saint-Lawrence.

3.2 Peer Reviewers

Don Aldous

Don Aldous has been involved in fisheries management issues in Canada and the Pacific Islands since 1977. He has experience at all levels of fisheries management from Fishery Officer to Commissioner of a Regional Fisheries Management Organization. In Canada, he achieved a Senior Advisor position in matters dealing with foreign and domestic fisheries management. He led teams of consultants preparing fisheries management plans for Fiji, Solomon Islands and Marshall Islands and has

returned to conduct follow-up work in all three. On a regional scale, he has provided advice to FFA on issues related to fisheries management, development and MCS.

Don is considered a P3 expert for MSC assessments and has been involved with Intertek Moody Marine as an Associate Auditor since 2009 as an editor, project coordinator, Principle 3 expert and team leader.

Dr. Neil Campbell

Neil Campbell is the Scientific Council Coordinator for the Northwest Atlantic Fisheries Organization (NAFO). After graduating in Marine Biology from Newcastle University, Neil moved to Aberdeen to study for a master's degree, before being employed as a researcher on a number of EU-funded fisheries research projects, the results of which formed the basis of his doctoral thesis. In 2005 he moved across Aberdeen to work for the Fisheries Research Service of the Scottish Government. During this time he performed a number of roles, including fish and shellfish stock assessment, deepwater fisheries, bioeconomic modelling, bycatch and discards reduction and analysis of VMS data. In 2011 Neil moved to Canada and took up a job with NAFO. This involves the coordination of the advisory process for fisheries targeting straddling and high-seas stocks of the northwestern Atlantic; working in close cooperation with scientists and managers from national governments, international organizations such as the FAO, academia, industry bodies and environmental NGOs.

4. Description of the Fishery

4.1 Unit of Certification and scope of certification sought

The MSC Guidelines to CAB specify that the UoC is “The fisheries or fish stock (biologically distinct unit) combined with the fishing method/gear and practice (vessel(s) pursuing the fish of that stock) and management framework”. Accordingly, the Gaspésie lobster trap fishery proposed for certification is defined according the UoC:

Species	<i>Homarus americanus</i> , American lobster
Geographical Area	Gaspé Peninsula, LFAs 19, 20, and 21, Quebec, Canada
Method of capture	Baited trap
Management system	Fisheries and Oceans (DFO) Quebec Region
Client Group	Regroupement des Pêcheurs Professionnels du Sud de la Gaspésie (RPPSG)

4.1.1 Eligibility for Certification against the MSC Standard

The fishery is eligible for certification and able to be assessed within the scope of the MSC Principles and Criteria for Sustainable Fishing as:

- The fishery is not conducted under a controversial unilateral exemption to an international agreement;
- Fishing operations do not use destructive fishing practices such as fishing with poisons or explosives;
- The fishery applying for certification is not the subject of controversy and/or dispute;
- The fishery has not previously failed an assessment or had a certificate withdrawn;
- The Client Group is prepared to consider how other eligible fishers may share the certificate;
- There are no catches of non-target stocks that are inseparable or practicably inseparable (IPI) from the target stock; and
- The assessment of the Gaspésie lobster trap fishery will not result in an overlapping assessment.

4.1.2 Eligible fishers

There are other lobster fisheries in the GSL adjacent to LFAs 19, 20 and 21. Lobster harvesters from other Provinces and other Quebec Regions are not allowed to fish lobster in Gaspésie.

4.1.3 Scope of Assessment in Relation to Enhanced Fisheries

The fishery under assessment is not an enhanced fishery.

4.1.4 Scope of Assessment in Relation to Introduced Species Based Fisheries (ISBF)

The fishery under assessment is not an Introduced Species Based Fishery.

4.2. Overview of the fishery

4.2.1. Biology of the target species

Taxonomy and geographic range

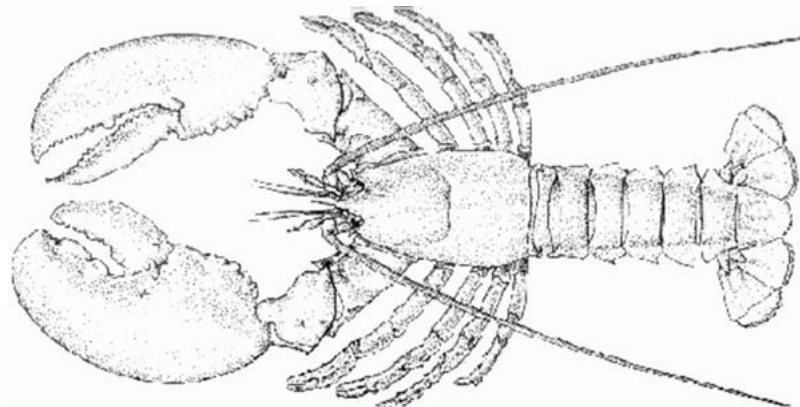


Figure 1. *Homarus americanus*. Source: FAO species fact sheet¹.

The American lobster, *Homarus americanus* (H. Milne Edwards, 1837), is a crustacean belonging to the family Nephropidae. It is distributed from Cape Hatteras in North Carolina to Newfoundland to the Strait of Belle Isle that separates Labrador and Newfoundland. The largest populations are found in the Gulf of Maine, southwest Nova Scotia and in the southern Gulf of St. Lawrence².

Migration and stock structure

Lobsters are known to migrate seasonally in response to the seasonal change in water temperatures and climate conditions. They migrate to shallow waters in the spring to moult, reproduce or hatch eggs and return to deeper waters in the fall. The movement or migrations of adults can be extensive and cover considerable distances (Campbell et al. 1984). There is evidence that some females and males in the southern New England continental shelf undergo seasonal return migrations of up to 200 km (Uzmann et al. 1977). Tagging studies have shown a fair exchange of mature lobster

¹ <http://www.fao.org/fishery/species/3482/en>

² <http://www.dfo-mpo.gc.ca/Science/publications/uww-msm/articles/americanlobster-homarddamerique-eng.html>

between inshore and offshore waters off southwestern Nova Scotia, with few lobsters reaching as far afield as Georges Banks (Campbell and Stasko 1985; Campbell 1989). However, long-range movement of adult lobsters from the outer Atlantic coast of Nova Scotia to offshore banks is extremely rare and there are no records of long-range movements of adult lobsters out of or into the Gulf of St Lawrence (Harding et al. 1997).

Lobster larval dispersal and circulation patterns suggest that there is likely a high degree of connectivity between exploited populations in the Northwestern Atlantic. Larval dispersal and population genetics studies in the Southern Gulf of St Lawrence (SGSL) all suggest that the lobster population in this region can be considered homogeneous (Harding et al. 1997; Chassé and Miller 2010). Harding et al. (1997) indicated that lobsters from the Southern Gulf of St Lawrence, Nova Scotia and Georges Bank are not genetically isolated. However, the authors observed that Gulf of St Lawrence lobsters were about three times as genetically distant from Nova Scotia and Georges Bank lobsters. This slight genetic distinction might have evolved in response to the predominantly “one way” drift of larvae from the Gulf of St Lawrence, forming a partial hydrographic barrier to gene flow. In a more recent genetic study, Kenchington et al. (2009) found that samples in the Gulf of St. Lawrence, with low genetic differentiation, differed from samples from Fundy to Cape Cod, in which genetic differentiation is higher. This is postulated to result from a shelf-edge post-glacial colonisation process, in which lobsters forced onto the southern continental slopes by low temperature and falling water level during the last ice age later re-colonised northwards along the slope and into newly available embayments as the ice retreated, thus creating a south-north genetic difference that is now maintained by contemporary patterns of bathymetry, temperature, and circulation. Deep water lobster populations along the shelf could then be a relic of this post-glacial expansion.

Lobsters in the Gaspésie are considered as a single biological unit, and the management of lobster fisheries at the LFA level and the defined unit of certification can therefore be considered appropriate.

Habitat

Lobsters inhabit areas from the water line out to the edge of the continental shelf, show habitat preference for hard substrates with shelters, but they may inhabit areas with sandy and muddy bottoms. This species is found in waters ranging between -1.5° and 24°C³.

Growth and moult

American lobster, like all crustaceans, grows incrementally in distinct moulting events called ecdysis. Although growth appears to take place entirely during the moult, lobsters actually spend much of their lives preparing for, or recovering from, moulting (Waddy et al. 1995). Growth rates are affected by two separate components, the size increase per moult, or moult increment, and the frequency of moulting. Moult increments are reported as a percent change in carapace length or as the actual change in carapace length per moult. During the moult, the carapace of the cephalothorax splits in two, and the lobster pulls its body through first, then its claws, its legs and its tail. The lobster is soft and approximately a month is needed for the new carapace to harden completely. After having moulted, lobsters are 15% to 20% larger than before and their weight increases approximately by 40% to 50%⁴. During the first year of their life, lobsters will grow quickly, moulting four to five times

³ <http://www.dfo-mpo.gc.ca/science/publications/uww-msm/articles/americanlobster-homarddamerique-eng.html>

⁴ <http://slgo.ca/en/lobster/context/cycle.html>

per year. Adults moult less often, about once every two to three years. In the GSL, lobsters are estimated to reach the minimum legal size at around eight or nine years of age after having molted approximately 16 times since their benthic settlement (DFO 2012a).

Life cycle

The life history of lobster is divided into a planktonic and a benthic life stage (Figure 2). Planktonic larvae hatch from eggs with female brood externally during the summer. Following metamorphosis, post larval lobsters settle to the substrate to begin their benthic life

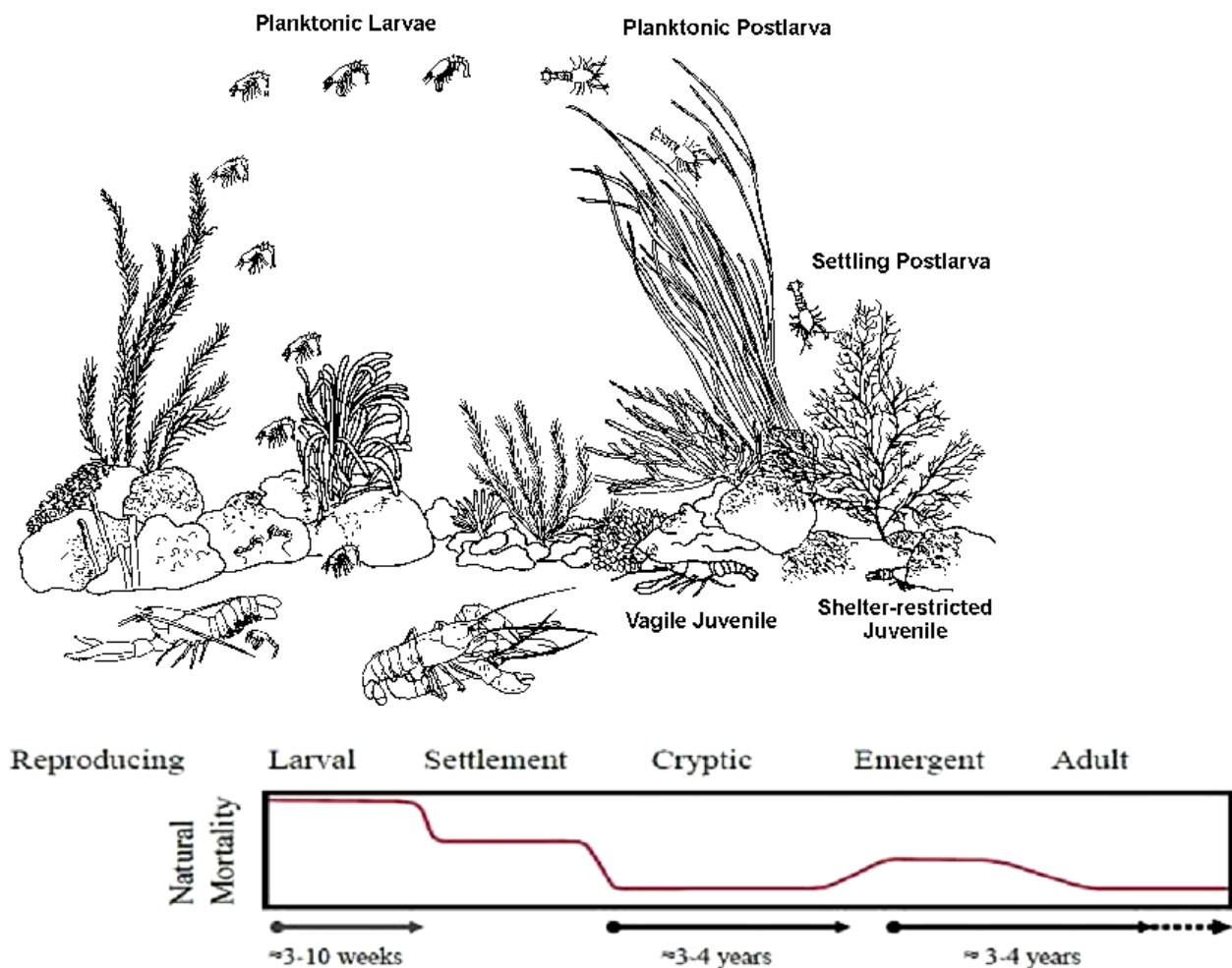


Figure 2. Life cycle of *Homarus americanus*. Source: Templeman 1937 (panel above) and DFO 2012a (panel below).

Reproduction

Lobsters migrate to shallow waters in the spring to moult, reproduce or hatch eggs. Males become sexually mature at smaller sizes and ages than females. Females reach sexual maturity at around 82 mm carapace length in the southern part of the Gaspé Peninsula (DFO 2012a). The examination of

size structures of berried females suggest that they reach sexual maturity at a larger size along the north shore of the peninsula. Typically, when a mature female lobster is about to moult, she seeks a mate and moves into his shelter. A few to several days later, she moults inside this shelter. It takes about 1/2 hour for her shell to harden enough to permit her to stand. The male then approaches, and helps her to roll over. The pair fan their pleopods against one another just before the male intromits. Copulation lasts a few seconds, after which the female tail flips out from under the male. The female remains in the male's shelter for one to several more days (Cowan and Atema 1990). After mating, the female keeps the male's sperm for several months (up to one year and even more). For most females, eggs will be laid the year after mating. Eggs are becoming evident on the underside of the female approximately one year later (berried female). The number of eggs produced by a female, from a few thousand to several tens of thousands, depends on her size. Also, first-time spawners produce eggs of lower quality than those of older females. The female carries her eggs for almost a year and hatching of eggs occurs in summer when water temperature increases. The survival rate of eggs is very low, and only an estimated 1 out 10,000 larvae will survive to become adults.

Preys and predators

Larvae lobster are omnivorous, they feed on zooplankton (copepods, crab larvae, eggs) and phytoplankton (diatoms, dinoflagellates and filamentous algae)⁵. Juveniles and adults are mainly carnivorous and prey on crab, small sea stars, lobster, marine worms, molluscs and fish. 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 ontogenic 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 sea 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.

⁵ <http://slgo.ca/en/lobster/context/foodchain.html>

4.2.2. Fishing area

The Gaspésie lobster fishery occurs in FAO Fishing Area 21 (Northwest Atlantic), Division 21.4T (Figure 3).

That portion of the subarea lying between the coasts of Nova Scotia, New Brunswick and Quebec from Cape North to Pte. des Monts and a line described as follows: beginning at Pte. des Monts, thence due east to a point at 49°25' north latitude, 64°40' west longitude; thence along a rhumb line in an southeasterly direction to a point at 47°50' north latitude, 60°00' west longitude; thence along a rhumb line in a southerly direction to Cape North, Nova Scotia.

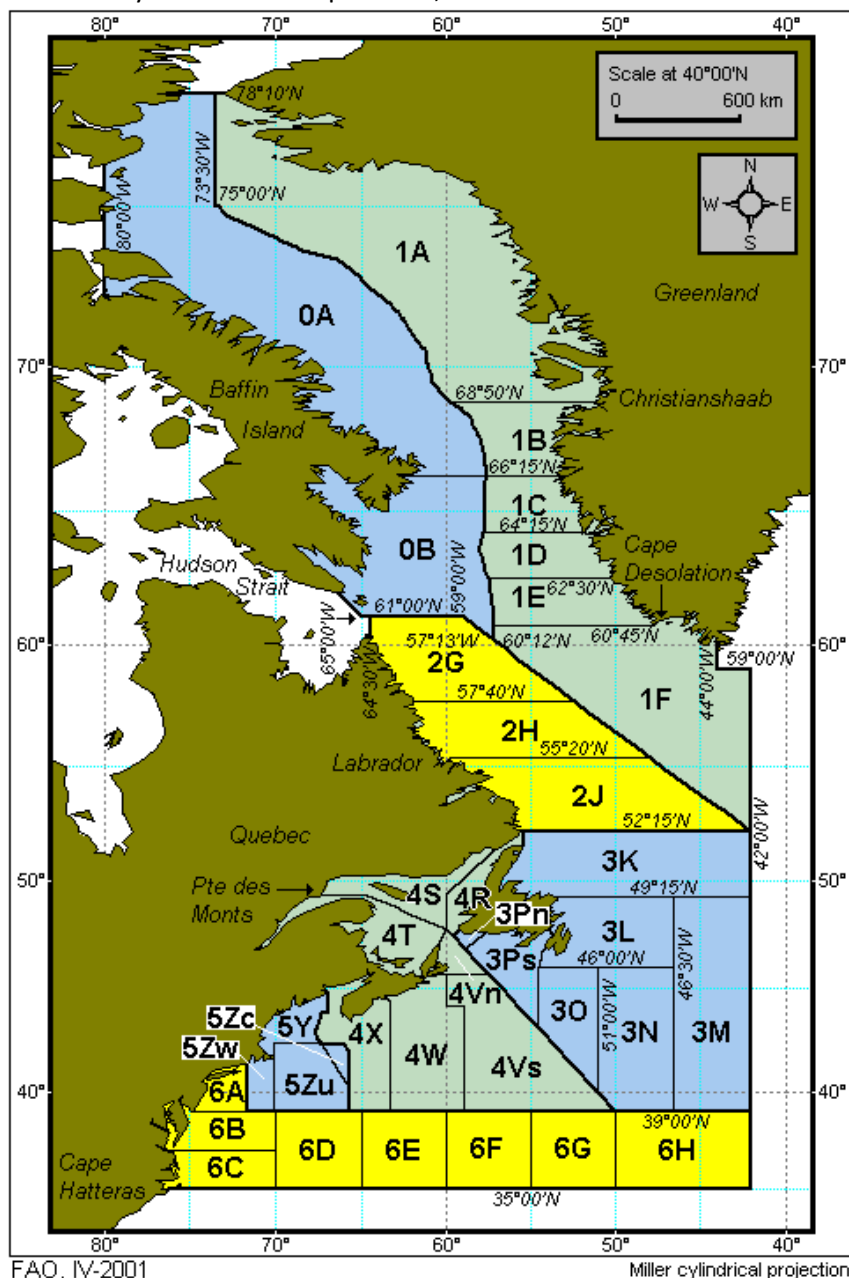


Figure 3. Map of the FAO Fishing Area 21 showing fishing sub-area 4T⁶.

The Gaspésie lobster harvesters have access to LFAs 19, 20 and 21 as described in the Schedule XIII/Annexe XIII of the *Atlantic Fishing Regulations (AFR)*, 1985⁷. The fishing activity is concentrated

⁶ <http://www.fao.org/fishery/area/Area21/en>

⁷ <http://laws-lois.justice.gc.ca/eng/regulations/SOR-86-21/page-41.html#docCont>

on rocky reefs, the preferred habitat of lobster, located in the coastal and nearshore areas of Gaspésie. LFA 19 corresponds to Gaspé-Nord, LFA 20 to Gaspé-Sud and LFA 21 to the upper Bay of Chaleur.

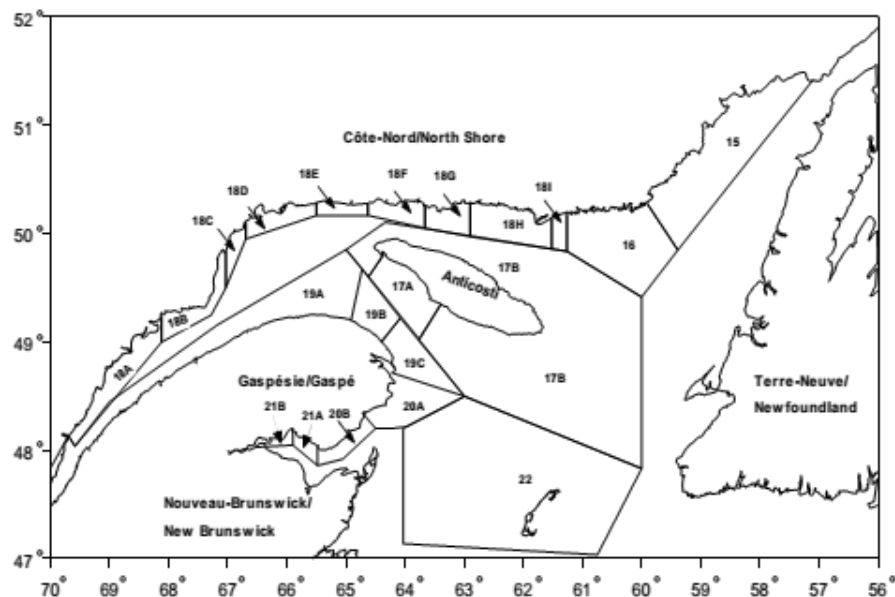


Figure 4. LFAs in Quebec. LFAs 19-21: Gaspé Peninsula. Source: Gendron and Savard 2012.

The three LFAs are subdivided into 27 sub-areas (Figure 5) since 1985.

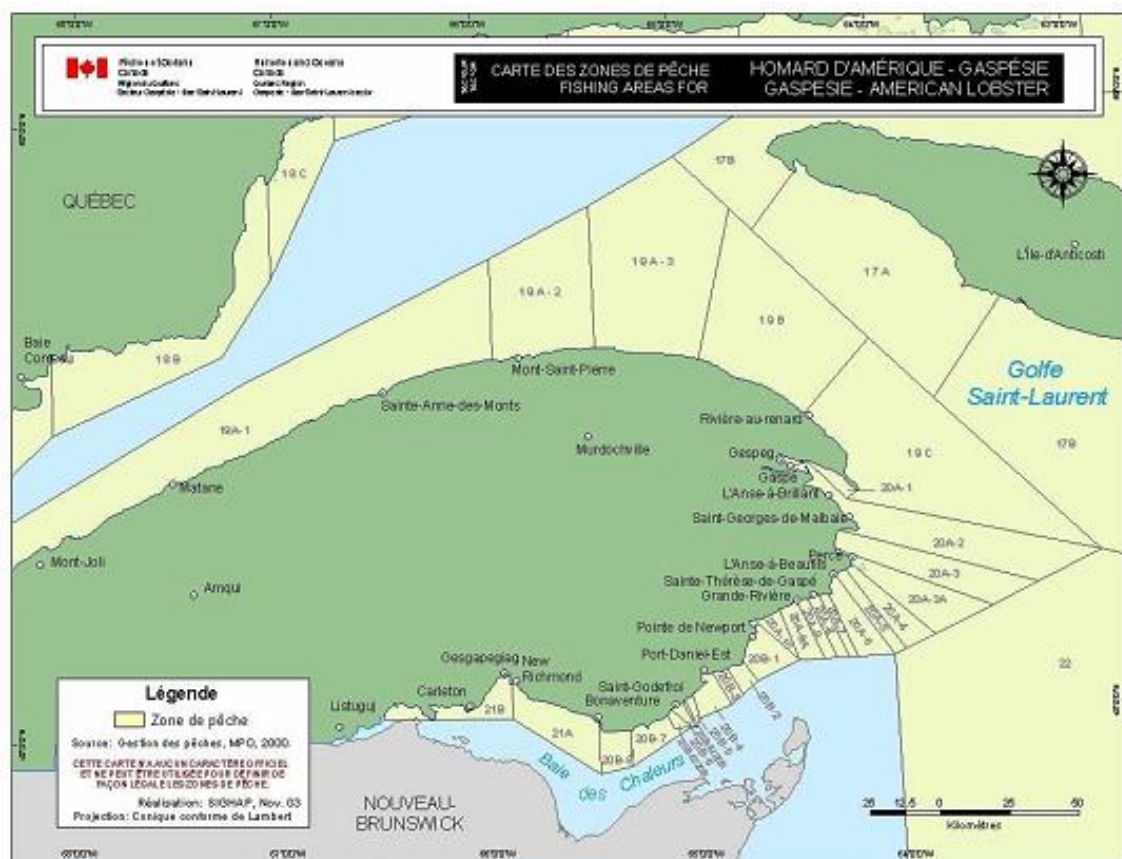


Figure 5. Map of the Gaspé Peninsula showing the different sub-areas of LFA 19 (19A1 to 19A3, 19B and 19C), LFA 20 (20A1 to 20A10 and 20B1 to 20B8) and LFA 21 (21A and 21B). Source: DFO 2012a.

4.2.3. History of the Gaspésie lobster fishery

The Canadian lobster fishery has provided a means of income for many in Atlantic Canada since the mid-1850s (FRCC 1995). 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-19th 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) (DFO 1998a and 1998b, and DFO 2005a) 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 2009⁸ 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.

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. The MLS is 83 mm and 82 mm for LFA 19 and LFAs 20 and 21, respectively since 2012 (DFO 2012b). Egg-bearing females must also be released. In 2008, a maximum catch size of 155 mm CL was implemented in LFA 20 (DFO 2012a). That size has been 145 mm since 2012 (DFO 2012b). On a voluntary basis, fishers mark berried females by V-notching their uropods. However, the release of V-notched lobsters is mandatory.

⁸ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/lobster-homard/alsm-mdih-eng.htm>

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

4.2.4. Catches

Landings (DFO 2012a)

Landings for the whole of the Gaspé Peninsula reached 872 t in 2011 (preliminary data) (Figure 6). They increased by 14.8% compared to 2008 (786 t). In 2011, they were 6% above the average of the past 25 years (1986–2010) (823 t). Also that year, 92% of the Gaspésie landings were from LFA 20, 3% from LFA 19 and 5% from LFA 21. Landings from the Gaspé accounted for 23.4% of total Quebec landings (3 716 t). In LFA 20, landings in 2011 reached 805 t, an increase of 8% compared to 2008 (739 t) and 6% compared to the average of the past 25 years (761 t). The upward trend observed since 2008 was noted in most of the sub-areas in LFA 20. Landings from that area dropped significantly between 1999 and 2005 and did not increase between 2005 and 2008. Landings in LFA 19 reached 28 t in 2011, just as they did in 2008 (Figure 6). The average of the past 25 years in LFA 19 is 26 t. Landings in LFA 21A more than doubled between 2008 (16 t) and 2011 (36 t) (Figure 6). In Area 21B, combined landings from the fall fishery and the spring fishery of the following year increased from 5 to 12 t between 2006 and 2011 (Figure 6). The drop in spring landings since 2004 is related to a drop in fishing effort. Fall landings have increased since 2006.

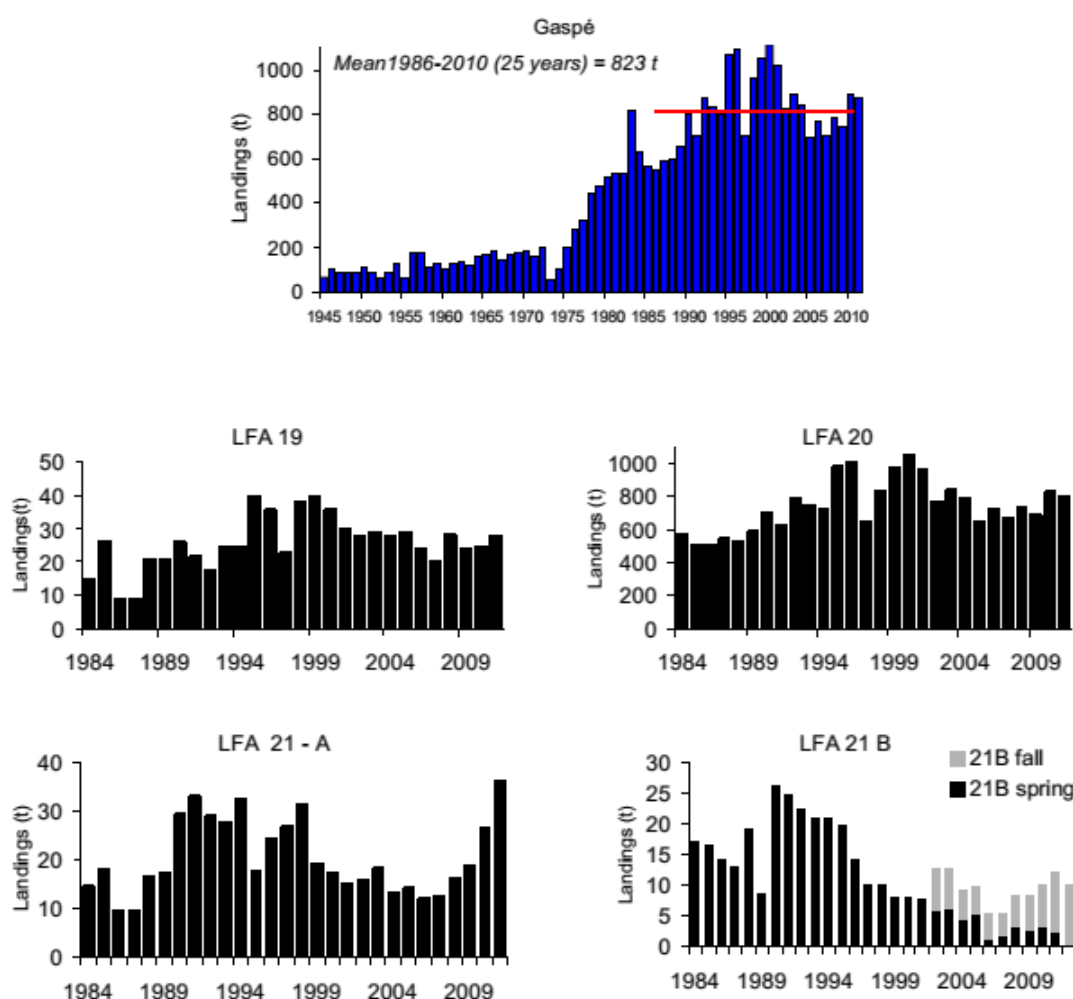


Figure 6. Lobster landings in Gaspésie from 1945 to 2011 and from 1984 to 2011 for LFAs 19, 20, 21A and 21B. The red line represents the average of the past 25 years. Source: DFO 2012a.

Preliminary landings for the whole Gaspésie reached 1032.5 t and 1232 t in 2012 and 2013, respectively (information collected during the site visit).

Catch Per Unit Effort (CPUE) (DFO 2012a)

CPUEs expressed in number or weight of lobster per trap. In 2011, the CPUE for commercial-size lobsters in LFA 20 was 0.58 per trap, which corresponds to a weight of 0.35 kg/trap. The CPUE in number in 2011 was 32% higher than that in 2008 and 9.4% above the series average (1985 to 2010) (0.53 lobster/trap, or l/trap). The CPUE in weight was 34.6% higher than that in 2008 and 39.6% above the series average (0.27 kg/trap). An increase in CPUEs was observed in the three groups of sub-areas sampled, especially in 20B5–B6. CPUE values obtained from the recruitment project also showed an upward trend between 2006 and 2011. CPUEs in Area 19 were 0.59 l/trap and 0.48 kg/trap in 2011, which is 8% and 6% lower than in 2008. However, the values fluctuate considerably from one year to the next. The average CPUE measured during the fall fishery in LFA 21B was 2.1 kg/trap (Figure 4E). This is the highest value observed since the start of the fall fishery in 2001. The 2001–2011 average was 1.2 kg/trap and these high values reflect the highest catchability of lobster in the fall. Traditionally, average CPUEs observed during the spring fishery are about 0.2 kg/trap.

4.2.5. Fishing season

In the Gaspésie, the commercial lobster fishery is a spring activity that lasts 69 days (LFAs 20 and 21) and 71 days (LFA 19).

The Notice to Fish Harvesters for LFAs 19, 20 and 21 for 2012 to 2014 issued by DFO in April 24, 2012 and amended in April 10, 2013, described the opening and closing dates as shown in Table 1.

Table 1. Opening and closing dates in Gaspé Peninsula lobster fishing sub-areas. Source: DFO 2012a.

Areas	Opening and Closing Dates
19A2	April 30 to July 9
19A3	May 5 to July 14
19B	April 30 to July 9
19C1	May 12 to July 21
19C2	May 5 to July 14
20A1	April 28 to July 5
20A2 to 20B8	April 29 to July 6
21A	April 28 to July 5
21B	May 5 to July 12

4.2.6. Fishing method and fleet description

Licensing and Fleet structure

The number of licence holders in the Gaspésie lobster fishery was 175, 172, 164 and 162 in 2011, 2012, 2013, and 2014, respectively. LFA 20 accounts for 87% of the total number of licence in Gaspé Peninsula.

For the 2014 fishing season, there are about 172 vessels targeting lobster in Gaspésie. Lobster fishing vessels vary in overall length from 21 ft. (6.40 m) to 44.83 ft. (13.66 m) with an average length of 39.59 ft. (9.32 m). The same vessel is used at various times during the fishing season to harvest other commercial species such as herring, and mackerel. Crew size also varies but most vessels carry 1 or 2 helpers in addition to the licence holder/owner.

Catching method

Lobster is harvested using baited traps set on the sea bed. The number of traps allocated per LFA is shown in Table 2.

Trap dimension and design have changed and evolved through time and the arrival of hydraulic haulers on fishing vessels has allowed the use of larger traps. However, the majority of traps currently in use are still under the maximum allowable dimensions (Table 2). Building material (wire, wood, metal, or hybrid wood/other material) and trap configuration (rectangular or bow) have changed over time as well as the number of entrances and parlors, and the offsetting and inclination of entrances.

Since 1994, traps must be equipped with escape vents that serve to reduce the retention of undersized lobster and non-target species.

Table 2. Trap allocation per licence and trap characteristics in Gaspésie lobster fishery. Source: DFO 2012b.

20120.

	LFAs		
	19	20	21
Maximum number of traps	250	235 470 (temporary merging involving 2 licences) 435 (permanent merging involving 2 licences) 335 (permanent merging involving 3 licences)	235 470 (temporary merging involving 2 licences) 435 (permanent merging involving 2 licences) 335 (permanent merging involving 3 licences)
Size of traps	92 cm length 61 cm width 50 cm height	<u>Wire traps</u> 92 cm length 54 cm width 39 cm height <u>Wood traps (or hybrid)</u> 87 cm length 56 cm width 46 cm height	<u>Wire traps</u> 92 cm length 54 cm width 39 cm height <u>Wood traps (or hybrid)</u> 87 cm length 56 cm width 46 cm height
Escape vents	<u>Circular Vents</u> Two unobstructed circular openings of a diameter no less than 60 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. <u>Rectangular Vents</u> 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 opening is at most 102 mm from the floor of the trap.		
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.	
Other management measures	<ul style="list-style-type: none">● It is prohibited to haul the traps on the opening day.● It is prohibited to haul and bait the traps more than once a day.● Tagging of all traps is mandatory.		

4.2.7. Market information

The lobster fishery is the major source of income for Gaspésie fishers. One quarter of the lobster landed in Quebec is caught in Gaspé Peninsula waters.

Canada and the United States are the only countries that harvest American lobster with Canada having the highest landings.

In terms of lobster export, the United States is primary market for Canadian lobster, followed by Europe (primarily Belgium, France and United Kingdom) and Asia. Canadian lobster is sold in different forms, but the main product traded on the U.S markets are live lobster, lobster tails and meat. With more than 80% of Canadian lobster exports destined for the United States, U.S. market conditions have a significant impact on the Canadian lobster industry.

80-85%% of Gaspésie lobster are sold live through the processors, retail buyers and live shipper primarily into domestic markets. The majority of processors work through brokers/traders to get their product into food service and retail in domestic markets.

4.3. Principle One: Target Species Background

4.3.1. Stock assessment

For all those units, 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. They are primarily fishery-dependent. The lobster stock assessment is based on the analysis of trends of stock indicators including abundance, demographic structure, fishing pressure and production.

The UoC regroups LFAs 19, 20, and 21. For management purposes, each LFA was divided in different sub-units, some of them being very small (Figure 7): 5 in area 19 (northern part of the Gaspé Peninsula), 22 in area 20 (southern Gaspé Peninsula), and 2 in area 21 (western part of the Chaleur Bay). Each sub-unit is exploited by 1 to 17 harvesters. That subdivision is expected to favour the implementation and the respect of local management measures and a better control through self-policing.

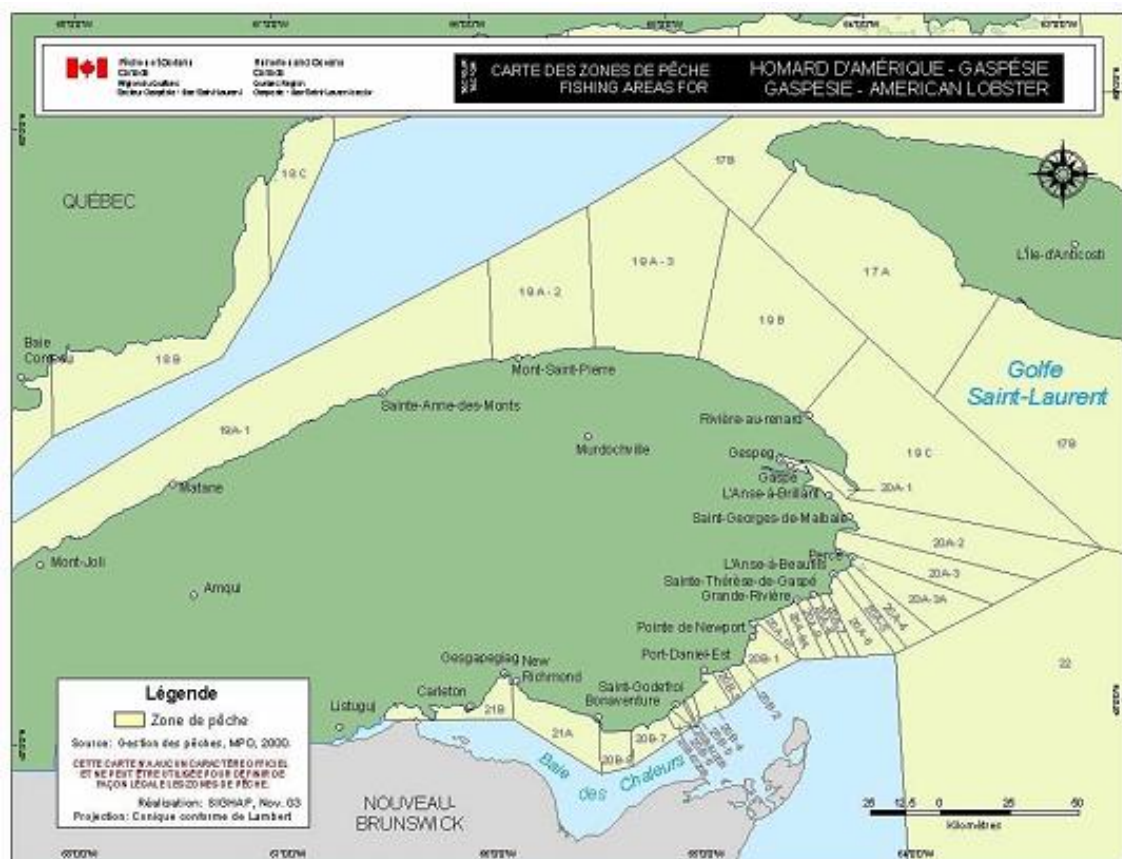


Figure 7. Map of the Gaspé Peninsula showing the different sub-areas of LFA 19(19A1 to 19A3, 19B and 19C), LFA 20 (20A1 to 20A10 and 20B1 to 20B8) and LFA 21 (21A and 21B). Source: DFO 2012a.

4.3.1.1. Source of data

Landings statistics

The database consists of a compilation of lobsters recorded on processing plant purchase slips, corresponding to sale transactions conducted between official lobster buyers and harvesters. Although this information essentially documents monetary transactions, it is assumed that the volume sold to official lobster buyers closely tracks the quantity of lobster caught by lobster harvesters.

Since 2012, an electronic log-book has become mandatory. This is expected to provide more accurate data on catch and effort. At the present time, the time series is too short to be useful to track trends

Other data

At-sea sampling has been conducted on board fishing vessels since 1986 in areas 20A2, 20A8–A9 20B5–B6. It was also carried out from 1997 to 2004 in 21B during the spring fishery, from 2002 to 2004 during the fall fishery, and from 2000 to 2004 and in 2011 in 19C. Since 2005, dockside sampling has replaced at-sea sampling in areas 21B and 19C. From 2008 to 2010, Parks Canada did additional sampling at sea in the Forillon National Park area (19C and 20A1).

Since 2006, 25–35 fishers have participated in a project to develop a recruitment index. Participants are allowed to use two lobster traps modified by closing the escape vents and two regular traps placed alternately on a fishing line. They collect data on the number and size (with a special gauge) of lobster caught. The abundance of pre-recruits is to be used as an index of recruitment to the

fishery one and two years in advance. Data obtained on commercial-size lobsters and on berried females in this project are also considered in the assessment. In 2011, a postseason (September) survey using modified traps (without escape vents) was conducted at five sites in the Gaspé (LFA 20) in order to develop a new index of recruitment to the fishery.

Between 2008 and 2011, scuba diving surveys were conducted in order to look for nurseries with the project to identify sentinel sites to follow larval settlement.

Table 3 summarizes the source of data used to assess the lobster stock status.

Table 3. Source of data used for the assessment of lobster stock of Gaspésie.

Fishing area	Landings	At-sea sampling (2006-...)	Dock-side monitoring	In season Recruitment index	Post season Recruitment index	Scuba diving survey
19B	✓					
19C	✓	2000-2004/2011 2008-2010 (Parks Canada)	(2005-present)			
20A1	✓				2011-present	
20A2	✓	✓				2011
20A3	✓					2012
20A4	✓			✓		2012
20A5	✓			✓		2012
20A6	✓			✓		2012
20A7	✓			✓		2008
20A8	✓	✓		✓		
20A9	✓	✓		✓		
20B1	✓			✓		2009
20B2	✓			✓		
20B3	✓			✓		
20B4	✓			✓		
20B5	✓	✓		✓		2010
20B6	✓	✓				
20B7	✓					
20B8	✓					
21A	✓					
21B	✓	1997-2004 (spring) 2002-2004 (fall)	(2005-present)			

4.3.1.2. Determination of indicators

The stock status assessment is based on indicators of abundance, demographics, fishing pressure and stock productivity (Table 4).

Abundance

Abundance indicators include landings recorded on processing plant purchase slips and catch rates of commercial-size lobsters obtained mainly from at-sea samplings of commercial catches. Landing levels are a function of abundance and a wide range of other factors but are still thought to be indicative of general trends and patterns of abundance. Catch rates (CPUE) are also affected by factors other than abundance.

Demographic structure

The demographic indicators are taken from the lobster size structures and include mean size and weight, jumbo abundance, and sex ratios.

Fishing pressure

The fishing pressure index (exploitation rate) is derived from a measurement of the ratio between the number of individuals (males) from the first moult class recruited to the fishery in a given year and that of the second moult class recruited to the fishery one year later.

Production

Productivity indicators are based on abundance of berried females and on egg production (reproduction) as well as on abundance of pre-recruits (recruitment).

Table 4. Indicators used to assess the lobster stock. Source: DFO 2012a and Gendron and Savard 2012.

Indicators	Source of information
Nominal Fishing Effort	Sale slips - Number of trips/season and number of traps (traps/license x number of licenses x number of fishing days).
Abundance	Landings from sale slips Catch rates (CPUE) - Average catch per trap (weight and number) / season - At-sea sampling and experimental traps
Demography	Size structure (weighed by landings) Average size Catch rates of lobsters > 127 mm ("jumbos") Sex-ratio (M:F) - At-sea sampling and experimental traps
Production - Reproduction - Recruitment	Abundance of berried females (average/season) Egg production - abundance index of berried females for each 1-mm size class x the size-specific fecundity Abundance index of pre-recruits - experimental traps Benthic settlement index - SCUBA diving
Fishing pressure	Exploitation rates (cohorts)

4.3.2. Stock status

Abundance

Landings have been identified as an initial candidate for reference points in recent conservation plan for Gaspésie lobster.

Landings for the whole of the Gaspé Peninsula reached 872 t in 2011 (Figure 8). They increased by 14.8% compared to 2008 (786 t). In 2011, they were 6% above the average of the past 25 years (1986–2010) (823 t). Since 1990, the landings are oscillating well above the Upper Stock Reference point, estimated at 650 t (80% of the average landings for the 1985–2009 period).

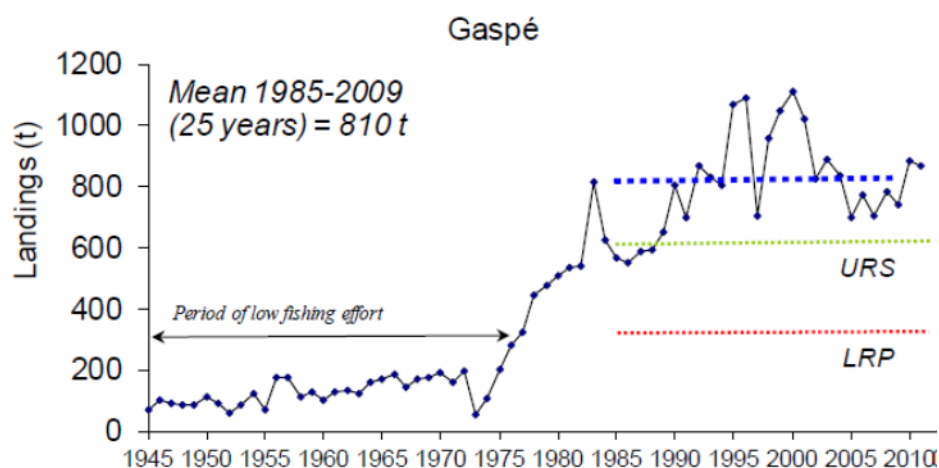


Figure 8. Lobster landings for the entire Gaspésie from 1945 to 2011. Are indicated the reference points accepted for this area (URS = Upper Stock reference point; LRP = Lower stock reference Point). Source: DFO 2014c.

Also in 2011, 92% of the Gaspé landings were from LFA 20, 3% from LFA 19 and 5% from LFA 21. Landings from the Gaspé accounted for 23.4% of total Quebec landings (3 716 t). In LFA 20, landings in 2011 reached 805 t, an increase of 8% compared to 2008 (739 t) and 6% compared to the average of the past 25 years (761 t). The upward trend observed since 2008 was noted in most of the sub-areas in LFA 20. Landings from that area dropped significantly between 1999 and 2005 and did not increase between 2005 and 2008. Landings in LFA 19 reached 28 t in 2011, just as they did in 2008 (Figure 9). The average of the past 25 years in LFA 19 is 26 t. Landings in LFA 21A more than doubled between 2008 (16 t) and 2011 (36 t) (Figure 9). In Area 21B, combined landings from the fall fishery and the spring fishery of the following year increased from 5 to 12 t between 2006 and 2011 (Figure 9). The drop in spring landings since 2004 is related to a drop in fishing effort. Fall landings have increased since 2006.

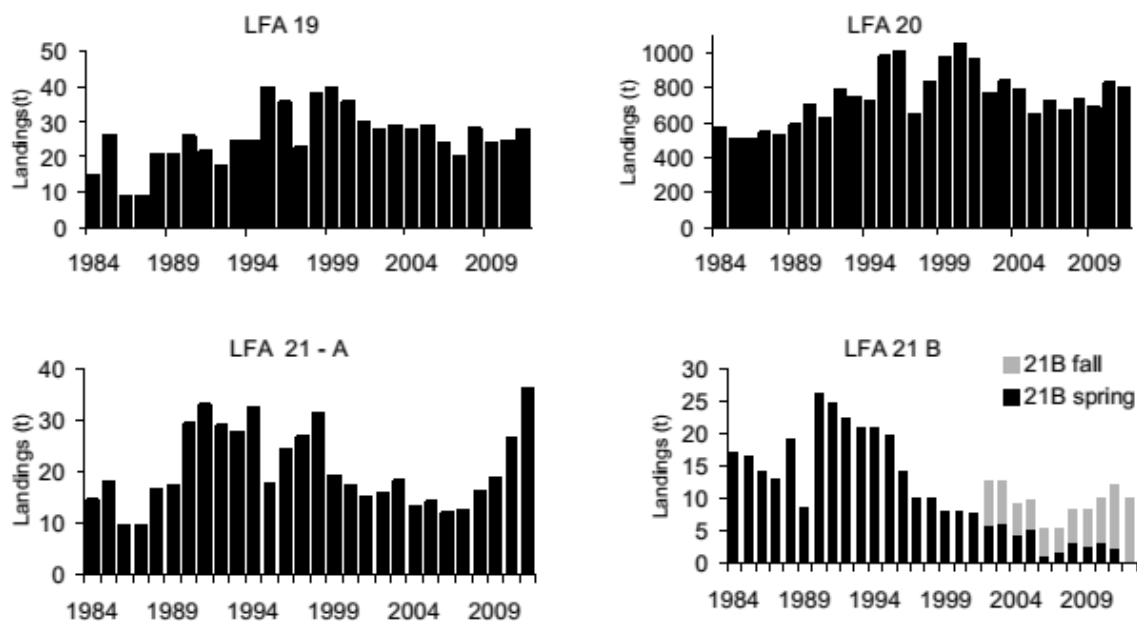


Figure 9. Lobster landings from 1984 to 2011 for LFAs 19, 20, 21A and 21B. Source: DFO 2012a.

Catch rates correspond to the CPUEs expressed in number or weight of lobster per trap. In 2011, the CPUE for commercial-size lobsters in LFA 20 was 0.58 per trap, which corresponds to a weight of 0.35 kg/trap (Figure 10). The CPUE in number in 2011 was 32% higher than that in 2008 and 9.4% above the series average (1985 to 2010) (0.53 lobster/trap, or l/trap). The CPUE in weight was 34.6% higher than that in 2008 and 39.6% above the series average (0.27 kg/trap). An increase in CPUEs was observed in the three groups of sub-areas sampled, especially in 20B5–B6. CPUE values obtained from the recruitment project also showed an upward trend between 2006 and 2011 (Figure 10). The values presented are those obtained with regular traps.

CPUEs in Area 19 were 0.59 l/trap and 0.48 kg/trap in 2011, which is 8% and 6% lower than in 2008 (Figure 10). However, the values fluctuate considerably from one year to the next. The average CPUE measured during the fall fishery in LFA 21B was 2.1 kg/trap (Figure 10). This is the highest value observed since the start of the fall fishery in 2001. The 2001–2011 average was 1.2 kg/trap and these high values reflect the highest catchability of lobster in the fall. Traditionally, average CPUEs observed during the spring fishery are about 0.2 kg/trap.

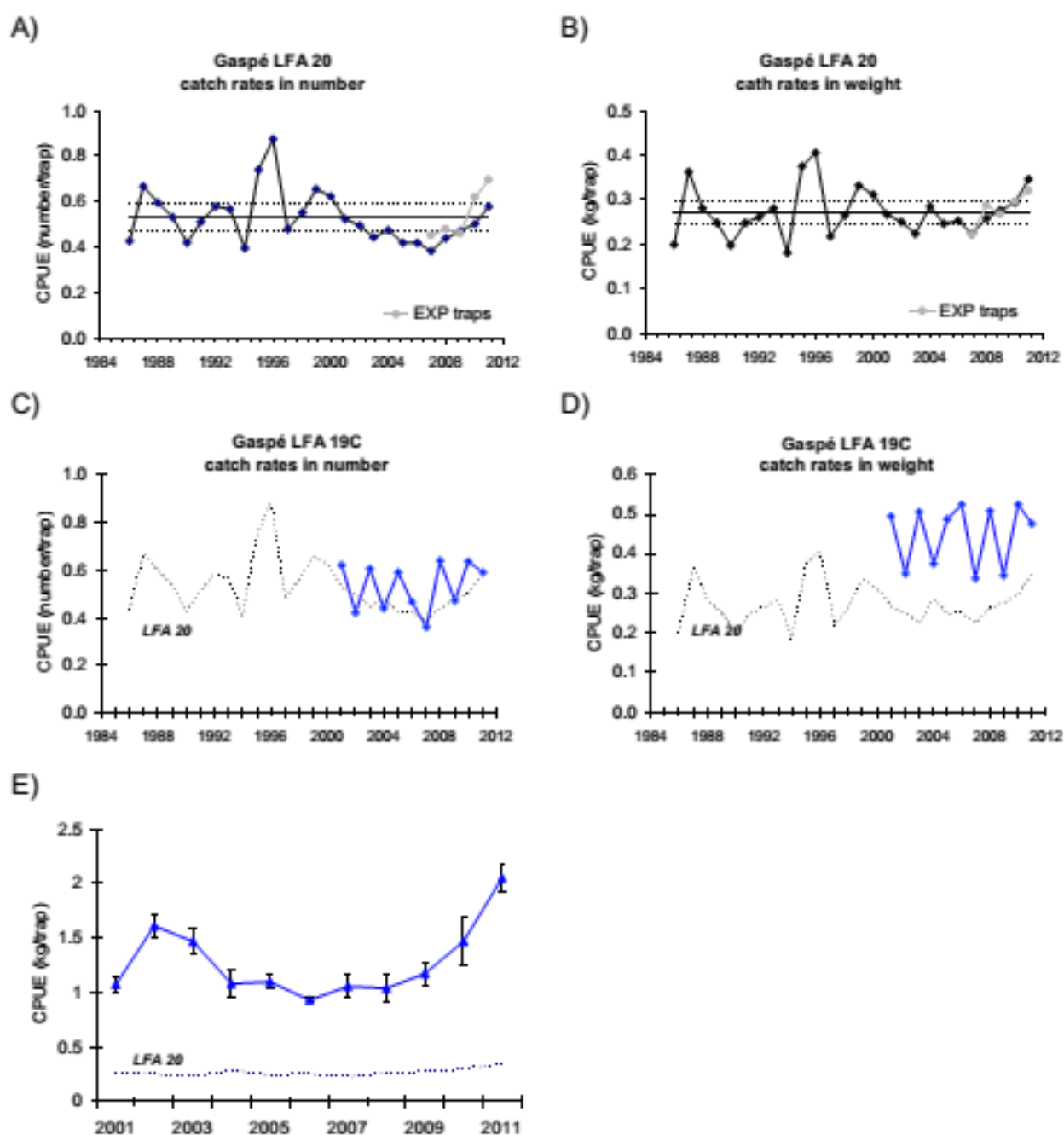


Figure 10. Catch rates (CPUE) of commercial-size lobsters for LFA 20 in the Gaspé from 1986 to 2011 in number (A) and weight (B) per trap, for LFA 19C from 2001 to 2011 in number (C) and weight (D) and for LFA 21B in the fall in kg/trap \pm standard error (E). For (A) and (B), 1986–2010 mean (solid line) \pm 0.5 standard deviation (dotted lines). The grey lines represent CPUEs reported by fishers in LFA 20 who participated in the 2007–2011 recruitment project. For (C), (D) and (E), the dotted line represents CPUEs in LFA 20. Source: DFO 2012a.

Fishing effort

In 2011, the estimated number of trips was 9626. This corresponds to a reduction of 5 % since 2008 (10 137) and of 21% compared to the average for the period 1994-2005 (12 180).

The number of traps was estimated at 2.26 millions in 2011. It was 2.38 millions in 2008 (diminution of 5%) and 3.05 millions in the period 1994-2005 (diminution of 26%). In 2006, the number of trap per license was reduced from 250 to 235.

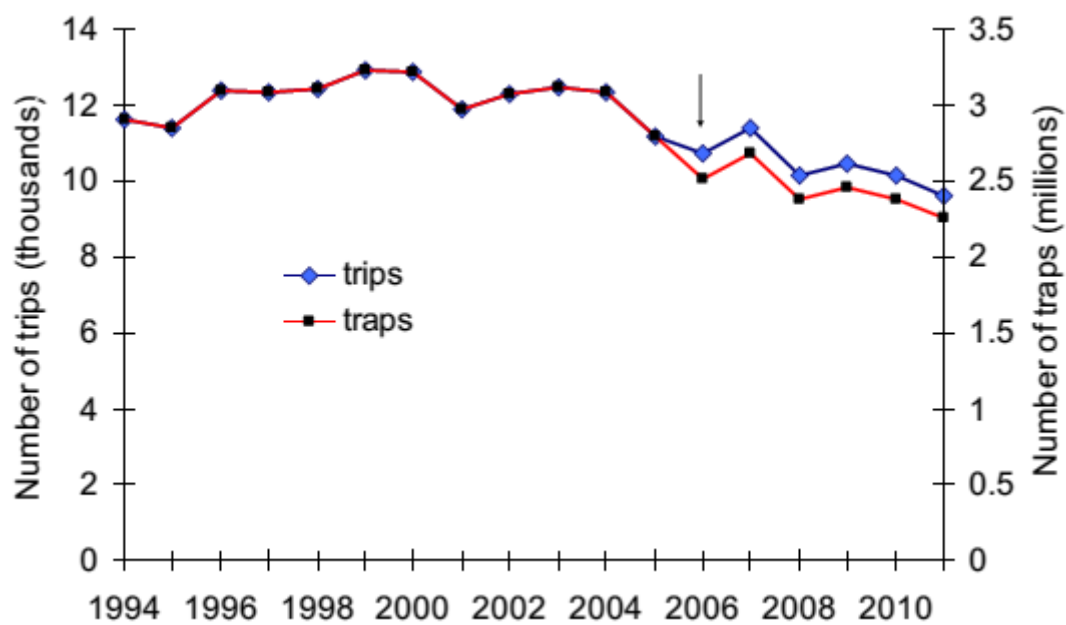


Figure 11. Number of fishing trips and trap hauls in Gaspé from 1994 to 2011. The arrow indicates the year (2006) where the number of traps per licence decreased from 250 to 235 in LFAs 20 and 21. Source: Gendron and Savard 2012.

Fishing effort is widely distributed along the Gaspé Peninsula shore (Figure 12). It is concentrated close to shore and rarely extends deeper than 25 m.

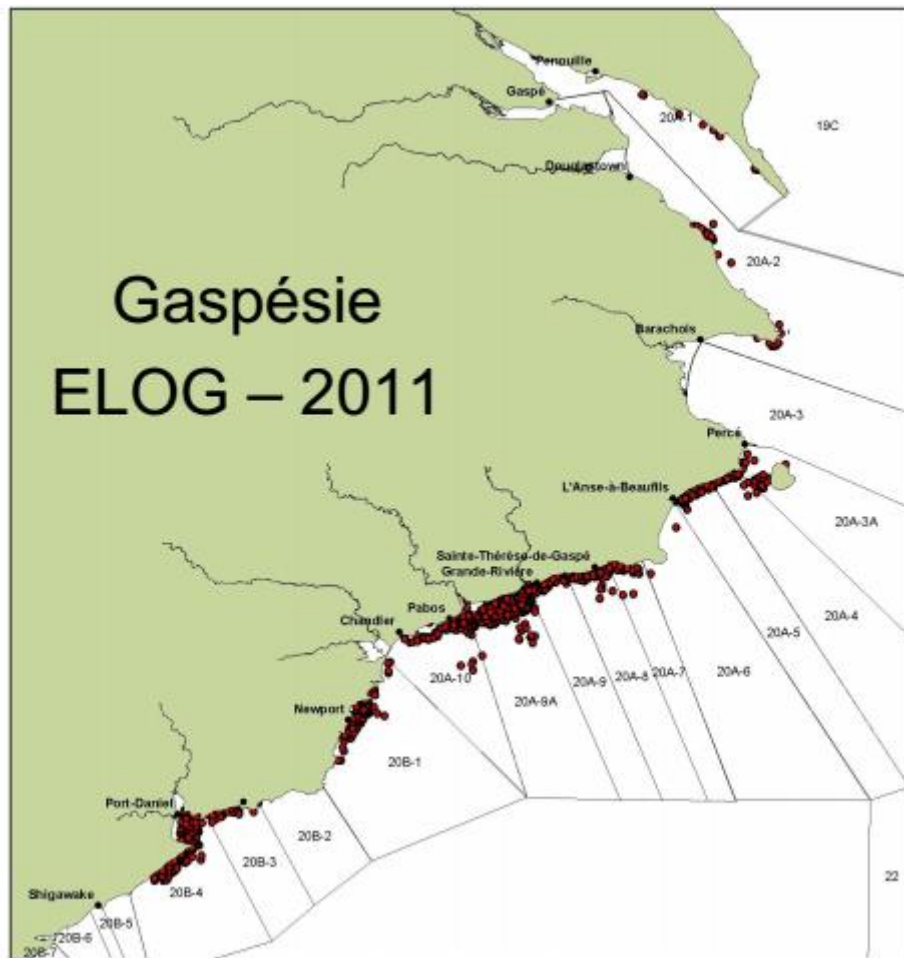


Figure 12. Distribution of lobster fishing effort derived from e-log in 2011 (preliminary). Source: L. Gendron, unpublished data. Presentation made to the Lobster Advisory Committee, Gaspé (Québec), February 23, 2012.

Fishing pressure

For the commercial fraction of the stock, the index of exploitation rate has remained above 80% since the late 1990s (Figure 13) and above the 1986-2009 average (73.3%).

However, the calculation made for lobsters larger than 76 mm (MLS before the size increase), indicates that the exploitation rate decreased from 80% before 1997 down to about 50% in 2003.

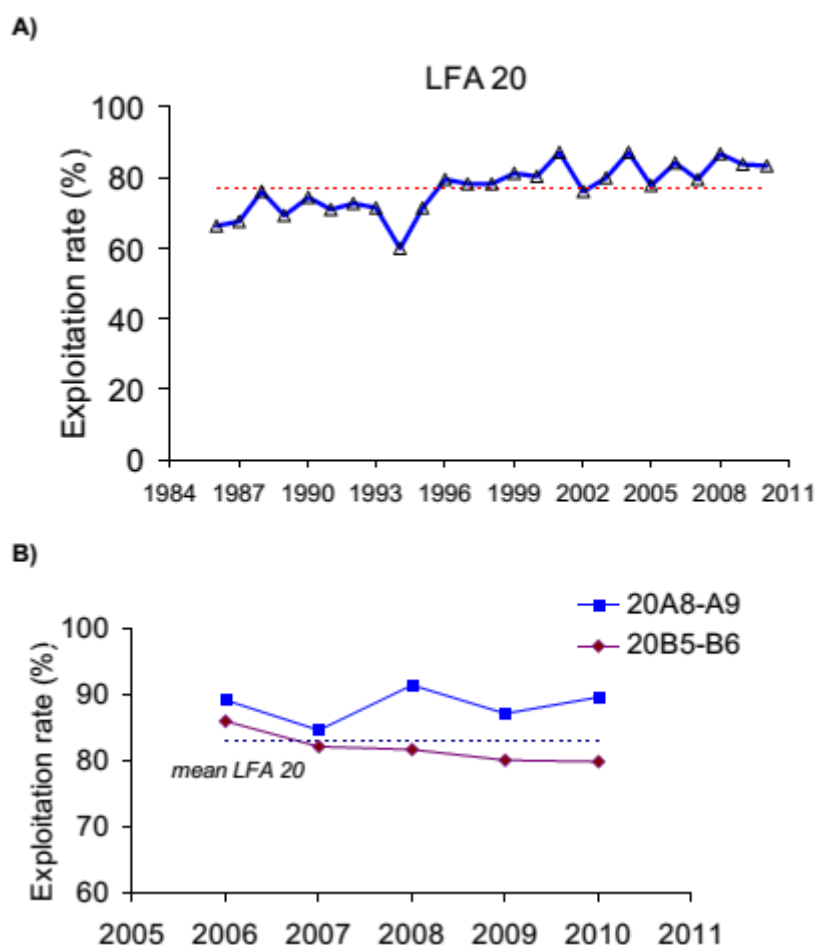


Figure 13. Exploitation rates of commercial size males A) for LFA 20 in the Gaspé from 1986 to 2010; the dotted line represents the series average (1986 to 2009) and B) for LFA 20A8-A9 and 20B5-B6 from 2006 to 2010; the dotted line represents the average for LFA 20 from 2006 to 2010. Source: Gendron and Savard 2012.

Demographic structure

The size structures have a truncated appearance and are dominated by a moult class of 82–93 mm for males and 82–89 mm for females corresponding to the year's recruits. There was no notable change in commercial-size (≥ 82 mm) lobster size structures since 2008 in LFA 20 (Figure 14A) or since the MLS was increased in 2004. Female size distributions are more truncated toward small sizes than male size distributions are. This reflects a decrease in the growth of females as they reach sexual maturity. The mean size and weight of landed lobsters has remained stable since 2008 at around 88 mm and 560 g. The proportion of jumbo lobsters observed in at-sea sampling is quite low. It fluctuated between 0.2% and 0.3% between 2008 and 2011.

Size structures are more spread out in LFA 19C compared to LFA 20 (Figure 14B). Several moult classes are recognized there. The proportion of jumbo lobsters observed is also much higher there. It was 6% in 2011 and has fluctuated between 5% and 6% since 2008. The mean size and weight of landed lobsters has remained stable since 2008 (around 98 mm and 850 g).

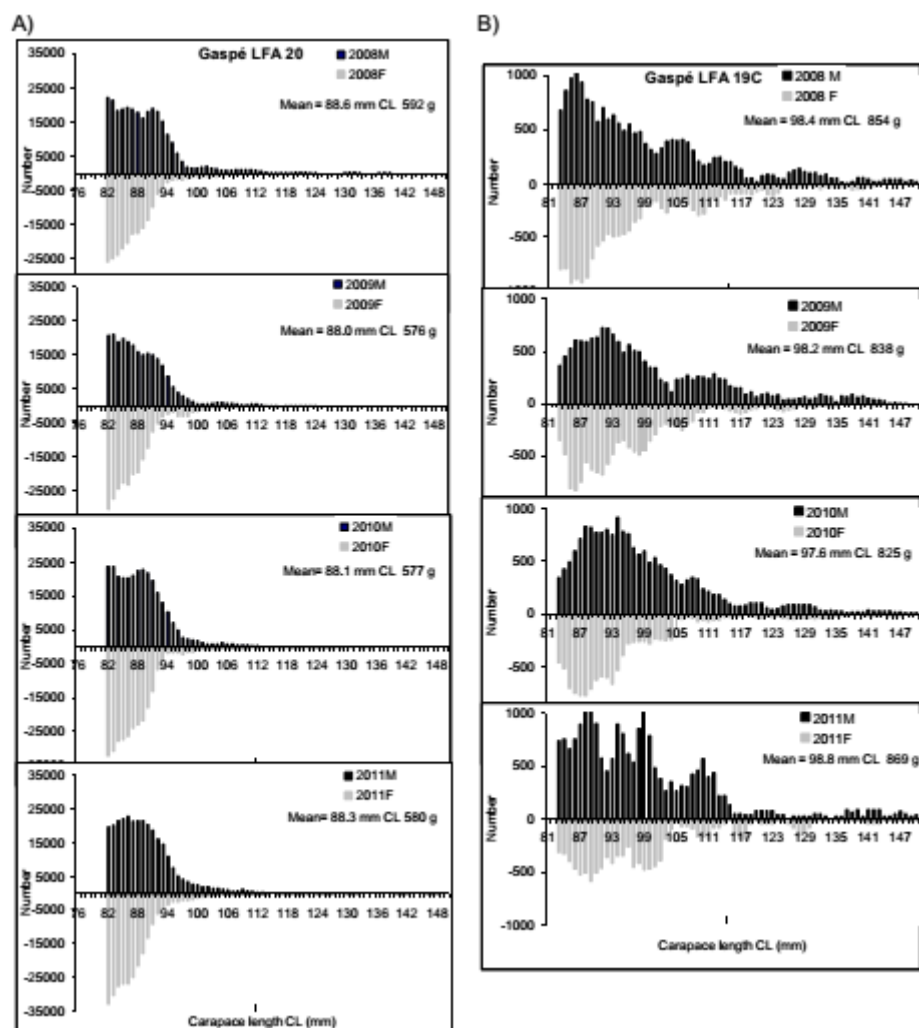


Figure 14. Size frequency distributions of male lobsters (black) and female lobsters (grey) (commercial portion) from 2008 to 2011 for LFA 20 (A) and LFA 19 (B). The frequencies are in number weighted by landings. Source: DFO 2012a.

The mean size of landed lobsters in LFA 21B (dockside sampling) in 2011 was 91 mm in spring and fall. Size structures are slightly less truncated than those observed in LFA 20. From 2008 to 2011, no jumbo lobsters were observed in the samples.

Production

Berried females

In 2011 in LFA 20, the CPUE for berried females reached 0.25 I/trap compared to 0.2 I/trap in 2008. Since then, the abundance of berried females has been at least three times higher than it was when the MLS was 76 mm (Figure 15A). The average CPUE from 1986 to 1996 was 0.06 I/trap. CPUE values obtained in the recruitment project where experimental traps were used have also shown an upward trend since 2007 (Figure 15A). The values are from modified traps (without escape vents), which explains why they are higher than the values from at-sea sampling.

The increased abundance of berried females is visible in the three sub-areas sampled (Figures 15B, 15C and 15D), especially in 20A8-A9 and 20B5-B6 where the abundance of berried females in 2011

was 4.8 and 6.6 times higher respectively than from 1986 to 1996, before the MLS was increased. In 20A2, abundance was 1.5 times greater. In all three cases, the CPUE was higher in 2011 than in 2008.

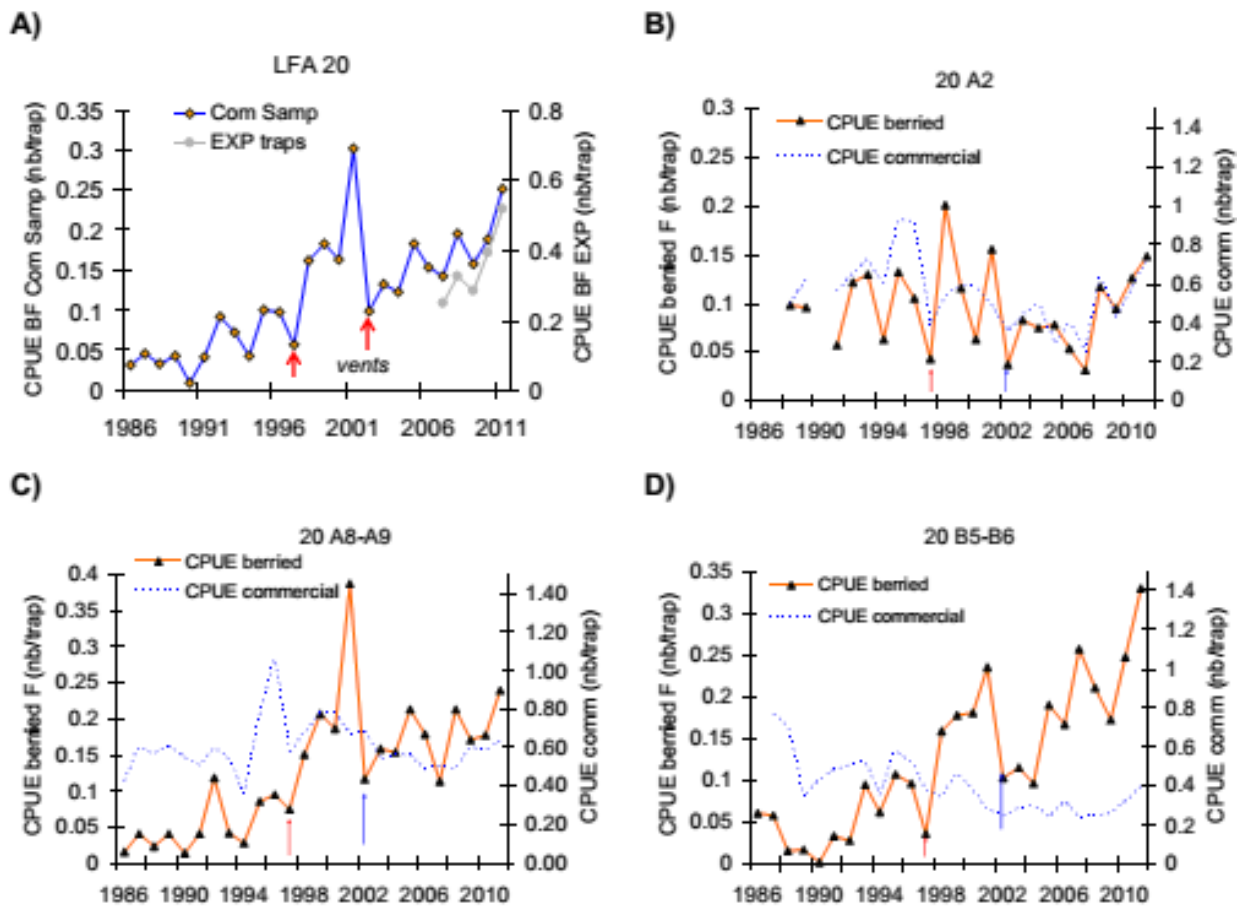


Figure 15. CPUEs of berried females A) in LFA 20, B) in 20A2, C) in 20A8-A9 and D) in 20B5-B6, from 1986 to 2011. The first arrow indicates the start of the increase in minimum catch size and the second arrow indicates the year when the height of the escape vents was increased from 43 mm to 46 mm. For A, the grey line represents CPUEs reported by fishers in LFA 20 who participated in the 2007-2011 recruitment project with experimental traps. For B, C and D, the dotted line represents the commercial CPUE. Source: Gendron and Savard 2012.

In LFA 19C, the abundance of berried females has fluctuated over the years without showing any clear trend (Figure 16). The increase in the MLS had less of an impact on berried females than it did in LFA 20 because of a higher size at sexual maturity.

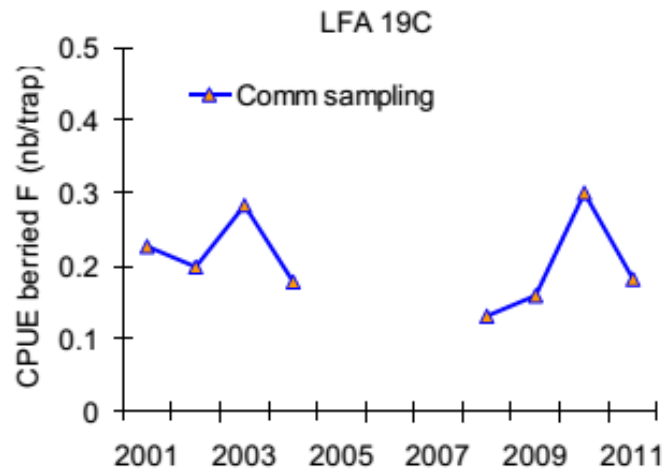


Figure 16. CPUE of berried females in LFA 19C from at-sea sampling. Source: Gendron and Savard 2012.

The examination of size structures of berried females in LFA 20 shows a strong mode under the MLS (Figure 17). A total of 66% of berried females are sublegal. Before the MLS was increased, most of these females did not contribute to egg production. In 2011, the average size of berried females was 81.3 mm CL. Also that year, multiparous females (those that spawn for at least a second time) represented 13% of berried females.

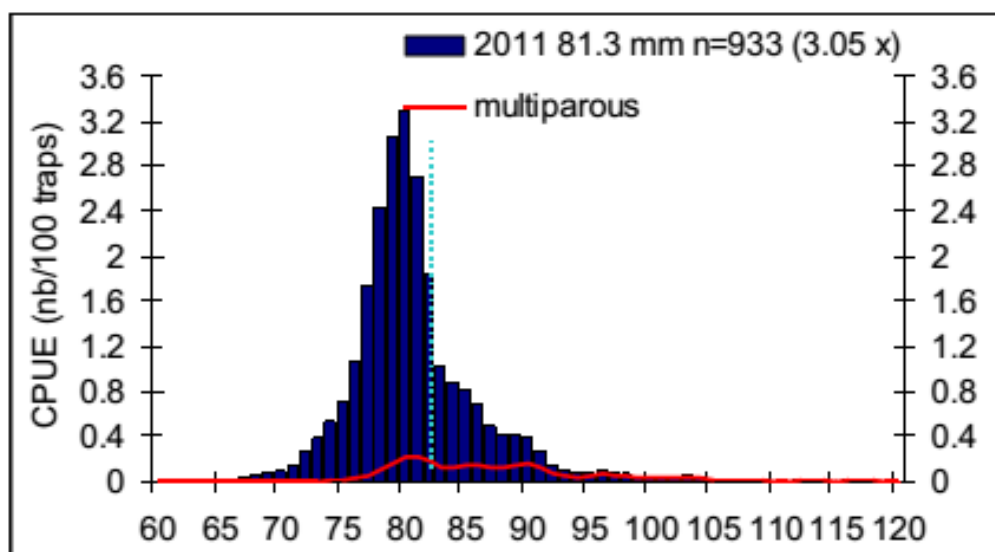


Figure 17. Size frequency distribution of berried females in 2011 in LFA 20. The red line represents multiparous females. The distributions are weighted by abundance indices (annual CPUE). The average size and total number of berried females measured are indicated. The vertical dotted line indicates MLS. Source: Gendron and Savard 2012.

The size structures of berried females in LFA 19C clearly differ from those in LFA 20 (Figure 18). Because of lower exploitation rates, a wider range of sizes is observed. The percentage of sublegal berried females (10%) is much lower than it is in LFA 20. The average size of berried females measured in 2011 was 96.6 mm. There is also a non-negligible portion of jumbo females (4%).

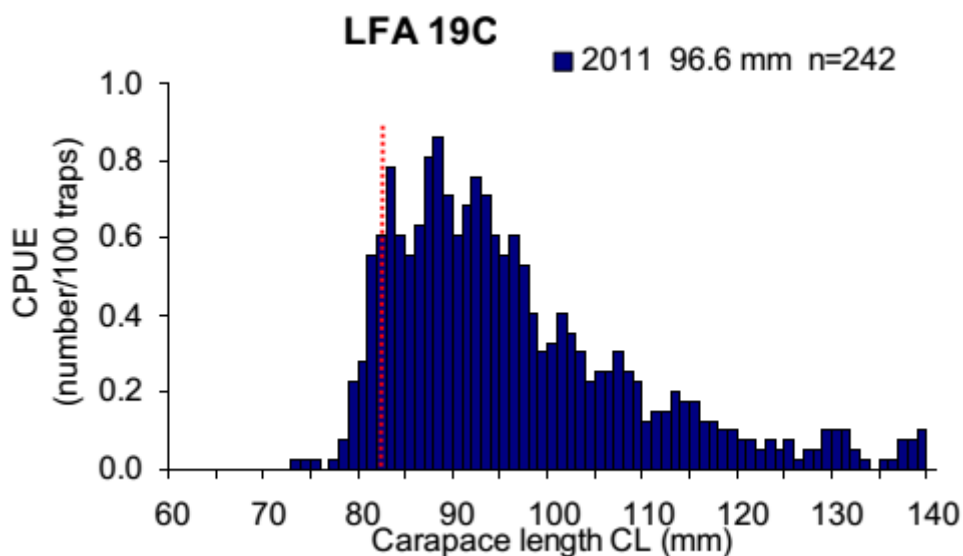


Figure 18. Size frequency distribution of berried females in 2011 in LFA 19C from at-sea sampling. The average size and total number of berried females measured are indicated. The red vertical dotted line indicates the MLS. Source: Gendron and Savard 2012.

Recruitment

Abundance indices of pre-recruits (70–81 mm, one moult below commercial size) from modified traps (closed escape vents) have increased since 2007 in LFA 20 (Figure 19). There is considerable spatial heterogeneity in the abundance of pre-recruits in the Gaspé, but the upward trend was observed in most of the 12 sub-areas covered by the study. Generally, there is a positive relationship between the abundance of pre-recruits in one year and commercial-size lobsters in the following year. However, the relationship can vary with sub-area. On the whole, the abundance of pre-recruits observed in 2011 suggests that landings observed over the past two years could be maintained in 2012. The medium-term outlook (two years) is still inaccurate because of the short data series. Another index of recruitment to the fishery is currently being developed and is based on a postseason survey. The survey is conducted in the fall after moulting and the population sampled represents that which is available to the fishery in the following year. In 2011, traps with closed vents were used to collect data on the abundance of pre-recruits at 245 stations in five sub-areas of LFA 20. The development of a time series (5–10 years) should, in the medium term (five years), establish a connection between the abundance of pre-recruits one year and landings one or two years later. Since 2008, SCUBA diving surveys have been conducted to locate lobster nurseries. About 70 km of coastline were explored between St-Godefroi and Douglastown. Several nurseries were found in this area. Monitoring of the abundance of lobster in some of those nurseries could help in the development of an index of recruitment to the fishery in the longer term.

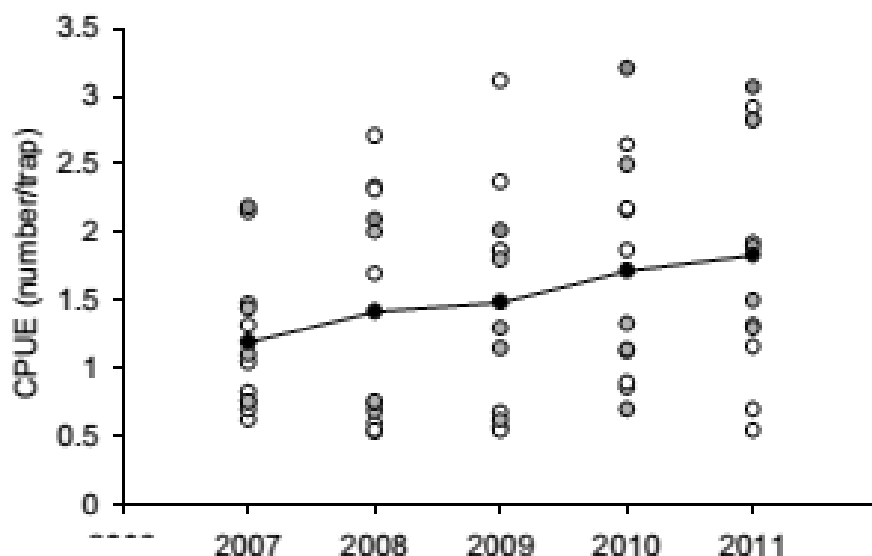


Figure 19. Catch rates (CPUE) of pre-recruits (70–81 mm one moult below commercial size) from 2007 to 2011 for sub-areas 20A (empty circles), 20B (grey circles) and all of LFA 20 (black circles and black line). Data from experimental traps (closed vents). Source: DFO 2012a, and Bruneau and Gendron 2012.

Egg production

An egg production index was obtained by multiplying the abundance index of berried females for each 1-mm size class by the size-specific fecundity. In 2011, the egg production index for LFA 20 was 3.1 times higher than that calculated for 1994 to 1996, before the increase in the MLS (Figure 20). Also that year, multiparous females contributed to 21% of total egg production.

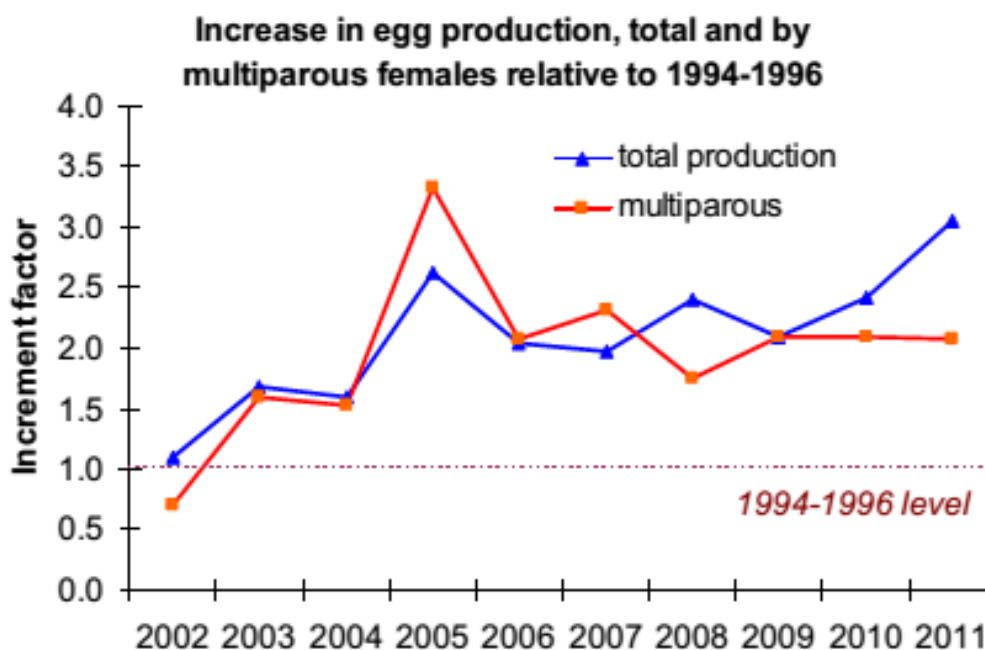


Figure 20. Egg production index since 2002. Red line corresponds to multiparous females, blue line represents the total production. The dotted line represents the value in 1994-1996, before the MLS increase. Gendron and Savard 2012.

4.3.3. Uncertainties

Landings are a function of abundance, level of fishing effort (trap hauls and soak days), timing of effort, fishing strategy and regulations, catchability (environmental, gear efficiency, density, and lobster movements), and the distribution of animals and effort. Variation in reporting levels also contributes to variation in landings. Thus, changes in landings are not a direct reflection of changes in abundance.

Coverage of at-sea sampling is poor (0.13% of fishing activities), which brings about uncertainties in the representativeness of the estimates. Catch rates (CPUE) are a function of abundance and catchability. Catchability is affected by environmental conditions, gear efficiency including trap design and bait, and other factors. Changes in any of these can affect catch rates. While one CPUE index presented does account for temperature, the bulk of the available CPUE time series do not account for any of the factors mentioned above. Spatial fishing patterns can affect the abundance index of berried females if, for example, fishers avoid areas where these females can gather.

Any changes in fishing efficiency (or “effective effort”) have not been accounted for. If fishing efficiency has increased over time due to larger vessels, better navigation or improved fishing strategy, then CPUEs (mean and modelled) will inflate our perception of abundance in recent years. The CPUE indices based on FSRS traps usually trended in a manner similar to CPUE from voluntary logs, indicating that any changes in fishing efficiency in the last 10 years are not affecting our perception of abundance.

4.3.4. Reference points

Egg production per recruit (EPR) reference points have formally been adopted in Canada after the 1995 Fisheries Resource Conservation Council report (FRCC) (FRCC 1995, Fogarty and Gendron 2004). A goal of doubling EPR relative to 1995 levels has been adopted as a management target (FRCC 1995).

The principle of using the landings as proxy for biomass was adopted in 2014 (DFO 2014c), as the starting point. That approach is on the line of the “Decision-making Framework (DMF) for implementing a harvest strategy that includes the precautionary approach (PA)”, developed by DFO in 2009⁹. The same approach was adopted and implemented in the Magdalen Islands (Gendron and Savard 2012) and in the Maritimes (Tremblay et al 2012).

The average biomass for 1985 to 2009 was used as a proxy for B_{MSY} . This corresponds to a productive period during which two generations of lobsters were produced in large numbers. Average landings for the Gaspé (LFAs 19, 20 and 21) from 1985 to 2009 totaled 810 t.

⁹ DFO.2009. A Fishery Decision-Making Framework Incorporating the Precautionary Approach <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precaution-back-fiche-eng.htm>.

Table 5. Lobster landing values corresponding to the proxy for biomass at maximum sustainable yield (B_{MSY}), the upper stock reference (USR), and the limit reference point (LRP) for the lobster stock of Gaspésie. The 2011 landings are shown and the position of the stock in 2011 within the status zones is shown (healthy, landings \geq USR; cautious, USR > landings > LRP; and critical, landings \leq LRP).

Period	B_{MSY} proxy	USR (80% B_{MSY})	LRP (40% B_{MSY})	2011 landings	Stock status zone
1985-2009	810 t	650 t	325 t	872 t	Healthy

4.3.5. Harvest Strategy, Harvest Control Rules and Tools

Harvest Strategy

The lobster fishery is managed by effort control (input fishery). The four most important measures in controlling effort are the limited entry of lobster fishing licences, an individual trap allocation, restrictions on gear characteristics, and a limited fishing season. In addition to those management measures, other measures were implemented to protect key components of the lobster population. Lobster can only be retained if they comply with a MLS designed to allow a portion of females to reach sexual maturity before being harvested. Egg-bearing and v-notched females must also be released.

In 1995, the Conservation Framework for Atlantic Lobster (“1995 Report”) published by the FRCC indicated that most of the Atlantic lobster stocks were overexploited. The FRCC formulated objectives and recommended conservation measures. The two main objectives were to increase the egg production (eggs-per-recruit) and to reduce the exploitation rate and the effective fishing effort.

The FRCC recommended that eggs-per-recruit be increased to five percent of an unexploited population for all LFAs. The Council recognized that the five percent target was somewhat arbitrary and that it is not possible to determine precisely the minimum value of eggs-per-recruit that would adequately reduce the risk of recruitment failure. Increasing the eggs-per-recruit was seen as a precautionary measure and was not offered as an absolute guarantee against lobster stock decreases or a sure path to an increase in landings. In implementing the FRCC recommendations, DFO chose to modify the target to double eggs-per-recruit rather than aim for the five percent target suggested given the appreciable uncertainties in the estimates of eggs-per-recruit of an unexploited population.

The target of doubling the eggs-per-recruit was achieved in only nine of the 38 LFAs, including LFAs 19, 20 and 21, (Figure 21, FRCC 2007). The FRCC further recommended setting the MLS at size of the onset of 50% sexual maturity (SOM_{50}) allowing for more primiparous females to mature before becoming available for the fishery (FRCC 2007). MLS was increased to 50% at size at maturity.

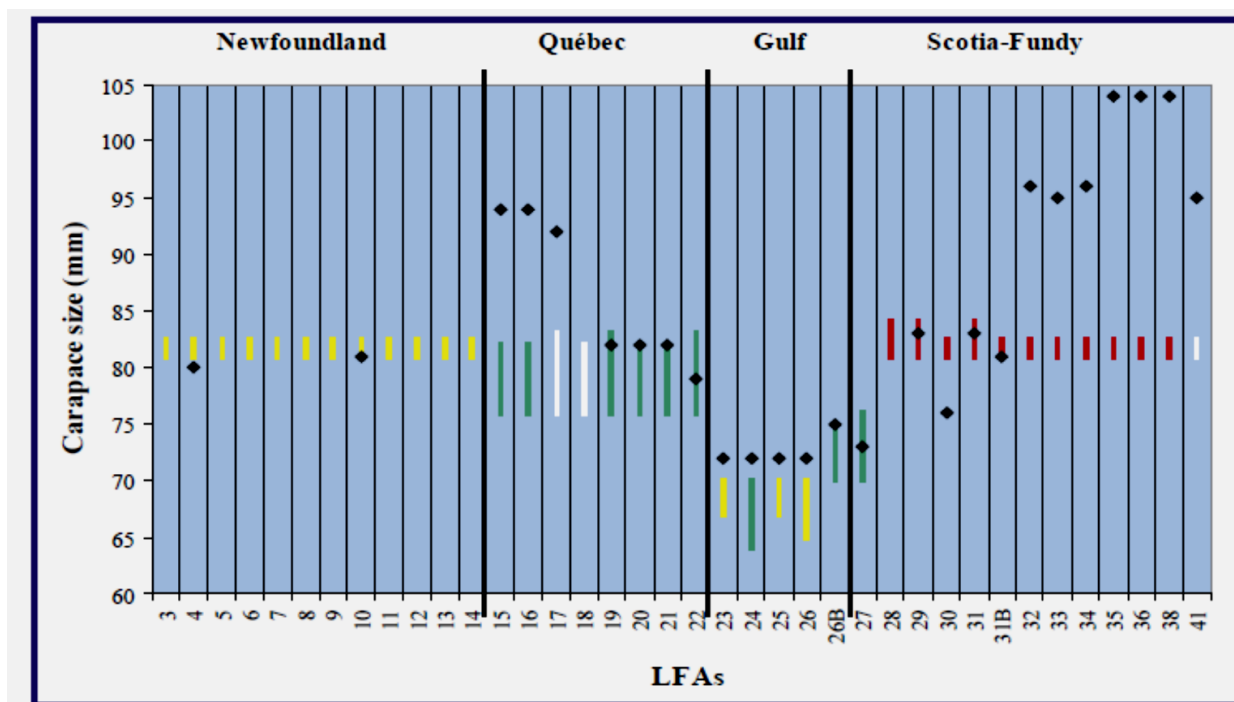


Figure 21. Increase in carapace length (mm) between 1995 and 2006 in each LFA in relation to the size at sexual maturity (black dot). Bars in green represent where the doubling of eggs-per-recruit (100% increase) was achieved, the yellow bars where the eggs-per-recruit increase was $\geq 50\%$ and red bars, where the eggs-per-recruit increase was $< 50\%$. White bars show where eggs-per-recruit increase was not assessed because it was not a concern given low exploitation rates (LFA 17 and 41) or because of the absence of information (LFA 18). Source: FRCC 2007.

From both 1995 and 2007 reports, FRCC also concluded that exploitation levels were too high and that fishing effort needed to be reduced. Two conservation plans (1998 and 2005) (DFO 1998a and 1998b, and DFO 2005a) 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 2009¹⁰ 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.

Table 6 summarizes the major changes that occurred in the Gaspésie lobster fishery over the years.

¹⁰ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/lobster-homard/alsm-mdih-eng.htm>

Table 6. Major changes in the Gaspésie lobster fishery.

Year	MLS	Other conservation measures
1992	76 mm	Voluntary V-notching
1994	76 mm	Release of V-notched females is mandatory
1995	76 mm	216 licenses (LFAs 20-21)
1997	78 mm	
2002	81 mm	Vertical opening of escape vent increased from 43 mm to 46 mm.
2004	82 mm (LFA 20) 83 mm (LFA 19)	
2006		Number of traps/licence reduced from 250 to 235 Season shortened by 2 days.
2007		9 licenses retrieved.
2008		Maximum catch size of 155 mm CL (LFA 20). 8 licenses retrieved.
2009		Maximum catch size of 150 mm CL (LFA 20)
2010		11 licenses retrieved.
2011		8 licences retrieved Maximum of 12 fathoms between traps; minimum of 6 traps per line.
2012		Standard trap; maximum catch size of 145 mm CL (LFA 20)
2013		10 licences retrieved

Harvest Control Rules (DFO 2014c)

Three categories of management measures apply in the lobster fishery: escapement measures, input control measures and output control measures. For each of the three categories, there is a set of tools described in the "tool box" in FRCC (1995). Escapement measures include size limits (minimum, maximum or a closed window of sizes), V-notching and discarding certain categories of lobster such as berried females. Input control measures include those designed to limit the various components of the fishing effort such as the number of fishing days allowed, the number of traps, trap dimensions, and those limiting fishing operations such as daily hours of fishing operation, the number of daily hauls, the length of trap lines and the number of traps per line. Input control measures could also include the implementation of fishing exclusion zones. Output control measures are intended to control the amount of landings; and such these measures rely on quotas.

In the PA for lobster in the Gaspé, it will be possible, depending on stock status zones, to use these measures successively and additively. Presently, we consider that the stock is in the healthy zone. Although considered high, the current exploitation rate is acceptable and under current environmental and ecological conditions, it does not endanger the health of the stock. Management measures may remain unchanged as long as the stock remains in this area. Target reference points can still be defined if needed, based on imperatives other than biological. Escapement and input control measures can be considered when the stock will be in the cautious zone. If the stock reaches the critical zone, it may be necessary to use output controls. However, the measures mentioned above are not all equivalent in terms of their effect on reducing the removal rate. Escapement measures have an immediate impact on the stock. For example, increasing the minimum catch size has an immediate effect on reducing the removal rate because it allows a direct and complete protection of an additional fraction of the population. Measures to control fishing effort have less direct effects on reducing the removal rate, especially in situations where there is initially a fishing overcapacity.

4.4. Principle Two: Ecosystem Background

	List principle 2 Species identified during Scoring Sessions
Retained Species	Under licence conditions, male rock crab (<i>Cancer irroratus</i>) is allowed to be landed. But in actual fishing practices, rock crab is discarded. With respect to bait used in the Gaspésie lobster fishery, refer to section 4.4.1 Retained species.
Minor Bycatch Species	There have been 18 species identified as per the DFO report (Gendron and Duluc 2012). Rock crab (<i>Cancer irroratus</i>) has been identified as the main bycatch species, 17 bycatch species have been identified as minor.
Major Bycatch Species	There have been 18 species identified as per the DFO report (Gendron and Duluc 2012). Rock crab is the only major bycatch species identified in this fishery. There are 17 minor bycatch species identified in the fishery. The bycatch survey has revealed that bycatch rates are fewer than 5% of lobster total catch which by way of definition of the MSC they are not considered a main bycatch species.
ETP Species	<i>Species at Risk Act or SARA, Committee on the Status of Endangered Wildlife in Canada or COSEWIC</i> (See section 4.3.3) <i>Leatherback Turtle Dermochelys coriacea</i> (Endangered under the SARA and the COSEWIC) <i>Northern Wolfish Anarhichas denticulatus</i> (Threatened under the SARA and the COSEWIC) <i>Spotted Wolfish Anarhichas minor</i> (Threatened under the SARA and the COSEWIC) <i>Striped Bass Morone saxatilis</i> (Extirpated under the SARA and the COSEWIC) <i>Atlantic wolfish Anarhichas lupus</i> (Special concern under the SARA and the COSEWIC) <i>Marine mammals</i> (See section 4.3.3) Sources http://www.sararegistry.gc.ca/sar/index/default_e.cfm http://www.dfo-mpo.gc.ca/species-especes/search-species-recherche-especes-eng.htm

4.4.1. Retained species

The Assessment Team had proposed to score the PI 2.1.1 Retained Species Outcome using the MSC's Risk-Based Framework (RBF)¹¹, but as further information was obtained during the site visit, it was determined that this PI could be score using the default PISGs.

Under the AFR (1985), lobster harvesters are not authorized to keep any groundfish species caught incidentally. Nonetheless, under the section 55 of the AFR, lobster harvesters are allowed to retain **male rock crab** without requiring a rock crab licence.

However, in actual fishing practices, rock crab is not retained by lobster harvesters. The last reported landings of rock crab in the lobster fishery occurred in 2010 with 0.25 t and 2 t in North-Gaspé and South-Gaspé, respectively (Gendron et Savard 2013), and none has been reported since (Figure 22).

¹¹ http://www.msc.org/track-a-fishery/fisheries-in-the-program/in-assessment/north-west-atlantic/gaspesie-lobster-trap/assessment-downloads-folder/20140418_Use_of_RBF_LOB455.pdf

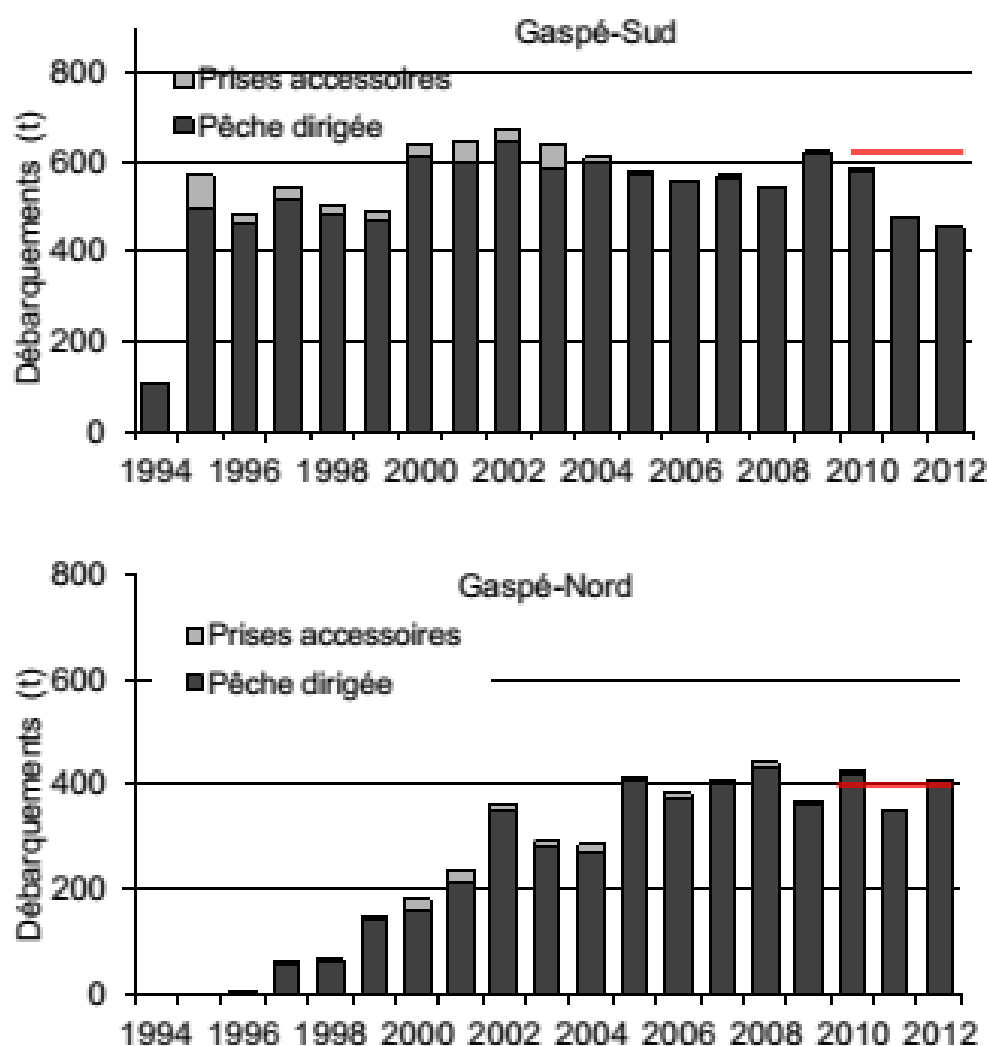


Figure 22. South-Gaspé (top panel) and North-Gaspé (bottom panel) rock crab landings (t) from directed fishery (dark grey) and lobster fishery (light grey); the red line represents the TAC for the directed fishery. Source: Gendron et Savard 2013.

Bait

CB3.5.5 The assessment team shall consider species used as bait in a fishery, if they are caught by the fishery under assessment or elsewhere under the Retained Species component in P2.

A bait survey was carried out by the Quebec Aquaculture and Fisheries Innovation Center (MERINOV) during the 2012 lobster fishing season (Laplanche et al 2013). MERINOV interviewed 8.3% of the total number of harvester to obtain quantitative information on bait. MERINOV interviewed 5 lobster harvesters to obtain qualitative information on bait. According to MERINOV survey, DFO and RPPSG (*pers. comm.* during the site visit), the main bait used in the Gaspésie lobster fishery are the Atlantic mackerel (from Canada and in a small proportion from US) and the SGSL fall-spawning herring.

Also, 60% of the harvesters interviewed by MERINOV **occasionally** used rock crab as additional bait with the traditional bait. Lobster harvesters must record rock crab catches in the e-log mandatory since 2012. But according the DFO staff, it is not specified retained or discarded. The Conservation & Protection (C & P) staff, and lobster harvesters met at RBF and Client meetings during the site visit indicated that harvesters recorded the rock crab retained for bait purposes. A preliminary evaluation

from DFO showed that the amount of rock crab recorded in the e-log represented around 1% of total lobster catches since 2012.

According to MERINOV survey, the mean daily amount of bait used in the Gaspésie lobster was for the 2012 fishing season, between 194 lb and 208 lb, except for the last week where it was 147 lb.

Moreover, the mandatory e-log implemented since the 2012 fishing season records the species used as bait and the bait condition (fresh or frozen) for each fishing day. The bait origin and amount used will be recorded in e-logs in 2015.

Atlantic mackerel in the Northwest Atlantic

The Northwest Atlantic mackerel stock is a transboundary stock that ranges from North Carolina in U.S. to Labrador in Canada, with northern and southern spawning contingents (TRAC 2010). This stock is migratory and seasonal distribution patterns are influenced by water temperature. The TAC is Atlantic-wide with allocation for U.S. and Canada mackerel fisheries.

According to the last joint Canada/U.S. Transboundary Resources Assessment Committee (TRAC) mackerel stock assessment (TRAC 2010), giving the uncertainty in the stock assessment, the TRAC could not determine overfished and overfishing status, and considered the status of the Northwest Atlantic mackerel to be “unknown”. The assessment model exhibited strong retrospective patterns and was also faced with uncertainty in stock structure and in particular whether the U.S. and Canadian contingents should be classified as two distinct mackerel stocks or one unit stock (NEFSC 2014).

The Canadian and U.S. Atlantic mackerel contingents were assessed separately and these assessments were used by the Assessment team in the context of the Gaspésie lobster fishery assessment.

Canadian Atlantic mackerel

The Canadian Atlantic mackerel fisheries are prosecuted using gillnets, trapnets, handlines and purses seines and managed under an Integrated Fisheries Management Plan effective from 2007¹². Mackerel fisheries are input control (licencing, fishing season, gear characteristics) and output control (TAC) fisheries. The TAC is Atlantic-wide, and Canadian TAC was 60,000 t following the 2010 Canadian Advisory Committee (DFO 2014a). Finally, following the 2012 Canadian Advisory Committee, the TAC was set at 36,000 t to equal the US TAC despite a scientific advice that recommended annual catches not exceeding 9,000 t (DFO 2012c). For several years, 40% of the Canadian TAC has been allocated to large seiners and 60% to small seiners and other gears (DFO 2012c). The three Canadian provinces with the largest landings are Newfoundland and Labrador, Prince Edward Island (PEI) and Quebec (Table 7). 65%, 19% and 10% of TAC has been caught in 2010, 2011 and 2012, respectively.

¹² <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/mackerel-atl-maquereau/mac-atl-maq-2007-eng.pdf>

Table 7. Landings (t) of Atlantic mackerel from Newfoundland and Labrador (NFDL), Quebec (QC) and Prince Edward Island (PEI). 2012 and 2013 data are preliminary. Source: DFO 2014a.

Year\Province	PEI	% of total	NFDL	% of total	QC	% of total	Atlantic total
2010	1,959	5%	33,159	86%	1,709	4%	38,753
2011	1,400	12%	7,337	64%	1,345	12%	11,401
2012	1,465	23%	2,619	40%	1,177	18%	6,468
2013	505	7%	5,145	69%	1,282	17%	7,431

As a result of the last stock assessment (DFO 2014a), age at 50% maturity has varied little over the years. However, length at 50% maturity has varied and in most cases it is greater than the minimum authorized length of catch of 250 mm. the fact that catches may target immature fish represents an additional pressure for the stock. The abundance index from the egg survey dropped significantly between 1993 and 1998, following by an increase caused by the arrival of the strong 1999 year-class. The index dropped again from 2002 to reach since 2005 the lowest values of the series, which reflects the collapse of the stock.

An analytical assessment based on a sequential population analysis (SPA) was undertaken using the Canadian catch-at-age (1996-2013) and the abundance index from the Southern Gulf of St Lawrence egg survey (1996-2013). Mortalities calculated by age group remain high with values superior than 0.46. The significant increases in fishing mortality were accompanied by declines in spawning and total biomasses (Figure 23). The lowest biomasses of the whole historical series were estimated in 2012 and 2013.

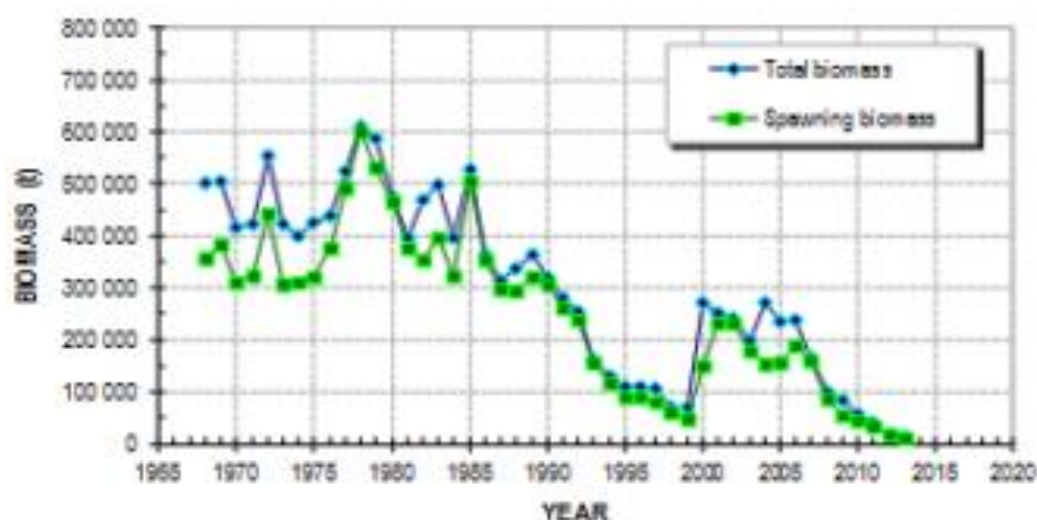


Figure 23. Total and spawning Atlantic mackerel biomasses (t) in NAFO subareas 3 and 4 for the 1968-2013 period. Source: DFO 2014a.

From 2007 to 2009, the trajectory of the stock moved inside the “overfishing and not overfished” area (Figure 24), but the trajectory subsequently remained in the “overfishing and overfished area”.

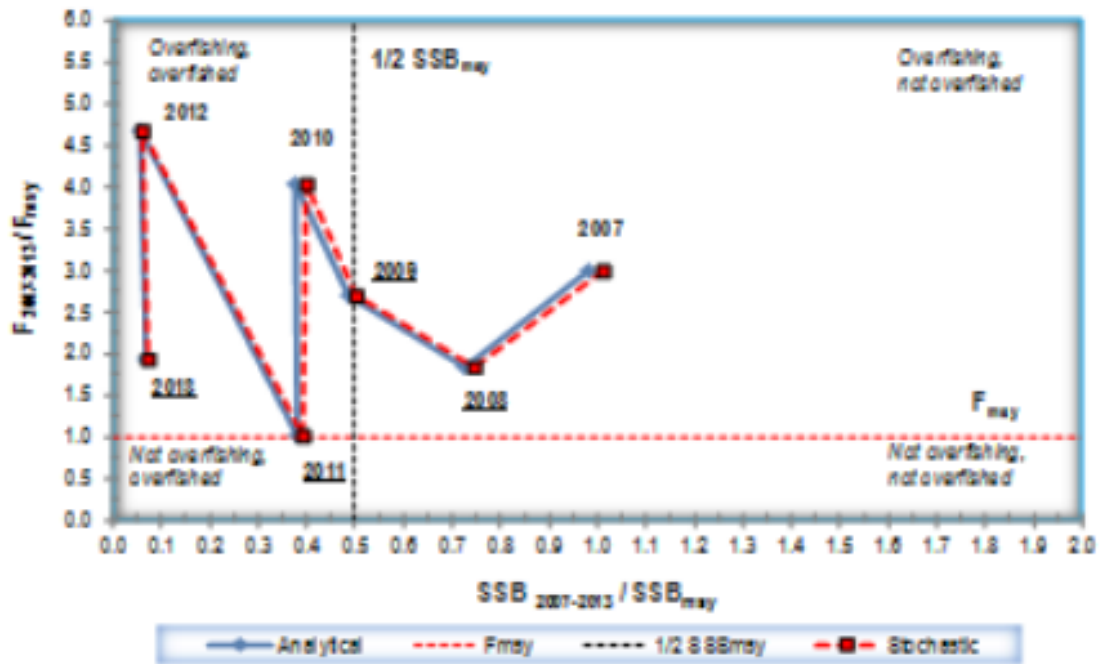


Figure 24. Status of the fishing mortality (F) and spawning biomass (SSB) (t) of the Atlantic mackerel in NAFO subareas 3 and 4 in 2013 and trajectory of the stock estimated since 2007 from the results of the retrospective analyses. Spawning biomasses at the maximum sustainable yield (msy) were estimated by analytical and stochastic approaches. Source: DFO 2014a.

Given the critical situation of the stock, the 2014 TAC, set at 10,000 t, was reduced of 26,000 t compared to 2013¹³. The minimum size was increased from 250 mm to 273 mm.

The 2010 TRAC assessment results are consistent with the decreasing trend in the spawning biomass in the Gulf of St Lawrence reported in the 2008 Canadian mackerel assessment. And the level of spawning biomass reported in the 2014 Canadian mackerel assessment is even lower.

U.S. Atlantic mackerel

A small portion of mackerel comes from the U.S. Atlantic mackerel fishery. The U.S. Atlantic mackerel fishery primarily uses mid-water and bottom trawls. The Atlantic mackerel, well-managed and resilient species, is managed by the Mid-Atlantic Fishery Management Council and the NOAA's National Marine Fisheries Service under a Fishery Management Plan established in 1978. Landings of Atlantic mackerel in US were 6,019 t and 5,250 t in 2012 and 2013, respectively. The FMP includes a number of measures to ensure sustainable harvesting including input (limited access program) and output (quotas) controls, reference points, and protection of mackerel Essential Fish Habitats^{14,15}. As a result of the last stock assessment (2006), fishing mortality remains very low (below $F=0.06$) since 1992, and the Atlantic mackerel spawning stock biomass (SSB) is 2.3 million mt for a SSB_{MSY} of 644,000 mt¹⁶. Therefore, the stock was not overfished, and overfishing was not occurring at this time. However, given the uncertainties in the stock assessment pointed out in the 2010 TRAC report and the absence of recent stock assessment since 2006, the assessment team cannot be consider that the US mackerel stock is highly likely to be within biologically based limits.

¹³ <http://www.dfo-mpo.gc.ca/decisions/fm-2014-gp/atl-009-eng.htm>

¹⁴ <http://www.mafmc.org/msb/>

¹⁵ <http://www.nero.noaa.gov/sustainable/species/msb/>

¹⁶ <http://www.nefsc.noaa.gov/sos/spsyn/pp/mackerel/>

Herring (fall spawner component)

Herring in the SGSL consist of a spring spawner component and a fall spawner component. SGSL herring are harvested by an inshore gillnet fleet on spawning grounds and a purse seine fleet (vessel > 65') in deeper waters. The TAC has been set separately for spring and fall fishing seasons since 1985. The 2011 TAC was 65,000 t and 2,000t for the fall spawner and the spring spawner, respectively. For both seasons, 77% of the TAC was allocated to the inshore gillnet fleet and 23% to the purse seine fleet. The spring fishery occurs in January-June and the fall fishery in July-December. Gaspésie lobster fishery is a spring fishery. According to lobster industry, in order to secure their bait supply and to be sure that the amount of herring for bait purpose is available before the starting of the lobster fishing season, lobster harvested use fall spawning herring from the fall inshore gillnet fishery (95% of the total catch of fall spawners) of the previous year and freeze the herring until the lobster fishing season of the following year.

The gillnet fleet harvests almost solely the spring spawner component in the spring, except for June, and solely the fall spawner component (99.9% of the total catch) in the fall (DFO 2012d).

A two-year SGSL Fall Herring Conservation and Harvesting Plan for 2012-2013 was issued by DFO in June 2012¹⁷. This plan includes a number of measures to ensure sustainable harvesting including input (gear characteristics, fishing season, fishing area) and output (quota allocations) controls. For the fall spawning component, the limit reference point (B_{lim}) and the upper stock reference (B_{USR}) are 51,000 and 172,000 t respectively (DFO 2012d). As a result of the last stock assessment, the exploitation rate in 2011 was 21% below $F_{0.1}$ reference level of 25% and the 2012 beginning-of-year spawning stock biomass was estimated to be about 183,800 t above B_{USR} (Figure 25). Therefore, the stock is not overfished, and overfishing is not occurring.

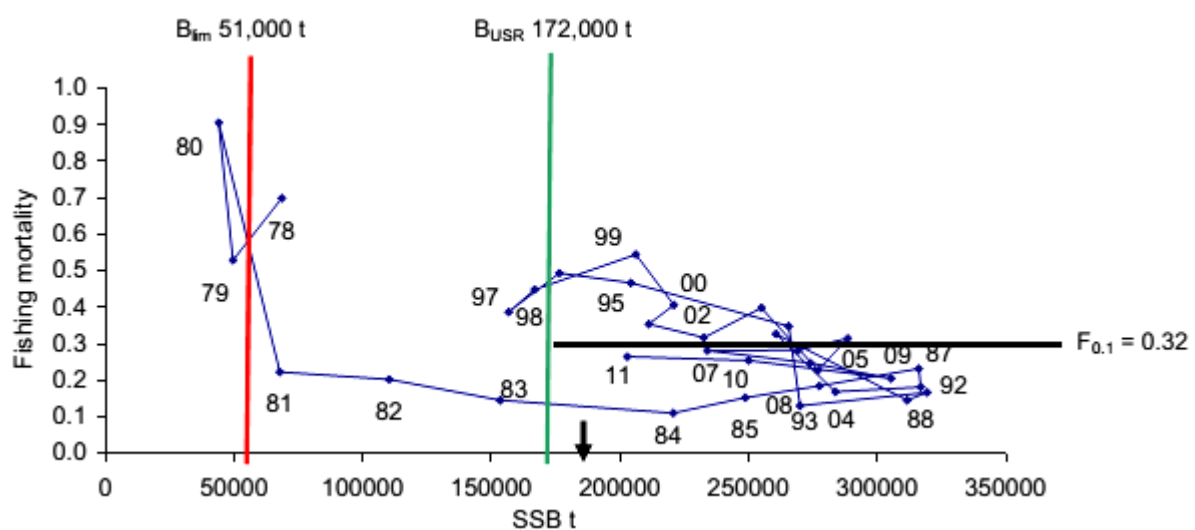


Figure 25. Fall spawner component biomass (ages 4+) and fishing rate (age 5-10) trajectory and reference points. The arrow indicates the 2012 SSB estimate of 183,800 t. Source: DFO 2012d.

¹⁷ <http://www.glf.dfo-mpo.gc.ca/Gulf/FAM/Herring-Information/Herring-2012-2013-CHP>

4.4.2. Bycatch species

DFO carried out a first bycatch survey during the 2011 fishing season (Gendron and Duluc 2012). 18 samplings (fishing trips), 6 in North-Gaspé (LFA 19) and 12 in South-Gaspé (LFA 20), were carried out, and all of the bycatch species were identified, counted and weighed. In the DFO report, the % provided referred to the % of total bycatch, not to the % of total lobster catch. The Assessment team, in collaboration with DFO, calculated for each bycatch species the % of total lobster catch making an extrapolation using a “potential” catches of bycatch calculated by the authors (estimated according to the scenario where all the authorized fishing effort would have been deployed).

A total of 18 species were listed, among which 7 species which catch is inferior to 0.1% of lobster catch and then were not listed in Table 8. Bycatch catches during the 2011 lobster season were estimated at 147.8 t, which represents about 17% of lobster landings.

Rock crab is the only species which catches made up more than 5% of the lobster catches (in weight) (Table 8).

On the whole, bycatches of other species were considered negligible.

Table 8. Estimation of bycatches (t) during the 2011 fishing season for combined North and South-Gaspé, assuming that all fishing effort is deployed and that animals were not caught more than once. Source: calculated from Gendron and Duluc 2012.

Species	Catch (t)	% of lobster catch
Rock crab	88.7	10.4
Green sea urchin	34.8	4
Atlantic cod	4.6	0.5
Ocean pout	4.6	0.5
Sculpin sp.	4.1	0.5
Toad crab>50 mm	3.9	0.4
Greenland cod	2.6	0.3
Atlantic wolffish	2.3	0.3
Cunner	1.4	0.2
Starfish	1.3	0.2
Hermit crab	0.7	0.1

Rock crab

In Quebec, the commercial exploitation of rock crab began in 1998, but did not really take off until 1995 (Gendron and Savard 2013). The rock crab is a key species in the ecosystem, and represents an important prey for lobster and several species of fish. The fishery is managed by a conservation plan which aims to protect the trophic links, particularly with the lobster. The management measures (Table 9) currently in place are intended to protect the reproductive potential by keeping harvesting rates low or moderate. The fishery is managed by controlling fishing effort and by controlling catches. Harvesting is also limited spatially through fishery closures in certain areas (Figure 26). The minimum catch size is 102 mm (carapace width), creating an exclusively male-directed fishery.

Table 9. Management measures implemented for the 2012 fishing season in Gaspésie. Source: Gendron and Savard 2013.

Region	Rock crab fishing zone	Licence	Trap allocation	Minimum size (mm) Carapace Width	Quota (t)	Fishing season
South-Gaspé	12 E-P	4	150	102	163	28 th Jul-6 th Oct
	12 Q-X	5 2	150 100	102	155	28 th Jul-6 th Oct
	12Y	3 4 Gasg. ¹	75 300 tot	102	123	28 th Jul-6 th Oct
	12Z	2 4 Listi. ¹	75 300 tot	102	183	21 st Jul-29 th Sept
North-Gaspé	12D4-D7	4	150	102	250	28 th Jul-6 th Oct
	17 TO 12D3	6	150	102	150	26 th Jul-3 rd Oct

¹ Communal licences, 4 licences share a total of 300 traps.

There is no estimate of total biomass of rock crab in the Quebec waters, in term of male biomass available to the fishery or estimates of exploitation rates. The rock crab stock assessment is based on abundance indicators, which are landings and CPUEs, and size of landed crabs (Gendron and Savard 2013).

But according to the last stock assessment (Gendron and Savard 2013), catch rates from 2010 to 2012 were above the average 2001-2011, except in zone 12Z where catch rates were slightly below the average. Size structures have been stable in South-Gaspé, and the conclusion was fishing over the last 10 years did not impact the rock crab population. Bigger crabs are observed in North-Gaspésie. Mean size are stable since 2005, and size at 90th centile was higher in 2011 and 2012 than 2005-2010. Size at 25th centile was lower in 2010 and 2011, which could suggest higher recruitment.

Although there are uncertainties in the stock assessment (total removals are not known, stock status indicators are almost all fishery-dependent, interpretation of catch rates), there is no sign suggesting a negative change in rock crab abundance in the recent years. The actual level of fishing effort does not cause a risk to the rock crab stock in Gaspésie. Rock crab has a high biomass and is widely distributed in the coastal areas of Gaspésie.

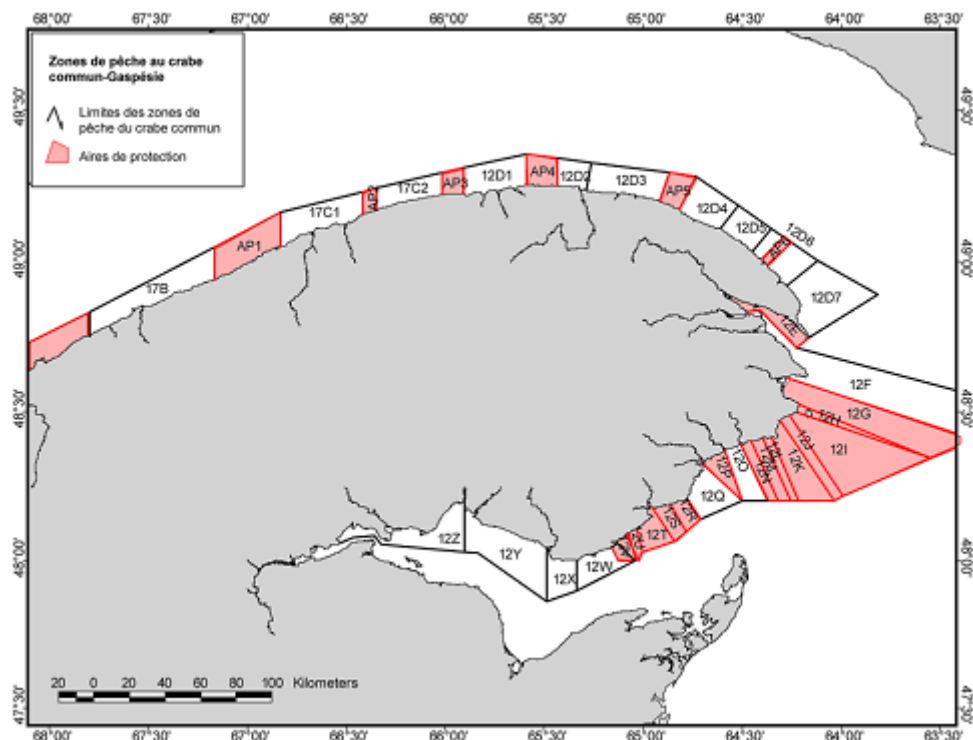


Figure 26. Rock crab fishing areas in Gaspésie. Fishery closures are represented by red zones. Source: Gendron and Savard 2013.

The lobster harvesters must record bycatches (species and number, weight for rock crab) in the e-log mandatory since 2012. Bycatches analysis has not been carried out yet, but will allow confirming the amount of bycatches.

There is a partial strategy in place to ensure that the Gaspésie lobster fishery does not pose a risk or irreversible harm to bycatch species populations. Escape vents are required on traps for all LFAs, it reduces non-target species catch. Moreover, the assessment team considered that the strategy of fishing effort reduction adopted by DFO and the RPPSG from 1998 to 2005 and after 2009 through licence retirement (reducing the number of harvesters), and the reduction of the number of traps per licence would have reduced bycatches. Individuals are immediately and carefully returned to the water, and survival is thought to be high.

4.4.3. ETP species

According to MSC (CB3.11.1), ETP species are defined as those that are recognised by national legislation and those that are listed in Appendix 1 of the Convention on International Trade in Endangered Species (CITES). Species that appear exclusively on non-binding list such as IUCN Red List or that are only the subject of intergovernmental recognition (such as FAO International Plans of Action) and that are not included under national legislation or binding international agreement are not considered as ETP species under MSC standards.

Legislative framework^{18,19,20}

The *Species at Risk Act* (SARA) is a piece of Canadian federal legislation which became law in 2002. The purposes are to prevent Canadian indigenous species, subspecies and distinct populations of wildlife from becoming extirpated or extinct, to provide for the recovery of endangered or threatened species, and to encourage the management of other species to prevent them from becoming at risk.

In June 2003, the SARA recognized the *Committee on the Status of Endangered Wildlife in Canada* (COSEWIC) as an advisory body, thus ensuring that wildlife species will continue to be assessed using the best available scientific and Aboriginal Traditional Knowledge. The COSEWIC, created in 1977, is a committee of experts that assesses and designates which wildlife species are in some danger of disappearing from Canada. Under the SARA, the government of Canada will take COSEWIC's designations into consideration when establishing the legal list of wildlife species at risk.

More specifically, the Act:

- requires that the best available knowledge be used to define long and short-term objectives in a recovery strategy and action plan;
- creates prohibitions to protect listed threatened and endangered species and their critical habitat;
- recognizes that compensation may be needed to ensure fairness following the imposition of the critical habitat prohibitions;
- creates a public registry to assist in making documents under the Act more accessible to the public; and
- is to be consistent with Aboriginal and treaty rights and respect the authority of other federal ministers and provincial governments.

The SARA is a result of the implementation of the Canadian Biodiversity Strategy, which is in response to the United Nations Convention on Biological Diversity. The Act provides federal legislation to prevent wildlife species from becoming extinct and to provide for their recovery.

Species at risk conservation is built on a cycle of assessment, protection, recovery planning, implementation, and monitoring and evaluation, as shown in Figure 31. It is premised on an adaptive management approach whereby monitoring progress towards achieving the stated conservation and protection objectives and evaluating the effectiveness of adopted strategies are performed on an ongoing basis and are incorporated into each of the different components of the conservation cycle. Early action at appropriate points on the cycle will be encouraged to expedite implementation of effective protection and recovery measures. Consistent with the 1996 Accord, lack of full scientific certainty will not delay measures to avoid or minimize threats to species at risk.

¹⁸ http://www.sararegistry.gc.ca/approach/act/sara_e.pdf

¹⁹ http://www.cosewic.gc.ca/eng/sct6/sct6_3_e.cfm#hist

²⁰ http://www.sararegistry.gc.ca/approach/strategy/Framework_e.cfm

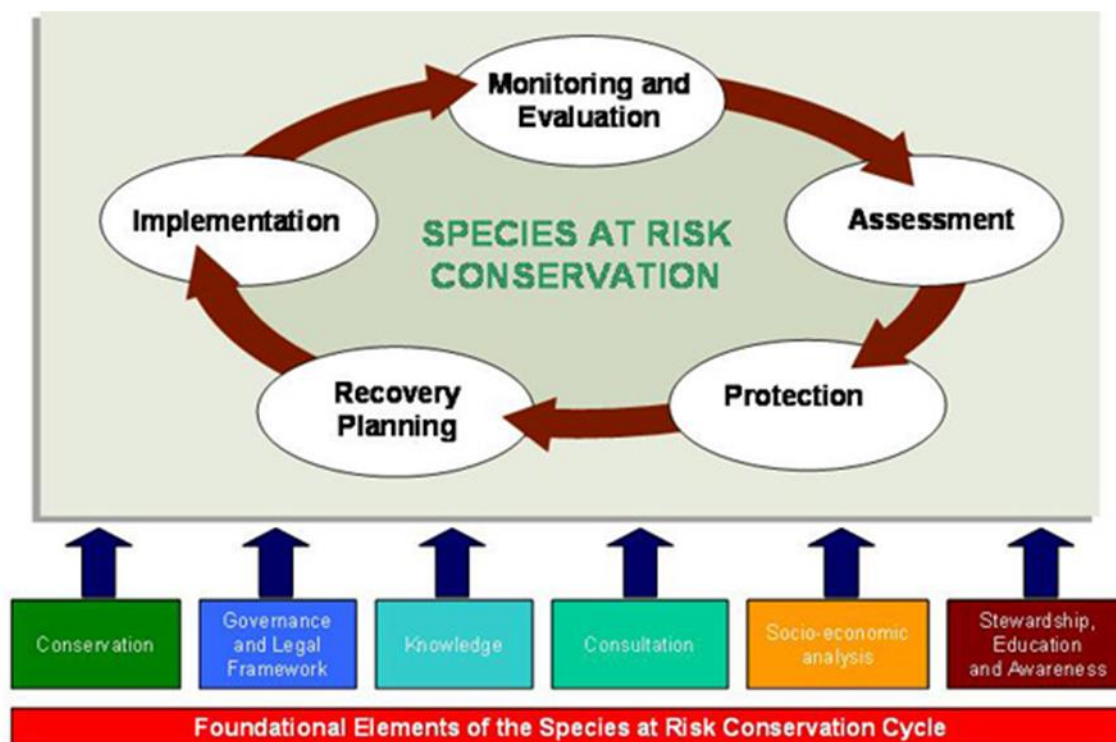


Figure 27. Diagram showing the *Species at Risk* conservation process.

Under the *SARA*, species are classified according to status, namely **extinct, extirpated, endangered, threatened or special concern**²¹.

Furthermore, species listed as threatened, endangered or extirpated are subject to immediate prohibitions. The Act prohibits killing, harming, harassing, capturing or taking such species and makes it illegal to destroy their critical habitat. DFO must plan their recovery by developing recovery strategies followed by action plans within the timelines set out in the Act. Recovery strategies must identify recovery objectives for the species to reach population objectives and specify the recovery feasibility.

Species listed as special concern under the *SARA* are not subject to any prohibitions. However, DFO must develop management plans containing the actions needed for the conservation of these species and their habitats in order to ensure that they do not become threatened or endangered due to human activity.

Wolfish species

In accordance with the recovery strategy for the Northern wolfish and the spotted wolfish, the fishing licences issued under the subsection 22(1) of the *Fishery (General) Regulations* allow licence holders/operators to carry out fishing activities authorized under the *Fisheries Act* that may accidentally kill, harm, harass, capture or take these species. However, licence holders/operators are required to ensure that, while fishing activities are conducted, anyone on board the vessel who accidentally captures a northern wolfish or a spotted wolfish returns it, without delay, to the water in which it was caught and, if the fish is alive, releases it in a manner that causes it the least harm. Moreover, licence holders/operators are required to provide information regarding interactions with species at risk while conducted their fishing operation in the *Species at Risk – Logbook*.

²¹ http://www.sararegistry.gc.ca/species/default_e.cfm

Under the SARA, a recovery strategy has been implemented for the Northern wolfish and the spotted wolfish (Kulka et al 2007).

The Atlantic wolfish (*Anarhichas lupus*) is listed as special concern under the SARA and was afforded protection under the SARA as of June 2004. Additional protection is afforded through the federal *Fisheries Act*²². However, as species listed as special concern are not subject to any prohibition, fish harvesters are not required to provide information on its catch in the *Species at Risk – Logbook*, but Gaspésie lobster harvesters provide this information to DFO (Table 20). Under the SARA, a Management Plan has been implemented (Kulka et al 2007).

From 2007 to 2013, 3 Atlantic wolfish were caught by Gaspésie lobster harvesters (Table 10).

Striped bass

In accordance with the recovery strategy for the striped bass, the fishing licences issued under the subsection 22(1) of the *Fishery (General) Regulations* allow licence holders/operators to carry out fishing activities authorized under the *Fisheries Act* that may accidentally kill, harm, harass, capture or take these species. However, licence holders/operators are required to ensure that, while fishing activities are conducted, anyone on board the vessel who accidentally captures a striped bass returns it, without delay, to the water in which it was caught and, if the fish is alive, releases it in a manner that causes it the least harm. Moreover, licence holders/operators are required to provide information regarding interactions with species at risk while conducted their fishing operation in the *Species at Risk – Logbook*.

Under the SARA, a recovery strategy has been implemented for the striped bass (Robitaille et al 2011).

No striped bass has been caught by Gaspésie lobster harvesters from 2007 to 2013.

Leatherback turtle

In accordance with the recovery strategy for the leatherback turtle, fishing licences issued under the subsection 22(1) of the *Fishery (General) Regulations* allow licence holders/operators to carry out fishing activities authorized under the *Fisheries Act* that may accidentally kill, harm, harass, capture or take this species. However, licence holders/operators are required to ensure that, while fishing activities are conducted, anyone on board the vessel who accidentally captures a leatherback turtle returns it, without delay, to the water in which it was caught and, if the turtle is alive, releases it in a manner that causes it the least harm. Moreover, licence holders/operators are required to provide information regarding interactions with species at risk while conducted their fishing operation in the *Species at Risk – Logbook*.

Under the SARA, a recovery strategy has been implemented for the leatherback turtle (Atlantic Leatherback Turtle Recovery Ream 2006). The leatherback turtle is also listed by the International Union for Conservation of Nature (IUCN) Red list in Critically Endangered Species of Wild Fauna and Flora, and is included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which reduces commercial exploitation of species at risk²³.

Satellite telemetry data from 70 leatherback turtles tracked in Atlantic Canadian waters were used to identify important habitat for the species (DFO 2012f). This is the single largest telemetry dataset for leatherbacks in the Atlantic. It includes 65 tags deployed on leatherbacks in Atlantic Canadian

²² <http://www.dfo-mpo.gc.ca/species-especes/species-especes/wolfish-loup-at-eng.htm>

²³ <http://www.iucnredlist.org/search>

waters over an 11-year period (1999-2009). At-sea capture of leatherbacks enables more representative sampling of the population versus the traditional focus on tagging adult females on nesting beaches. The sample considered in this analysis included all sexes and size classes that use Atlantic Canadian waters.

As a result, three primary areas of important habitat were identified including the southeastern Gulf of St. Lawrence and waters off Eastern Cape Breton Island, including Sydney Bight, the Cabot Strait, portions of the Magdalen Shallows and adjacent portions of the Laurentian Channel. The relative probability of residency was estimated (Figure 28).

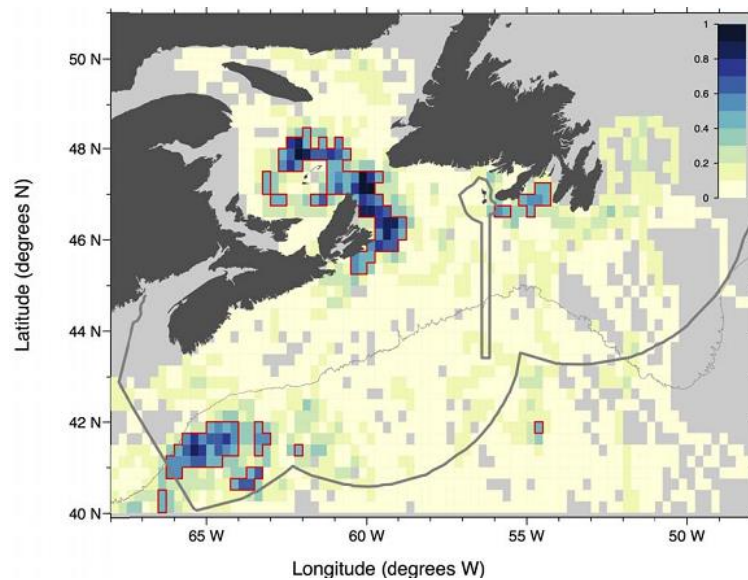


Figure 28. Relative probability of residency estimated from 70 leatherback turtles equipped with satellite tags. Note that all but those areas shaded in light grey were sampled by turtles. Red polygons denote areas where aggregated residency probabilities ≥ 0.4 for all satellite tracked turtles. Thick grey line indicates Atlantic Canadian EEZ boundary, thin grey line indicates 1000 m isobaths. Source: DFO 2012f.

Figure 28 shows that the relative probability of residency of leatherbacks around Gaspé peninsula is low. However, it was noted that notable areas not sampled by tagged turtles included Gaspésie peninsula (Figure 28, light grey areas). But 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.

According to Table 10, there were no reported catches of leatherback turtle in the Gaspésie lobster fishery during the 2007-2013 period. The information was confirmed by DFO Conservation & Protection staff during site visit meetings.

Species At Risk Logbook Information

Table 10. ETP fish and turtle species catches in the Gaspésie lobster trap fishery, 2006 to 2013. Source: DFO.

Date	Species	Number	Biomass (kg)	Observation
01-05-2006	Atlantic wolfish	1	1.8	The fish was immediately returned to water.
12-05-2009	Atlantic wolfish	2	5.9	N/A

Marine mammal species

Marine mammals, whales and seals, are abundant in the Gulf of St-Lawrence include. Thirteen whale species and four seal species are common to the Gulf. Table 11 shows the endangered, threatened and special concern marine mammal species that might be incidentally caught in the Gaspésie lobster trap fishery.

Table 11. Marine mammal species with possible interactions with the Gaspésie lobster fishery, their status under the COSEWIC and the SARA are given²⁴.

Common name	Scientific name	COSEWIC	SARA
Blue whale	<i>Balaenoptera musculus</i>	Endangered	Endangered
Fin whale	<i>Balaenoptera physalus</i>	Special concern	Special concern
Humpback whale	<i>Megaptera novaeangliae</i>	Not at risk	Special concern
North Atlantic right whale	<i>Eubalaena glacialis</i>	Endangered	Endangered
Harbour porpoise	<i>Phocoena phocoena</i>	Special concern	Special concern

The blue whale is also listed by the IUCN Red List as endangered species and is included in the *CITES*, which reduces commercial exploitation of species at risk, and the fin whale and the right whale are also listed by the IUCN Red list as endangered species²⁵.

The harbour porpoise is also on the IUCN Red list as least concern species, and is included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (*CITES*), which reduces commercial exploitation of species at risk²⁶.

Under the *SARA*, recovery strategies have been implemented for the blue whale (Beauchamp et al 2009) and the North Atlantic right whale (Brown et al 2009), and a management plan is being drafted for the fin whale²⁷.

Fishing gears, especially traps and gillnets, are recognized as a potential danger of entanglement of marine mammals. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the *SARA* and considered not at risk under the *COSEWIC*²⁸, occurred in the Gaspésie lobster trap fishery trap (DFO 2010a). No incidental catch has been reported since.

²⁴ http://www.sararegistry.gc.ca/sar/index/default_e.cfm

²⁵ <http://www.iucnredlist.org/search>

²⁶ <http://www.dfo-mpo.gc.ca/species-especes/species-especes/harbourporpoiseAtl-marsouinat-eng.htm>

²⁷ <http://www.dfo-mpo.gc.ca/species-especes/species-especes/finwhale-atlantic-rorqual-commun-atlantique-eng.htm#threats>

²⁸ http://www.registrelep-sararegistry.gc.ca/species/speciesDetails_e.cfm?sid=894

The assessment team considered that there is low interaction between Gaspésie lobster fishery and ETP species and that the fishery does not pose a risk of serious or irreversible harm to ETP species.

4.4.4. Habitat

Legislative and Policy framework

On June 29, 2013 amendments to the *Fisheries Act* have been approved. The Fisheries Protection Program and its Policy Statements (November 2013) support changes made to the *Fisheries Act*. The mandate of the Fisheries Protection Program is to maintain the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries²⁹. The Fisheries Protection Policy Statement (FPPS) focuses on the management of impacts to fish resulting from habitats degradation or loss and alterations to fish passage and flow.

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. Section 35 of the *Fisheries Act* prohibits *serious harm to fish* which is defined in the Act as “the death of fish or any permanent alteration to, or destruction of, fish habitat”.

Proponents are responsible for avoiding and mitigating serious harm to fish that are part of or support commercial, recreational or Aboriginal fisheries. When proponents are unable to completely avoid or mitigate serious harm to fish, their projects will normally require authorization under Subsection 35(2) of the *Fisheries Act* in order for the project to proceed without contravening the Act.

The Subsection 35(1) prohibition will be applied to those projects that have the potential to cause serious harm to fish. These projects are likely to reduce the ability of the fish habitat to directly or indirectly support the life processes of fish or result in the death of fish. Relationships between typical project impacts (e.g., temperature change, sedimentation, infilling, reduction of nutrients and food supply, etc.) and the consequences to fish or fish habitat are described in various Pathways of Effects diagrams.

Projects requiring authorization are those likely to result in a localized effect to fish populations or fish habitat in the vicinity of the project. Localized effects may also lead to more widespread impacts on fish and fish habitat and, in turn, affect the ability of the area to produce fish.

DFO interprets serious harm to fish as:

- the death of fish;
- a permanent alteration to fish habitat of a spatial scale, duration or intensity that limits or diminishes the ability of fish to use such habitats as spawning grounds, or as nursery, rearing or food supply areas, or as a migration corridor, or any other area in order to carry out one or more of their life processes;
- the destruction of fish habitat of a spatial scale, duration, or intensity that fish can no longer rely upon such habitats for use as spawning grounds, or as nursery, rearing or food supply areas, or as a migration corridor, or any other area in order to carry out one or more of their life processes.

²⁹ <http://www.dfo-mpo.gc.ca/pnw-ppe/fpp-ppp/index-eng.html>

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 Framework³¹, 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. Both are currently the focus of international efforts to reduce the impacts of fishing on benthic environments (e.g. Food and Agriculture Organization International Guidelines for the Management of Deep-Sea Fisheries in the High Seas, Northwest Atlantic Fisheries Organization Vulnerable Marine Ecosystem impact assessments), and hence they are among the most well understood from a management perspective.

The Ecological Risk Assessment Framework outlines a process whereby the ecological risk of fishing impacts is determined through the examination of two factors:

1. *consequence*, which examines the anticipated degree of impact on a sensitive benthic area resulting from an overlap between it and the fishing gear, and
2. *likelihood*, which examines the probability that the fishing gear will overlap with sensitive benthic areas.

The development of management options is guided by the ecological risk level. Where the fishing activity presents a low risk to the benthic habitat, no additional management options are generally required. Where risk levels are determined to be moderate, additional management options may be required based on the specific circumstances of the fishery and benthic habitat being investigated. Examples may include changes to the fishing methods. Where the risk has been determined to be high, additional management options will usually be required. Examples include fisheries closures or gear modifications and/or restrictions. Options would be determined on a case-by-case basis, in consultation with stakeholders and Aboriginal groups, using existing processes that would be adapted to the specific circumstances.

³⁰ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/benthi-eng.htm>, <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/risk-ecolo-risque-back-fiche-eng.html>

³¹ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/risk-ecolo-risque-eng.pdf>

Marine Protected Areas (MPAs)

DFO and Park Canada have a number of MPAs designated under the *Ocean Act* (1996), including several areas of interest that are at various stages of progress towards designation³². These areas are ecologically significant, with species and/or properties that require special consideration.

MPAs are one among various other management tools that contribute to the improved health, integrity and productivity of Canada's marine ecosystems and help advance integrated ocean management. These areas are part of Canada's network of MPAs.

The MPA designation process includes public input to determine the costs and benefits of MPA designation. Areas of Interest (AOI) are identified and will undergo a detailed biophysical and socio-economic evaluation and public consultations before a decision is made to formally designate it as a Marine Protected Area. Consultation with First Nations, stakeholders, industry and interested groups will provide opportunities to contribute to the evaluation and analysis of impacts of MPA designation, establishment of appropriate conservation and management objectives, and development of the regulatory package.

The American Bank has been designated Areas of Interest for possible inclusion in a network of Marine Protected Areas under Canada's Oceans Act. American Bank is a submarine bank lying off the eastern tip of the Gaspé Peninsula in the Quebec portion of the Gulf of St. Lawrence³³. It has a least depth of 12 m and comprises two shelves separated by a sharp ridge. American Bank lies entirely within the 1000 km² Area of Interest. The area is characterized by the diversity of its habitats, seasonal or year-round occurrence of many commercially important species and whales, the presence of species at risk and a high diversity of molluscs and crustaceans. The area also has significant potential as a feeding ground for various species of fish and marine mammals and as refuge habitat for declining groundfish populations, including the southern Gulf cod stock. It has traditionally been a much sought-after fishing area.

³² <http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/mpa-zpm/index-eng.htm>

³³ <http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/mpa-zpm/atlantic-atlantique/americanbank-bancdesamericains/index-eng.htm>

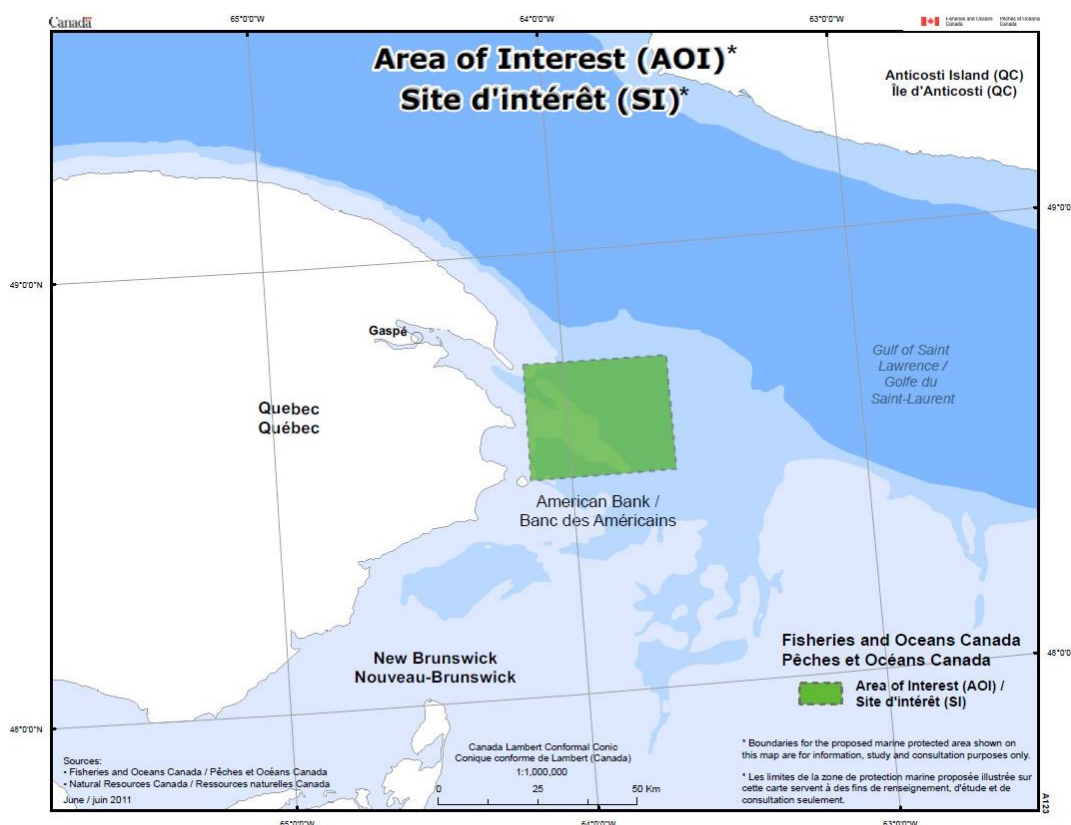


Figure 29. American Bank Area of Interest. Source: <http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/mpa-zpm/atlantic-atlantique/americanbank-bancdesamericains/index-eng.htm>.

The establishment of a Marine Protected Area would promote the productivity and diversity of species including many commercial ones and the recovery of species at risk found in this particular area.

Saguenay - The St. Lawrence Marine Park³⁴

With a surface area of 1 245 km², the **Saguenay-St. Lawrence Marine Park** is located at the confluence of waters of the St. Lawrence Estuary with those of the Saguenay Fjord (Figure 30). It is managed jointly by the governments of Canada (Parks Canada) and Quebec (Parcs Québec) in association with local bodies. The Park was created in 1998 with the objectives of conservation of marine ecosystems and cultural heritages, public education and research.

The St. Lawrence Estuary is a major feeding ground for numerous species of marine mammals because of high concentrations of forage species such as krill and capelin. Every year, many cetaceans, including many large whales, migrate to the estuary to feed and build up their energy reserves in preparation for the breeding season. The Estuary is also an essential habitat for the beluga whale and the harbour seal, both of which reside there year-round. As a result of the high diversity and density of marine mammal species in the St. Lawrence Estuary, the proximity of observation sites and the relatively calm waters, it is one of the best marine mammal observation sites in the world.

³⁴ <http://www.pc.gc.ca/eng/amnc-nmca/qc/saguenay/index.aspx>

Nine species of marine mammals are frequent in the park. Beluga and harbour porpoise are year round resident. Three species are pinnipeds: harbour seal, grey seal and harp seal. Six are cetaceans: St. Lawrence beluga, harbour porpoise, Minke whale, blue whale, fin whale, humpback whale. Other cetaceans are occasionally seen: sperm whale, Atlantic white-sided Dolphin, long-finned pilot whale, and hooded seal.

Six of those species are considered to be endangered species according to the COSEWIC in Canada³⁵. The cumulative threat for marine mammals in the St. Lawrence Estuary includes exposure to noise, Deterioration of marine mammal habitat and food resource, and collision with boats.

Manicouagan Marine Protected Area³⁶

The purpose of the proposed MPA (Figure 30) is to conserve and protect the peninsula's estuarine and marine ecosystems, including their rich biodiversity and biological productivity, while sustaining those activities taking place in the area that are consistent with this purpose. The purpose of the establishment of the proposed Manicouagan MPA is also to make it a model of sustainable development, increase the knowledge and understanding of this marine environment and raise public awareness about its fragility in order to ensure the sustainability of its habitats and resources.

Announcement was made in August 2013³⁷ to create a MPA covering a surface of 712 km². It results in effort between the federal and the Quebec Governments to coordinate the establishment of a MPA with their respective conservation tools.

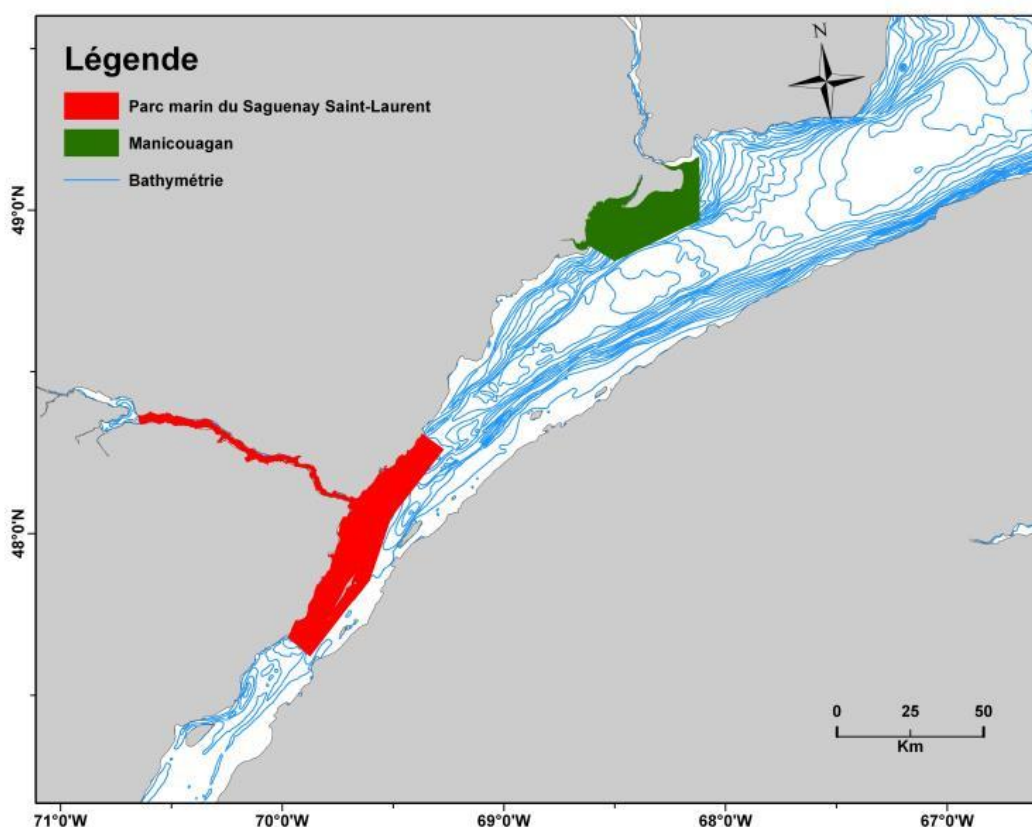


Figure 30. Location of the Saguenay – St Lawrence Marine Park (red) and the Manicouagan MPA (green) in the St. Lawrence estuary. Source: Drawn from data provided by the Ministère du Développement Durable, de l'Environnement, de la Faune et des Parcs, Québec.

³⁵ <http://www.cosewic.gc.ca/index.htm>

³⁶ <http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/loma-zego/atlantique-atlantique/gsl/3/325-eng.htm#c3252>

³⁷ <http://www.mddelcc.gouv.qc.ca/Infuseur/communiqu.asp?no=2582>

Magdalen Island Project³⁸

In 2012, the Governments of Quebec and of Canada signed an agreement to launch a study to implement a marine protected area in the area of the Magdalen Islands (Figure 31). The project aims at proposing area of interest and scenarios of conservation. The study includes ecological features, economic activities and cultural characteristics of the region. The report was presented in winter 2014 and a second phase is under discussion.

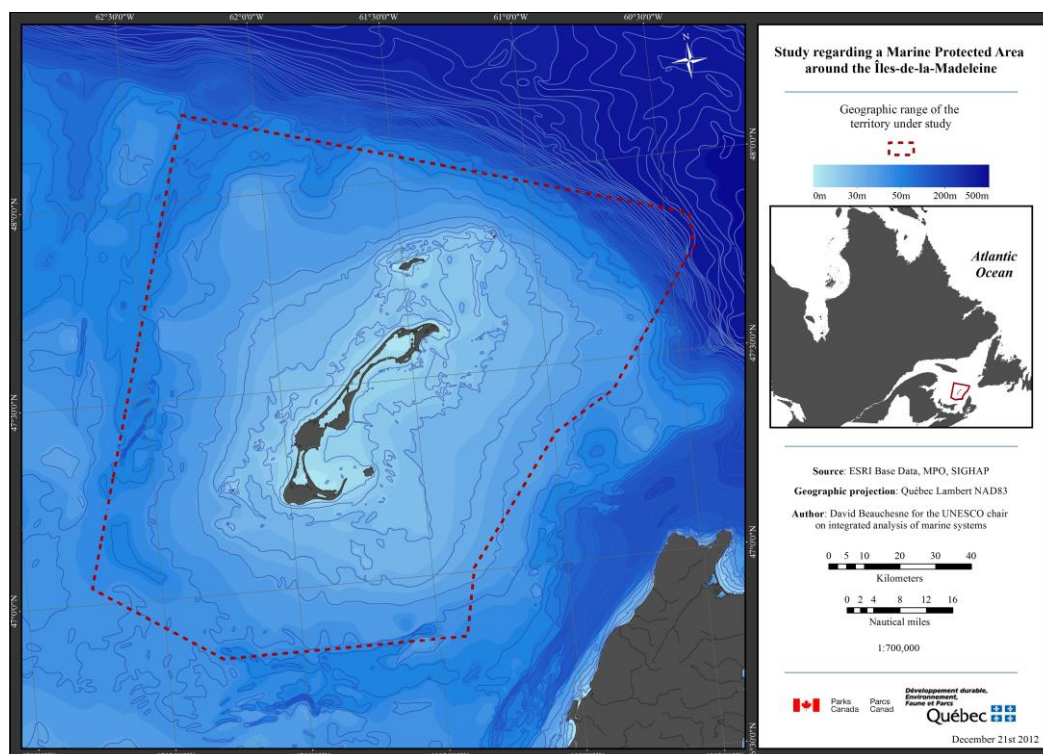


Figure 31. Map of the area around the Magdalen Islands, within which a marine protected area would be implemented.

Shediac Valley has been designated Areas of Interest for possible inclusion in a network of Marine Protected Areas under Canada's Oceans Act. The Shediac Valley Area (Figure 32) is a candidate Marine Protected Area (MPA), which would provide comprehensive and long-term management and protection for this area rich in biodiversity. The Shediac Valley AOI is an area rich in biodiversity in the SGSL and is recognized as having high productivity with circular currents (gyres) located near the north and south borders. Water depths in the Area of Interest range from 24 to 51 metres³⁹. It is located east of New Brunswick and north-west of Prince Edward Island and covers an area of 1530 km². The area plays an important role in various biological functions (feeding, refuge, nursery and spawning) for a variety of fish species including many commercial species. In particular, it is used by Atlantic cod particularly for summer feeding and as a nursery ground. Other species of conservation interest are also in the area, such as American Plaice and Winter Skate. Protection of this area will contribute to the survival and recovery of healthy and abundant aquatic resources⁴⁰.

Although a portion of the Shediac Valley is closed to groundfish fisheries, the closure is renewed on a yearly basis by the Department. Furthermore, the closure does not protect the site from other

³⁸ http://www.mddelcc.gouv.qc.ca/communiqués_en/2011/c20111205-ilesdelamadeleine.htm

³⁹ <http://www.dfo-mpo.gc.ca/media/back-fiche/2011/hq-ac10b-eng.htm>

⁴⁰ <http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/mpa-zpm/atlantique-atlantique/shediacvalley-valleedeshediac/index-eng.htm>

potential activities. A Marine Protected Area designation would ensure longer term protection from a wide variety of human activities.

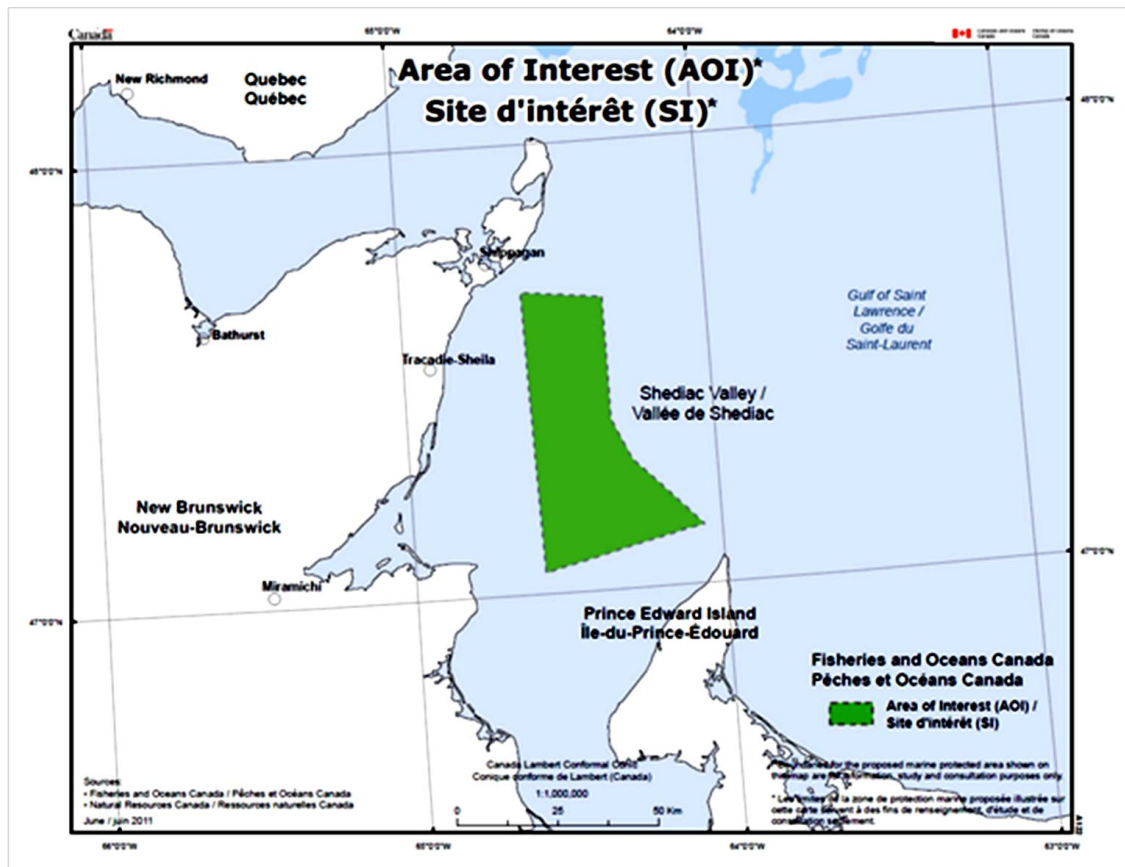


Figure 32. Shediac Valley area of interest. Source: <http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/mpa-zpm/atlantic-atlantique/shediacvalley-valleedeshediac/index-eng.htm>

Forillon National Park was created in 1970. It covers a total of 244.8 km², which includes a narrow strip of marine area a little over 150 m wide (4.4 km²) (Parks Canada 2010). It is part of the large Gaspé ecosystem where there are also two migratory bird sanctuaries and several natural areas protected or developed under Quebec law.

The marine part of the parks surrounds, in a discontinuous way, the Forillon peninsula from Cap-des-Rosiers to Penouille (Figure 33).

4 lobster harvesters are authorized (special licence) to fish within the Park limits, among which 2 are monitored three times during the lobster fishing season by the Park staff.



Figure 33. Map of the section of the Forillon National Park with its marine area (hatched areas). Source: Parks Canada 2010.

The National Park of Îles de Bonaventure and of Rocher Percé is part of the Québec's National Park Network. It's located in the Gaspé peninsula and encompasses the Île Bonaventure and the Rocher Percé (Figure 34).

The National Park of Îles de Bonaventure and of Rocher Percé is an important nesting area for several seabird species. The area is also characterized with a high diversity of marine habitat.

There is an agreement that authorized the local lobster harvesters from Percé to fish in the marine zone of the Park.

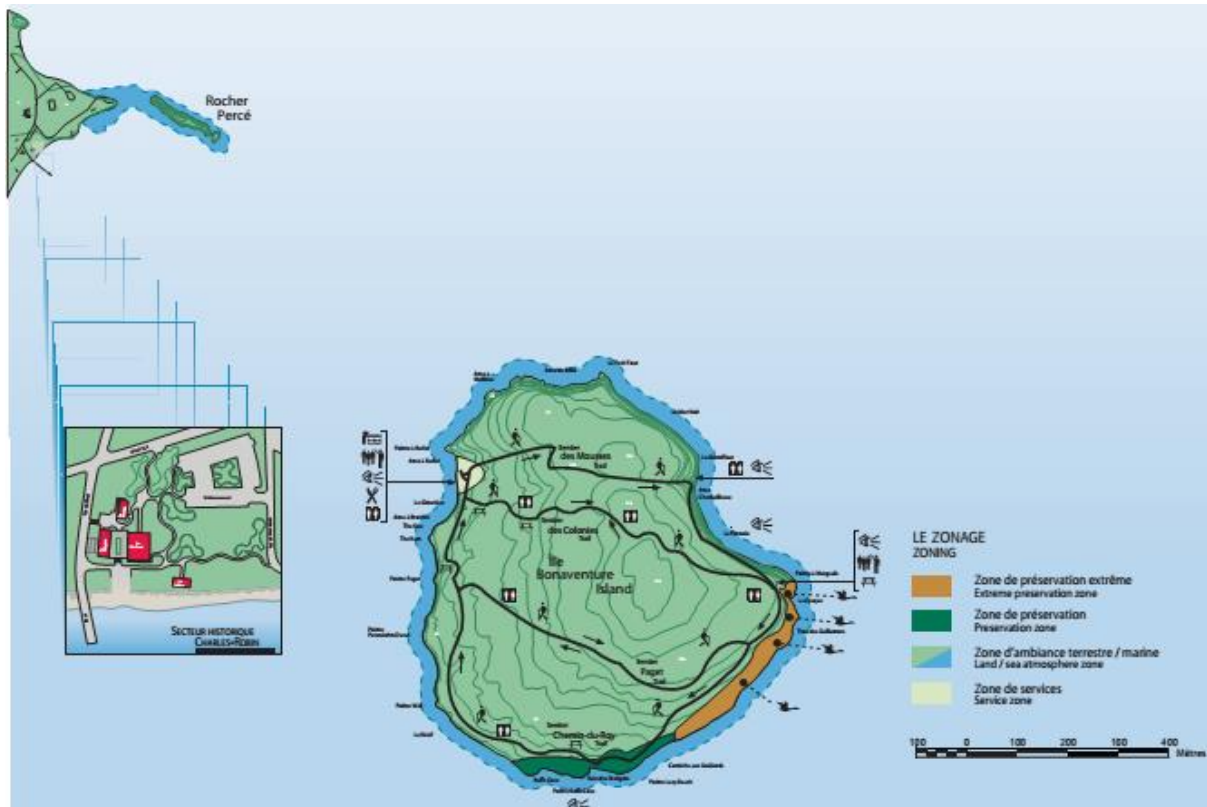


Figure 34. Map of the National Park of Île de Bonaventure and of Rocher Percé. Source: <http://www.sepaq.com/pq/bon/index.dot>.

Fishing closure areas

Six protection areas are closed to sea cucumber exploratory fishery in Gaspésie to protect lobster habitat and carry out studies on the impact of the fishery on habitats (DFO 2014b). Also the sea cucumber fishery must occur between 22 m and 40 m depth (DFO 2013a).

There are restrictions for the scallop fishery to protect lobster habitat. In subareas 17A1, 17A2, 18B1 and 18B2, fishing is not authorized in waters less than 18.3 m (DFO 2013c and 2013b). In area 19, fishing is not authorized in waters less than 18.3 m from May 1 to August 15, and in waters less than 27.4 m from August 16 to September 30 (DFO 2013b).

Spatial distribution of habitats in Gaspésie

Dutil *et al* (2012) mapped the coastal and epipelagic habitats of the estuary and Gulf of St. Lawrence. The database presented describes the pelagic and benthic habitats of the 0 – 30 m surface layer in estuary and Gulf of St. Lawrence. The dataset includes 130 descriptors: cell location parameters such as cell address, latitude and longitude, and distance to the coast; landscape features such as depth, slope, insularity, coastline development, shore material and characteristics, degree of protection front the open sea, sensitivity of the shoreline to sea; hydrographic and oceanographic parameters such as distance to the nearest stream or river and its drainage area and mean annual flow, tidal range, vertical and horizontal currents, ice conditions, salinity and temperature at various depths. Coastal areas, particularly in the southern Gulf, appear to be more diversified locally than midshore and offshore habitats, which formed large patches of more uniform characteristics. The dataset

provides useful information on the spatial extent of major coastal epipelagic habitats. 7 habitat categories were mapped from that dataset (Figure 35).

Figure 36 shows shoreline areas suitable for spawning and as nursery for larval and juvenile stages of various fish species (light blue patches). The superimposed deep blue patches indicate known occurrence of nearby eelgrass meadows. Eel grass meadows are considered “fish habitats” and are therefore protected from harmful alteration, disruption and destruction (HADD) unless authorized under *Section 35 of the Fisheries Act* (DFO 2012e).

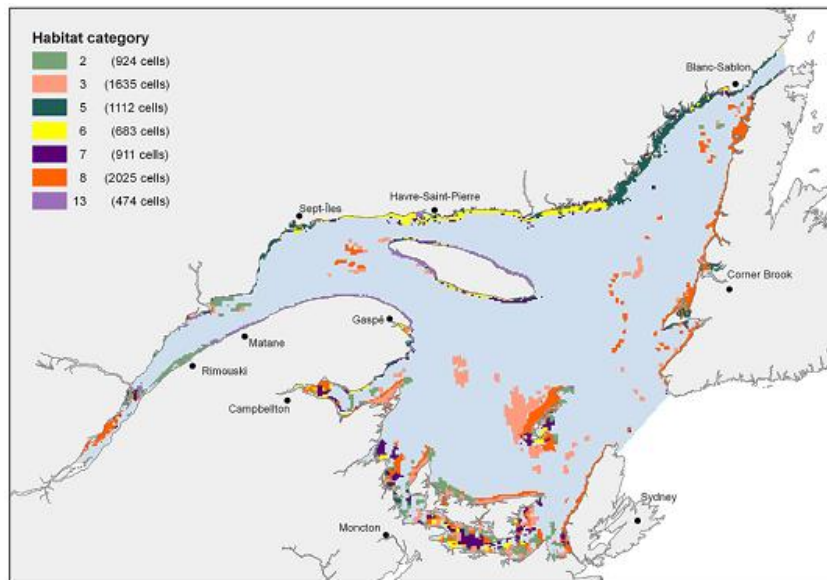


Figure 35. Spatial distribution of seven clusters of cells based on 103 habitat descriptors. Source: Dutil *et al* 2012.



Figure 36. Spatial distribution of sand beach, marsh, and mud flat (light blue areas). Within light blue areas, dark areas indicate cells located within 10 km of known eelgrass beds. Source: Dutil *et al* 2012.

Under the *Fisheries Act*, corals and sponges are defined as “fish” and “fish habitat” and are therefore protected from harmful alteration, disruption and destruction (HADD) unless authorized under *Section 35 of the Fisheries Act* (Campbell and Simms 2009). Concentration of corals and sponges on the east coast of Canada have been identified by Kenchington *et al* (2010) through spatial analysis of research vessel survey by-catch data following an approach used by the NAFO. As a result, Gaspé

peninsula inshore area is not considered as a significant area for corals and sponges (Figures 37 and 38).

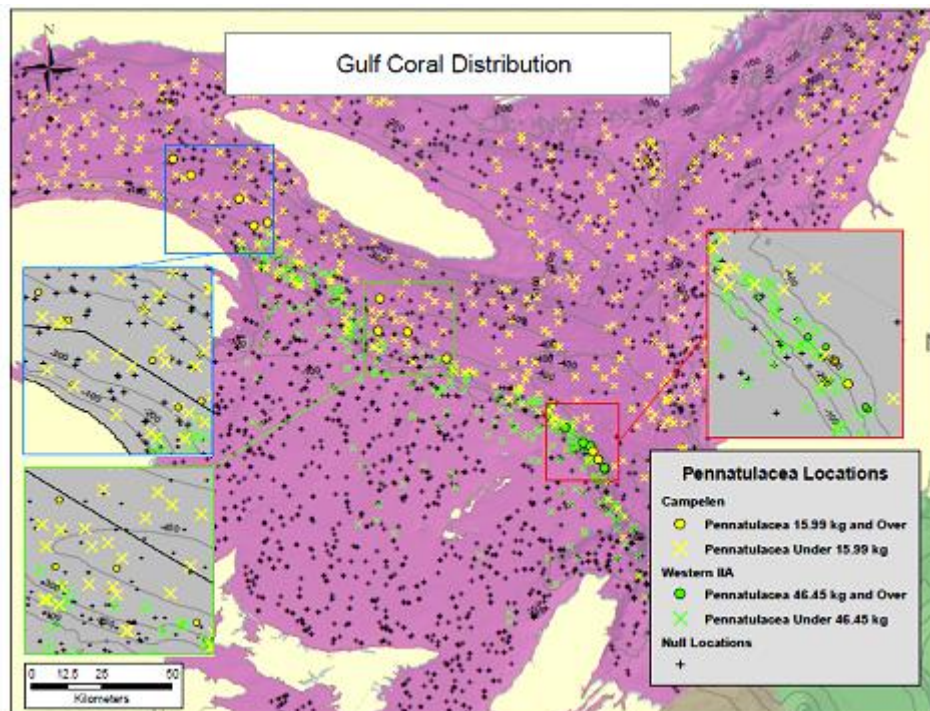


Figure 37. Location of significant Pennatulacea locations in the Gulf Biogeographic Zone. Source: Kenchington et al 2010.

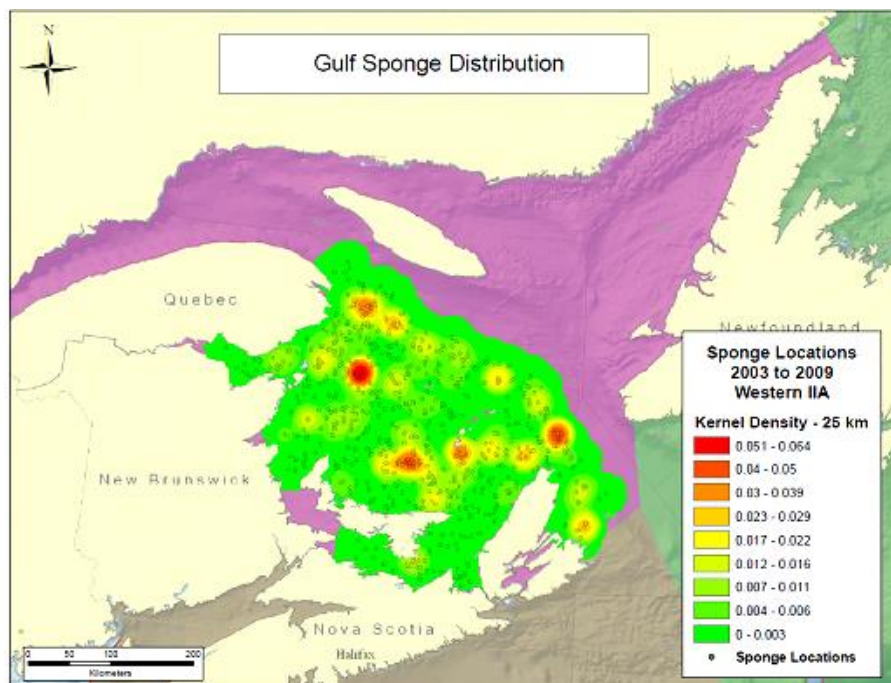


Figure 38. Interpolated density distribution (kg/km^2) of sponges in the SGSL. Data are from 2003-2009. Source: Kenchington et al 2010.

Impact of Gaspésie lobster trap fishery on habitats

Traps are passive gear types that rely on bait to attract the target species. 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 (DFO 2010b). 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).

The potential impact of traps on marine habitats is dependent on a variety of factors including:

- Characteristics of the bottom where they are set (sediment type, relief and depth);
- Weight, size and construction material of traps;
- Retrieval methods and sea state, weather, tides, currents;
- Type of rope;
- Soak time;
- Use of anchor or weights; and
- String configuration (e.g. length) can affect degree of entanglement on bottom.

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. A study carried out by Fuller et al (2008) examined the ecological impacts of the most common types of fishing gear used in Canada and assessed the relative severity of these impacts to seafloor habitat and discarded bycatch of target and non-target species. They determined that traps used on the west and east coasts of Canada have a medium low impact on the seafloor and a medium impact on corals and sponges. They pointed out that inshore lobster traps are often smaller and lighter than fish traps so cause less damage.

Figures 35 and 36 show that Gaspé peninsula inshore area is not considered as a significant area for corals and sponges. Moreover, DFO and lobster fishermen mentioned at site visit meetings that there is no overlapping between coral and sponge grounds and lobster fishing grounds.

According to Martel et al (2009), eel grass beds are located inside river mouths where the estuaries form bays, lagoons, and in estuaries and lagoons behind baymouth bars (known as a “barachois” in Québec) (Figure 39).

Lobster fishing does not occur in these areas, so there is no overlapping between eel grass beds and lobster fishing grounds.

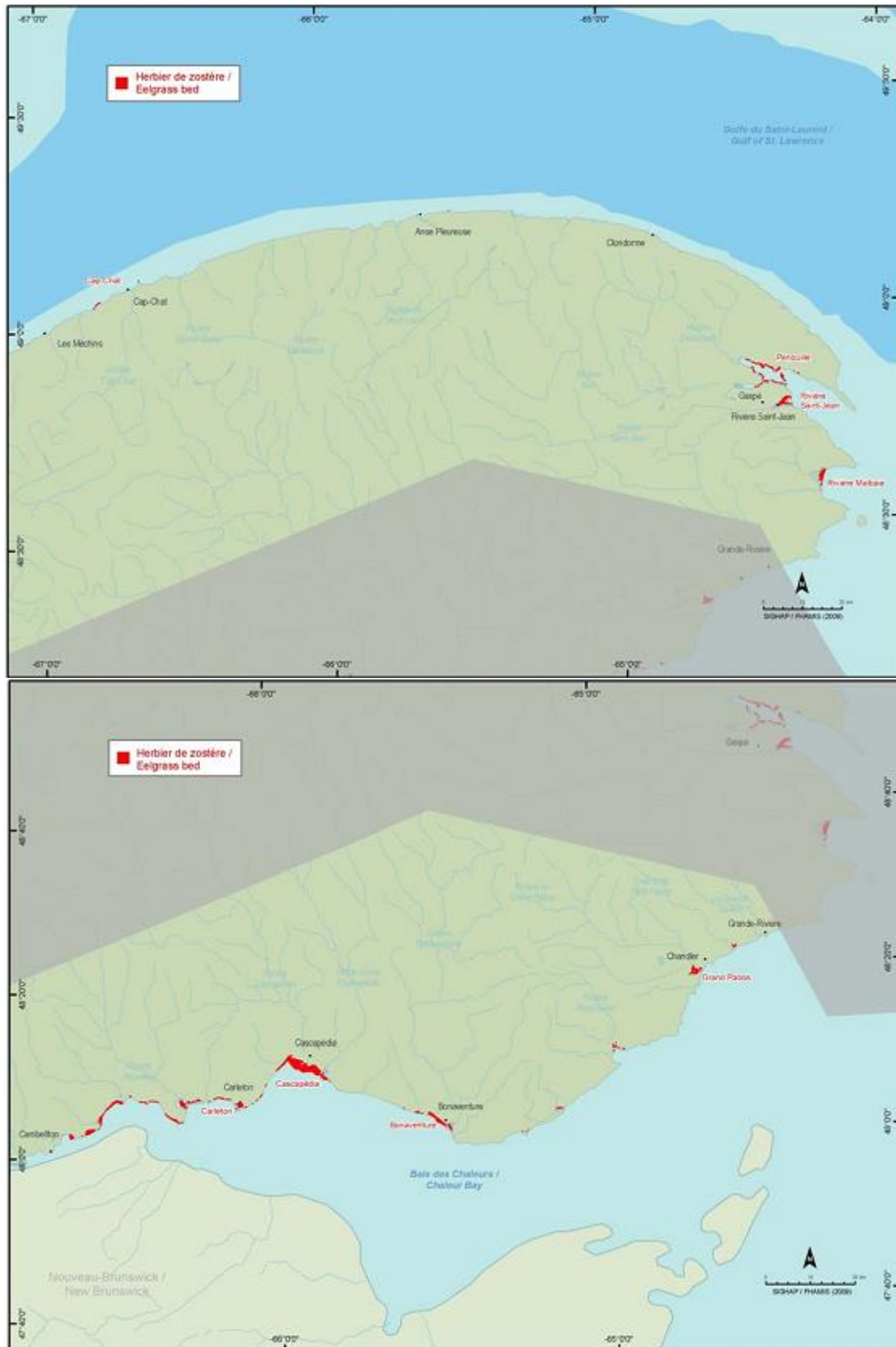


Figure 39. Distribution of eel grass beds in the GSL: Gaspé Peninsula (top panel) and Chaleur Bay (bottom panel). Source: Martel et al 2009.

There is a strategy in place to ensure that the Gaspésie lobster fishery does not pose a risk of serious or irreversible harm to habitats. Impacts on habitats are limited by restricting the number and size of traps in use, the number of fishermen and the fishing season. In addition, the strategy of fishing effort reduction adopted by DFO and the RPPSG from 1998 to 2005 and after 2009 would reduce the impacts on habitats.

Artificial Reefs project

A compensation project for the loss of habitats favourable to lobster settlement by the immersion of artificial reefs has been established by RPPSG (RPPSG 2013). The aim of the project, which is incorporated within the framework of the Habitat Policy, is to increase the productive capacity of fish habitat. Four sites, Port-Daniel, l'Anse-à-Beaufils, Grande-Rivière (2 sites) and l'Anse-à-Brillant, were selected (Figure 40). Four to six multigenerational artificial reefs per site were immersed in 2012 (Figure 41 and 42).

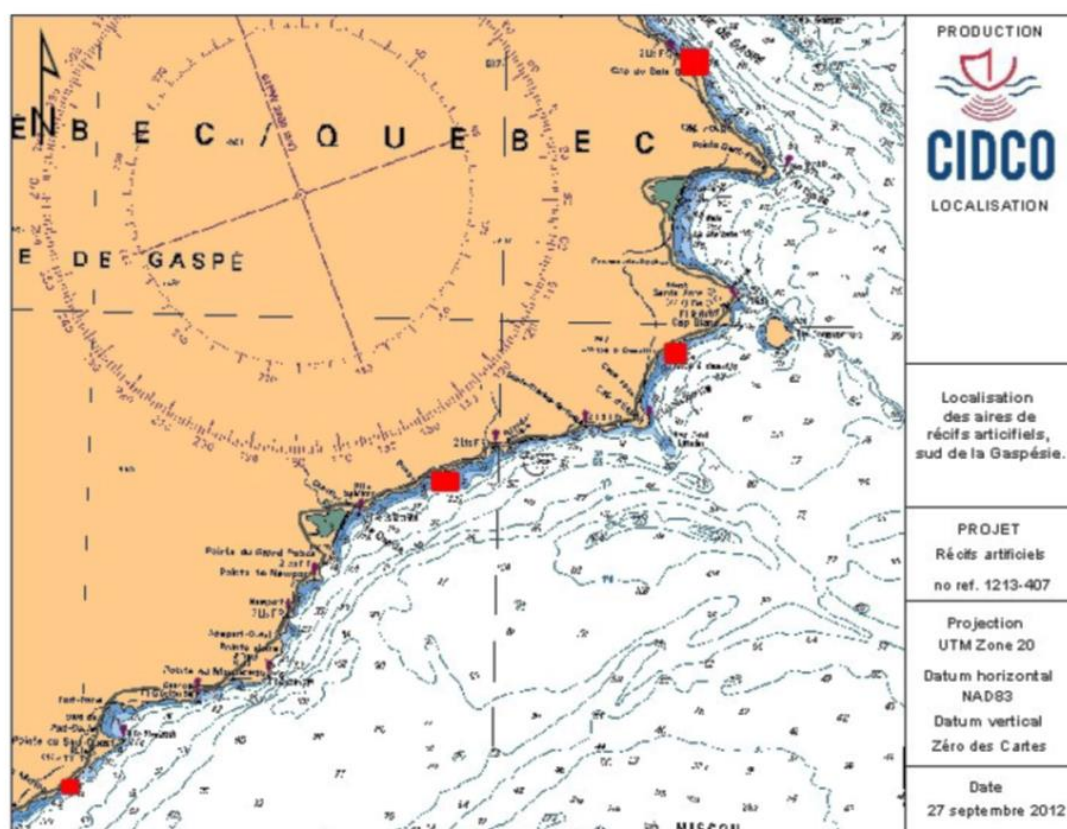


Figure 40. Localisation of the artificial reefs sites. Source: CIDCO 2012.

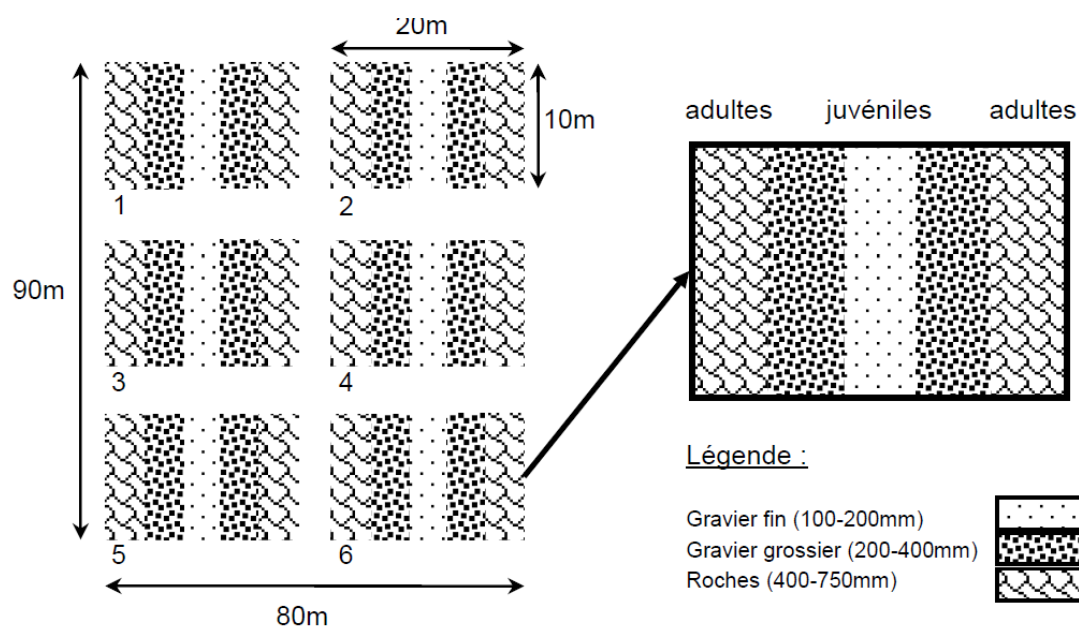


Figure 41. Organization of an artificial reefs site (left) and the structure of a single reef (right). Source: CIDCO 2011.

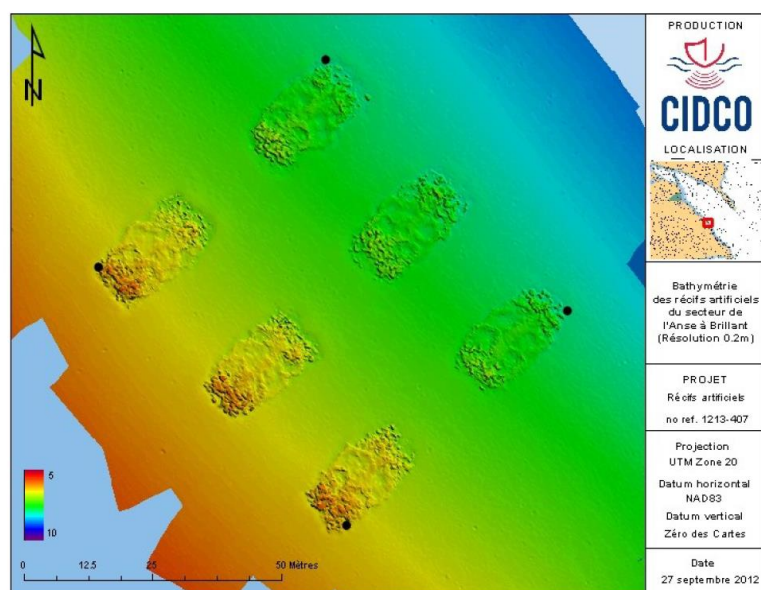


Figure 42. Bathymetric map of Anse-à-Brillant site from multibeam echo-sounding. Source: CIDCO 2012.

Table 12. Reel area of the 6 artificial reefs immersed in the 3 of the 4 selected locations. Theoretical area of one reef is 200 m². Source: RPPSG 2013.

Artificial Reef	Real area (m ²) of artificial reefs		
	Port-Daniel-West	L' Anse-à-Beaufils	L' Anse-à-Brillant
1	295	271	288
2	283	268	268
3	274	280	262
4	293	299	265
5	269	265	281
6	274	272	269
Mean area	281	276	272

The assessment team considered that this project was established in a cautious way as the project was gradual, the biological and physical characteristics of the selected sites are well known and monitored, and the lobster settlement on the artificial reef was surveyed. The assessment team further notes that fishing is not authorized within the vicinity of the artificial reefs.

4.4.5. Ecosystem

Gulf of St. Lawrence Ecosystem

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 (DFO 2005b). 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 $240 \times 10^3 \text{ km}^2$, which opened to the Atlantic Ocean through the Cabot Strait and the Strait of Belle Isle (Figure 43). 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 43. Physical environment of the Gulf of St. Lawrence. Source: DFO 2005.

The physical environment and the chemical environment including suspended particulate matter, nutrients, oxygen, organic carbon and contaminants in the Gulf of St. Lawrence are studied and well known (DFO 2005, Dufour and Ouellet 2007, Galbraith et al 2013).

The Gulf comprises a vibrant marine ecosystem with high biodiversity. The main groups and species found in the waters of the Gulf are: phytoplankton, zooplankton, invertebrates, forage fish, large ichthyophagous fish species, birds and marine mammals (DFO 2007c). At the base of any marine ecosystem, there is the phytoplankton. Benthic invertebrates feed on them when they fall to the bottom but zooplankton is almost its only predator. Zooplankton in turn is consumed by small forage fish species, e.g. capelin, sand lance, herring and mackerel. Forage species play a key role in transferring energy from secondary producers (zooplankton) towards fish and other higher trophic levels. Large ichthyophagous fish species include cod, redfish and flatfish. Overall, cetaceans, seals, cod and redfish are the main predators of forage species. Marine birds also feed on them. The benthic community of invertebrates mostly made up of shellfish, molluscs, sea urchins and worms, and includes species such as the northern shrimp, snow crab have an important role in the transfer of energy. Marine mammals form an unavoidable component in the trophic links in the Gulf. They are at the top of the food web.

A multidisciplinary and inter-regional program known as CDEENA (Comparative Dynamics of Exploited Ecosystems in the Northwest Atlantic) originally proposed a comparative analysis of changes in the structure and function of northwest Atlantic shelf ecosystems to determine how these may have affected the productivity of living resources⁴¹. To this end, CDEENA brought together the expertise of field scientists and modellers to: (1) describe the changes in time and space, (2) identify and fill critical data gaps in the knowledge base, and (3) develop models to investigate ecosystem-level hypotheses (i.e., environmental variation, predation, fishing effects) concerning changes in reproduction, mortality, growth, and feeding of cod and other species. One of these ecosystems was the southern Gulf of St. Lawrence. Mass-balance models have been used to reconstruct trophic flows through the southern Gulf ecosystem before (mid-1980s) and after (mid-1990s) the collapse of the cod stock. The whole-system model of the southern Gulf is divided into 30 functional groups or compartments from phytoplankton and detritus to marine mammals and seabirds, including harvested species of pelagic, demersal, and benthic domains. Details of the input data (biomass, production, consumption, export, and diet composition) for each compartment used in the modelling have been published. The model provides a tool to evaluate the impact of human and environmental factors on the southern Gulf ecosystem.

Framework and Policies

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. The governance, regulation and management of activities within and surrounding the Gulf are shared between a wide variety of government departments and agencies involved in, or with an interest in, the use and management of resources within its coastal, estuarine

⁴¹ <http://www.dfo-mpo.gc.ca/Library/279943.pdf>

and marine environments. The process is intended to involve all stakeholders. There is a strategy in place that is being implemented and will continue to develop under new national policies.

Canada has developed a Sustainable Fisheries Framework (SFF)⁴² 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. It incorporates existing policies with new and evolving policies using a phased-in approach. It also includes tools to monitor and assess results of conservation and sustainable use in order to identify areas that may need improvement. Overall, the SFF 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.

The Conservation and Sustainable Use policies incorporate precautionary and ecosystem approaches into fisheries management decisions. These policies include:

- A Fishery Decision-Making Framework Incorporating the Precautionary Approach (April 2009)⁴³
- Managing Impacts of Fishing on Benthic Habitat, Communities and Species (April 2009)⁴⁴
- Policy on New Fisheries for Forage Species (April 2009)⁴⁵
- Ecological Risk Assessment Framework for Coldwater Corals and Sponges dominated communities (April 2013)⁴⁶
- Policy on Managing Bycatch (April 2013)⁴⁷
- Guidance on Implementation of the Policy on Managing Bycatch (April 2013)⁴⁸

The implementation process will use adaptive management principles, whereby experience applying the policies to fisheries management will guide future applications. Integrated Fisheries Management Plans (IFMPs) will continue to play a critical role as the primary resource management tool through which the Framework's policies are applied.

Ecosystem Science is the foundation for the science needed to support the integrated management of diverse human activities and is needed to inform departmental policies and management practices. The Ecosystem Science Framework was developing to provide an effective and comprehensive approach for identifying, monitoring, and interpreting trends important to ecosystem sustainability and integrating knowledge about the effects of human activities on ecosystem components⁴⁹. A Five-Years Research Plan (2008-2013) has been developed to support the ecosystem science through its 20 components and their connections.

This Research Plan showed how four of the priority areas will be addressed primarily through Ecosystem Research Initiatives (ERIs) that address regional research including: Fish Population and Community Productivity, Habitat and Population Linkages, Climate Change / Variability, Ecosystem

⁴² <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overview-cadre-eng.htm>

⁴³ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precaution-eng.htm>

⁴⁴ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/benthi-eng.htm>

⁴⁵ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/forage-eng.htm>

⁴⁶ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/risk-ecolo-risque-eng.htm>

⁴⁷ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/bycatch-policy-prise-access-eng.htm>

⁴⁸ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/bycatch-guide-prise-access-eng.htm>

⁴⁹ <http://www.dfo-mpo.gc.ca/science/publications/fiveyear-plan-quinquennal/index-eng.html>

Assessment and Management Strategies. Each of the Ecosystem Research Initiatives, Centres of Expertise and the Climate Change Science Initiative are strongly influenced by the Ecosystem Science Framework and will produce new knowledge and improve existing knowledge that will be needed for integrated management and demonstrate a strong commitment to research to our clients and partners. Each ERI will serve as a pilot for DFO's ecosystem-based approach by focusing on regional research priorities. This will allow integrated research on a particular ecosystem with predefined geographical boundaries and the knowledge gained from large-scale ecosystem studies will allow the development and testing of tools required to manage human activities within our aquatic ecosystems. Before we can begin to understand how human activities might impact ecosystem components we need to first understand how ecosystems function and how they respond to drivers or perturbations. Thus, the general themes within each ERI include: 1) understanding ecosystem processes, 2) understanding the impacts of climate variability, and 3) developing tools for ecosystem-based management. The Ecosystem Research Initiatives focused on seven geographically-distinct areas including the Lower St Lawrence estuary (White et al 2013).

Because of the wide variety of human use and pressure, the Estuary and Gulf of St Lawrence was one of the first marine ecosystems in Canada to be recognized as a Large Ocean Management Areas (LOMA) that required action by the Government of Canada under the *Ocean Act* to ensure the sustainable development of its human uses (Dufour and Ouellet 2007). In 2000, The Gulf of St. Lawrence Integrated Management (GOSLIM) project was thus created to develop and implement a management plan for ocean resources in the Gulf (Figure 44). 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. Tools used to manage the Gulf of St. Lawrence include Ecosystem Overview Assessment Reports (Dufour and Ouellet 2007), identification of Ecologically and Biologically Significant Areas (EBSAs), seabed mapping, and development of ecosystem objectives (DFO 2005b).

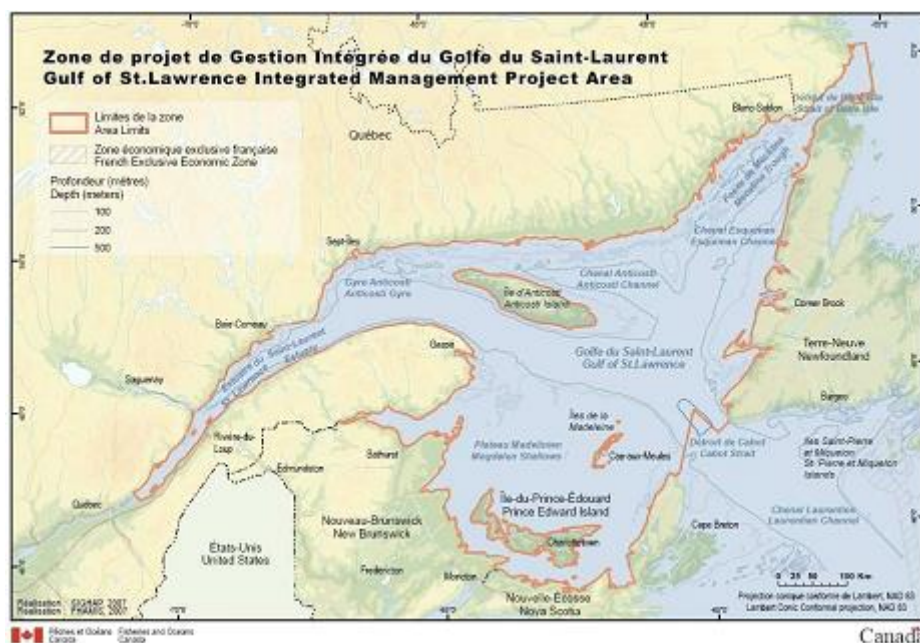


Figure 44. Map of the Gulf of St Lawrence illustrating the GOSLIM project. Source: Dufour and Ouellet 2007.

Identification of EBSAs represented a step towards specifying objectives for integrated oceans management and for the GOSLIM (DFO 2007b). It also helped identify research needs. The territories covered by the ESBAs play a remarkable ecological and biological role and therefore special treatment is required when managing activities that may affect them. The Gulf of St. Lawrence has

ten identified ESBA among which 2 fall within the boundaries of Gaspé Peninsula (Figure 45) (DFO 2007b).

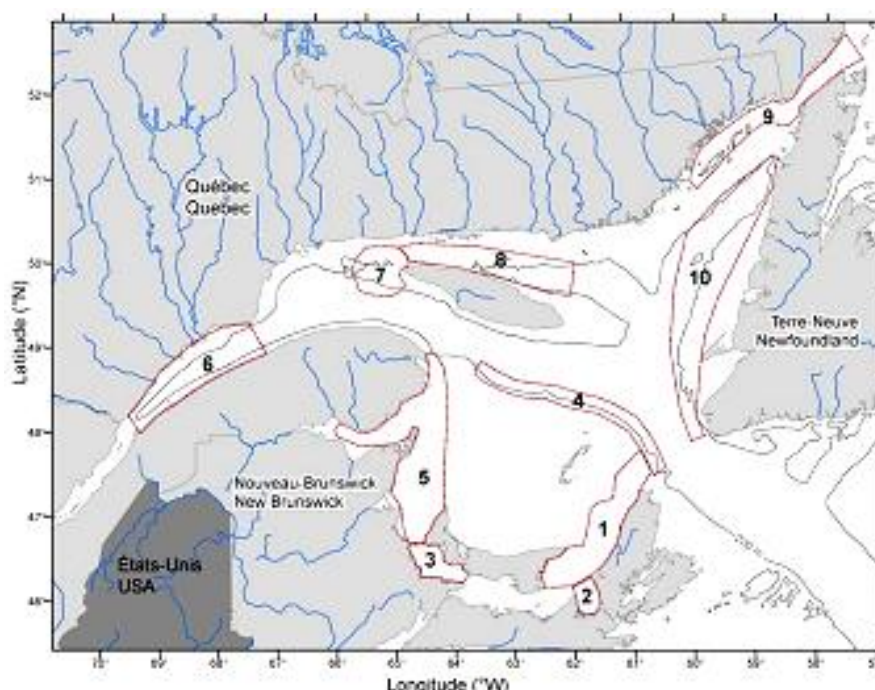


Figure 45. ESBA distribution in the estuary and Gulf of St. Lawrence: (1) western Cape Breton, (2) St. George's Bay, (3) Northumberland Strait, (4) the southern fringe of the Laurentian Channel, (5) the southern-western coast of the Gulf, (6) the lower estuary, (7) western Anticosti Island, (8) northern Anticosti Island, (9) the Strait of Belle Isle, (10) the west coast of Newfoundland. Source: DFO 2007b.

St. Lawrence Action Plan 2011-2016⁵⁰

Since 1988, the governments of Canada and Quebec have cooperated to conserve, restore, and protect the St. Lawrence. This cooperation refers to the St. Lawrence system as a whole. In 2011, a new agreement was signed. The action plan forecasts the implementation of three new MPAs for 2015. A technical committee is in place to analyse available scientific data in order to propose areas of interest for conservation.

The governments of Canada and Quebec have been working together since 1988 to ensure the conservation and enhancement of the St. Lawrence. These efforts continue under the St. Lawrence Action Plan 2011–2026, for which the governments have identified three priority issues⁵¹:

- Biodiversity conservation
- Sustainable use
- Improved water quality

Lobster in the GSL food web

As previously reported, larvae lobster are omnivorous, they feed on zooplankton (copepods, crab larvae, eggs) and phytoplankton (diatoms, dinoflagellates and filamentous algae)⁵². 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 ectopods (Hudon and Lamarche 1989). Hudon and Lamarche (1989) also observed in one

⁵⁰ <http://planstlaurent.qc.ca/en/home.html>

⁵¹ http://planstlaurent.qc.ca/en/priority_issues.html#c916

⁵² <http://slgo.ca/en/lobster/context/foodchain.html>

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 ontogenic 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 sea 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.

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. Contrarily, 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 (Boudreau and Worm 2010).

Impact of Gaspésie lobster fishery on the Ecosystem

There is a large amount of literature which describes the 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 (Goñi 1998, Pauly et al 1998, Bianchi et al 2010).

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, bycatch 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, retained and bycatch species, and information is available to show the negligible impact on ETP species. There is no indication that the fishery causes serious or irreversible harm to habitats.

Again, as previously reported, there is a strategy in place to ensure that the Gaspésie lobster fishery does not pose a risk or irreversible harm to ecosystem structure and function by restricting the number of fishermen, the number and size of traps in use, and the fishing season. A MLS, a maximum size and the release of berried lobster female are required. Escape vents are required on traps to reduce non-target species and undersized lobster catch. Moreover, the assessment team considered that the strategy of fishing effort reduction adopted by DFO and the RPPSG from 1998 to 2005 and after 2009 through licence retirement (reducing the number of harvesters), reduction of the number of traps per licence would have reduced impacts on ecosystem components.

4.5. Principle Three: Management System Background

4.5.1 The Legal Basis and Scope of the Management System

Legislative framework

The Canadian fisheries management system is based several Laws principally the *Fisheries Act* of Canada that gives to the Minister of Fisheries and Oceans the authority to manage the Canadian fisheries and create, add or change any fisheries management measures. Ensuing from this Act, several regulations are in force, the principal being as the Atlantic Fishery Regulations, 1985, amended many times (last amendment in 2013) and *Fishery (General) Regulations (1993)*. Here is the Acts that are applied by DFO⁵³

- *Atlantic Fisheries Restructuring Act*
- *Canada Shipping Act, 2001*
- *Coastal Fisheries Protection Act*
- *Department of Fisheries and Oceans Act*
- *Financial Administration Act*
- *Fisheries Act*
- *Fisheries Development Act*
- *Fisheries Improvements Loan Act*
- *Fishing and Recreational Harbours Act*
- *Freshwater Fish Marketing Act*
- *Great Lakes Fisheries Convention Act*
- *Oceans Act*
- *Species at Risk Act*

For the assessed fishery, of special interest in addition to *Fishery Act* is the *Oceans Act*, who, among other things, gives to the Minister the authority to integrated oceans management and to implement use of the precautionary approach. In 2012, the Fishery Act was amended⁵⁴ among other things to develop regulations in order to enter into agreements with other federal departments, provinces and others for the effective management of fisheries resources.

The SARA is also implement in the fishery management; DFO is a part of government agencies that are responsible for the application of this Law (Environment Canada, Parks Canada are also involved).

From time to time, other legal rulings arising from Canada's judicial system will impact the use and scope of the Minister's authorities over such matters as fisheries access, enforcement and control, aboriginal inherent and treaty rights, and trade. Transport Canada has also the authority to manage marine transportation that could affects time to time fishing boats through Small Fishing Vessel Inspection Regulations⁵⁵.

⁵³ <http://www.dfo-mpo.gc.ca/acts-lois/acts-lois-eng.htm>

⁵⁴ <http://www.dfo-mpo.gc.ca/pnw-ppe/changes-changements/index-eng.html>

⁵⁵ <http://www.tc.gc.ca/fra/securitemaritime/desn-bateaux-de-peche-petit-menu-292.htm>

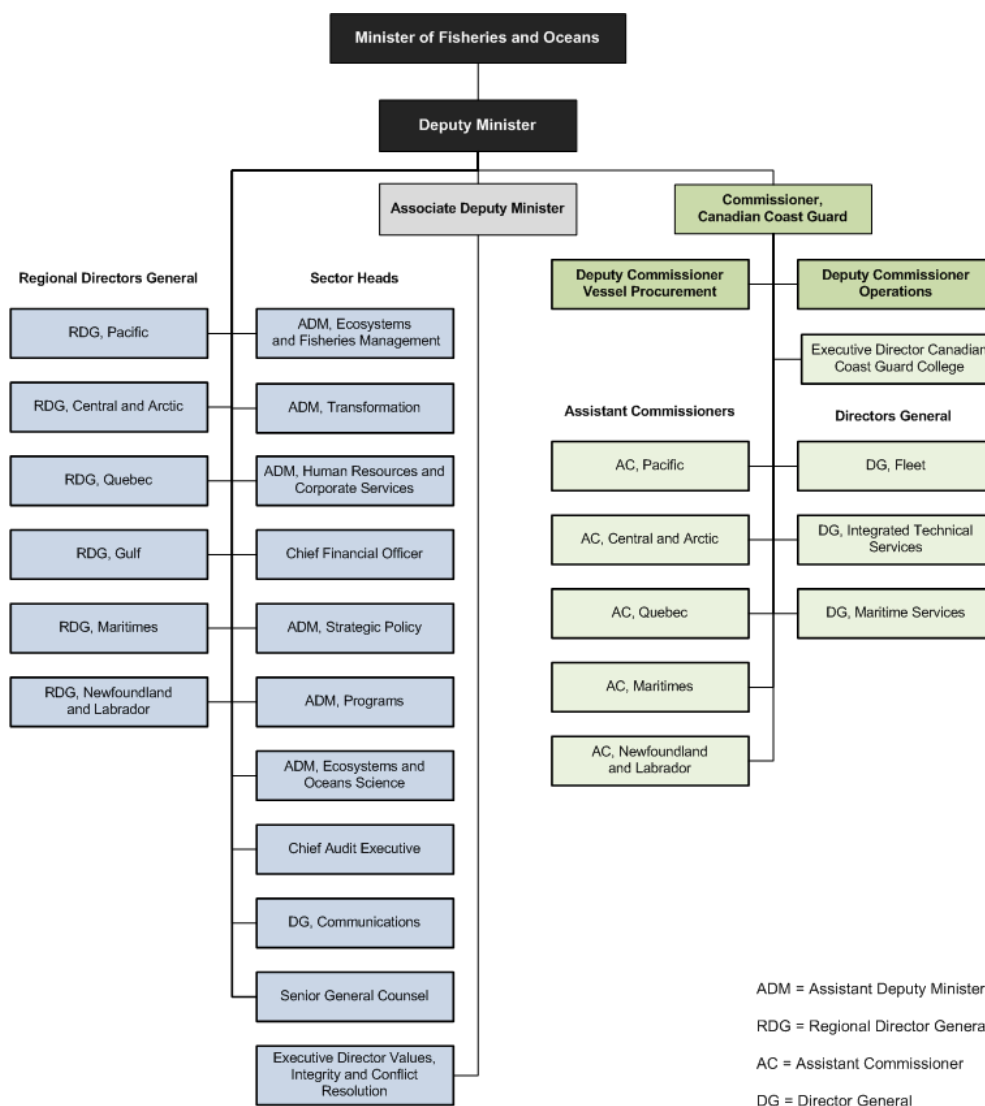


Figure 46. Schematic representation of Fisheries and Oceans Department.

International relations and treaties

Canada is a signatory to the United Nations Convention on Law of the Sea (UNCLOS) as well as the subsequent United Nations Fish Stocks Agreement (UNFA). It has adopted the FAO Code for Responsible Fisheries and assisted the domestic development of the Canadian Code of Conduct for Responsible Fishing operations⁵⁶. Canada has also supported the four International Plans of Action (IPOA) (on seabirds, sharks, fishing capacity and illegal, unreported and unregulated fishing) that have emerged under the FAO Code.

Canada is a member of Regional Fisheries Management Organizations (RFMO) around the world⁵⁷:

- Northwest Atlantic Fisheries Organization (NAFO)
- Inter-American Tropical Tuna Commission (IATTC)
- International Commission for the Conservation of Atlantic Tunas (ICCAT)

⁵⁶ http://www.dfo-mpo.gc.ca/international/media/bk_fao-eng.htm

⁵⁷ <http://www.dfo-mpo.gc.ca/international/dip-rfmo-eng.htm>

- North Atlantic Salmon Conservation Organization (NASCO)
- North Pacific Anadromous Fish Commission (NPAFC)
- Western and Central Pacific Fisheries Commission (WCPFC)

Canada has also partnership links with some multilateral organizations:

- Organization for Economic Co-operation and Development (OECD)
- United Nations Food and Agriculture Organization (FAO)—Committee on Fisheries
- World Trade Organization (WTO)
- North Atlantic Fisheries Ministers Conference (NAFMC)

In addition, Canada has bilateral partnership with other country fishery departments to address overfishing and oceans governance issues.

Legal disputes and the Aboriginal Fishing issues

Unresolved disputes within the Canadian fisheries management system can be, and have been, taken to the Canadian judicial system for a final decision. The most notable of these over the last two decades have been the “Sparrow”, “Marshall” decisions that concerns aboriginal rights to fish under specific circumstances and “Larocque” decision that outlawed the use of resource allocations to pay for services provided to, or on behalf of, government without the approval of Parliament. There is also provision for an appeal of licensing decisions to independent Regional (RLAC) and Atlantic License Appeal Boards (AFLAB)⁵⁸.

Important legal judgments on aboriginal rights were the occasion for DFO to integrate aboriginal communities in Gaspé lobster fishery. Some permits were allowed to the Mi'kmaq groups, that is also present in New Brunswick. This aboriginal community is member of advisory Committee and the aboriginal fishery is subject to the conservation measures under agreement reached between DFO and aboriginal community.

4.5.2 Consultation Processes

In 2004, DFO published a departmental frame work to consultations with fishing industry stakeholders and professional and to support its decision-making process. This frame was completed by a consultation toolbox to guide staff in planning and evaluating consultation processes⁵⁹. These tools provide for a common understanding of consultation and common approach in the consultation processes.

This Appendix C of the framework is a special section that provides guidance to DFO officials when undertaking consultations with Aboriginal groups. This guidance is consistent with the principles of the Consultation Framework, but outlines special considerations that apply with respect to consulting with Aboriginal groups. This consultation allows the aboriginal groups to be involved in decision-making process and promote more effective management of fisheries.

Quebec Regional Processes

Document framework

Following the DFO Consultation Framework publication, a regional framework was produced also in 2004⁶⁰ and is generally consistent with the broader departmental policy framework. Framed by the

⁵⁸ <http://www.dfo-mpo.gc.ca/fm-gp/policies-politiques/licences-permis/aflap-pappa/index-eng.htm>

⁵⁹ <http://www.dfo-mpo.gc.ca/Library/282189.pdf>

⁶⁰ POLITIQUE RÉGIONALE POUR LES CONSULTATIONS DE L'INDUSTRIE DES PÊCHES, Région du Québec Gestion des Pêches, Pêches et Océans Canada, Juin 2004, 10pp.

principles of transparency, coherence, accountability and respect, the regional framework's objectives include (i) optimal sharing of information, (ii) promoting consensus, (iii) informed decision-making, (iv) strengthening industry positions, (v) reinforcing the role of spokespersons, and (vi) promoting industry collectives. The consultation framework's guidelines require that fish harvester organizations be accredited and representative of their members and fleet sectors. While individual fishers are free to express their views on any subject directly to DFO, the regional policy stipulates that only those views which are expressed by a recognized organization during a departmental-sanctioned consultation process will be considered. The regional framework also provides for meetings to be co-chaired by DFO and the Industry.

Consultation body and working procedure

Gaspe Lobster Advisory Committee (AC), gathering together representatives of various accredited inshore fish harvester associations, aboriginal groups, processors, and provincial government (MAPAQ) representative is the core of DFO Gaspe area's approach to consultation. Advisory committee meetings are public. Dates of advisory committee meetings are published on DFO Quebec Region website⁶¹. Experts and other DFO members and experts could be invited on special discussion topics. This primary government-industry fisheries management advisory body for the Gaspe lobster fishery in the LFA 19-20 and 21 existed since many years and is therefore a well-established platform for the information exchange on lobster and advice. The committee seek broad consensus on modifications to bring to management system. In addition to RPPSG representatives, one representative of fishermen in each sub-unit is invited to attend the AC meeting as a formal member. Even if this sub-unit participation increase significantly number of AC members in meetings, it proves to be very useful to give access to small fishermen communities to the discussion and guaranty a better information spreading. An Integrated Fishery Management Plan (IFMP) is to be completed by the end of 2014; this plan will be an important tool to management planning.

Representatives of industry and the DFO met during site visit in June 2014 insist on the importance of committee's work as a positive way to manage the lobster resource with a common and proactive approach. Workshops are also organized about each two years to solve management problems or discuss measures that have to be changed. DFO regional staff and the RPPSG considered that this was a very efficient way to reach consensus when the subject is questioning by industry stakeholders. The Assessment Team was informed that the committee's meeting agenda was planned jointly by DFO and the fish harvester organizations which ensured that members were informed of the discussion points well in advance of the meetings. This allowed members the opportunity to gather appropriate information and data, prepare presentations, and contribute to the points of discussion⁶².

Reference terms do not exist per se for the Advisory Committee activity. The Representatives on the committee that we met in June did not see this as a hindrance to their work. They indicated that members had a high level of understanding regarding the committee's mandate and of their own responsibilities. The number of decisions taken on specific measures and roles played by DFO as well RPPSG in their implantations demonstrate that formal terms of reference are not absolutely necessary.

The information coming from AC meetings are share rapidly. From notes written by DFO staff that attends to advisory meeting, a report is produced and sent by e-mail to every representative of the committee. The representatives have the responsibility to spread the report to their organizations and members.

⁶¹ <http://www.gc.dfo-mpo.gc.ca/peches-fisheries/commerciale-commercial/consultation-eng.html>

⁶² Information obtained from assessment team June site visit

Science based RAP process

The Gaspésie Lobster Advisory Committee meetings are preceded by DFO Science's Regional Advisory Process (RAP) sessions, which are public, to discuss and develop the stock assessment advice for the lobster fishery. Reports are published by the Canadian Science Advisory Secretariat as (i) Science Advisory Reports, (ii) Research Documents, and (iii) Proceedings. Industry and provincial government representatives are invited to contribute to the SAR and Proceedings deliberations. All reports are published on the CSAS website⁶³. For the Quebec lobster fishery, the latest scientific reports were published in August 2012 (DFO 2012a).

Canada - Aboriginal Consultation Framework

In September 2008, the Mi'kmaq of Québec, the Province of Québec and Canada signed the Niganita'suatas'gl Ilsutagann Agreement (NI). The NI is an Umbrella Agreement which establishes a results-oriented process to discuss issues of mutual concern with a view of reaching a Framework Agreement. In June 2012, the parties signed a Consultation Agreement⁶⁴ which establishes a streamlined, one-window process through which federal and provincial governments can consult the Mi'kmaq in Québec.

In 2013, The Interim Tripartite Agreement on Mi'kmaq Consultation and Accommodation between THE MI'GMAQ, as represented by the Chiefs and Councils of the Micmacs of Gesgapegiag, La Nation Micmac de Gespeg and the Listuguj Mi'kmaq Government, and their assembly, the Mi'gmawei Mawiommi ("Mi'kmaq"), the Quebec Government and Canada Government was signed⁶⁵. This agreement defines the consultation process and relationship to the Gaspé Mi'kmaq and government agencies (federal and provincial).

The Mi'kmaq community represented by three different groups, Listuguj and Gesgapegiag in the Chaleur Bay and Gespeg in the east portion of the Gaspé Peninsula benefited from full respect of their aboriginal rights to exploit marine resource and lobster permits were given to these three groups. They are now recognized as lobster harvesters and attend the advisory committee meetings as members.

4.5.3 Long Term Objectives

The revised 2013 DFO vision⁶⁶, as presented in its website is: Through sound science, forward-looking policy, and operational and service excellence, Fisheries and Oceans Canada employees work collaboratively toward the following three strategic outcomes:

- Economically Prosperous Maritime Sectors and Fisheries;
- Sustainable Aquatic Ecosystems;
- Safe and Secure Waters.

To achieve Sustainable Fisheries and Aquaculture the Department has developed its Sustainable Fisheries Framework "to provide the basis for ensuring, Canadian fisheries are conducted in a

⁶³ <http://www.dfo-mpo.gc.ca/csas-sccs/index-fra.htm>

⁶⁴ <https://www.aadnc-aandc.gc.ca/eng/1100100028632/1100100028633>

⁶⁵ <https://www.aadnc-aandc.gc.ca/eng/1360079520382/1360079711082>

⁶⁶ <http://www.dfo-mpo.gc.ca/about-notre-sujet/org/vision-eng.htm>

manner which supports 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 Sustainable Fisheries Framework provides the foundation for an ecosystem base and precautionary approach to fishery management in Canada“.

The sustainable fishery framework⁶⁷ that was developed in 2009 is based on the following main goals:

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.

(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 (IFMP) identifies goals related to conservation, management, enforcement, and science for individual fisheries; 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. IFMP 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 its fishery renewal effort and taking in account its mission DFO, three strategic and long-term objectives are formulated⁶⁸:

- Long-Term Stability –enabling DFO and resource users to achieve strong conservation outcomes through risk management frameworks incorporating the ecosystem and precautionary approaches;
- Economic Prosperity – aligning fisheries policies and decision-making processes to support economically prosperous fisheries for Canadians;
- Improved Governance –increasing stability, transparency and accountability in fisheries.

Complementing these documents, the Atlantic Fisheries Policy Framework (2004)⁶⁹ provides policy direction for the management of fisheries on the Atlantic coast over the long term. The framework identifies two core objectives and two supporting objectives. These four objectives describe the outcomes that DFO will strive to achieve in collaboration with resource users and others who have an interest in the Atlantic fisheries:

- Conservation and Sustainable Use of the marine resources. This is the first priority and fishing activities must be done to assure sustainability of the resource.
- Self-reliance fisheries, based on collaboration among all orders of government and fishery communities;
- Shared Stewardship, in decision-making processes at appropriate levels. Industry representatives have the opportunity to contribute to the process with their knowledge and experience.
- A Stable and Transparent Access and Allocation Approach;

⁶⁷ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overview-cadre-eng.htm>

⁶⁸ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/index-eng.htm>

⁶⁹ <http://www.dfo-mpo.gc.ca/fm-gp/policies-politiques/afpr-rppa/framework-cadre-eng.htm>

4.5.4 Incentives for Sustainable Fishing

Operating subsidies and other financial incentives that are offered by government agencies as are oriented towards sustainability lobster Gaspé fishery, consistent with MSC principles 1 and 2:

- From the ALSM program⁷⁰ established in 2009, \$3 million were offered to the RPPSG and the Association des Pêcheurs Propriétaires des Îles-de-la-Madeleine (APPIM) to develop lobster sustainability, improve lobster abundance and support therefore economic prosperity. The RPPSG had \$1.1 million to conduct projects in areas 19, 20 and 21, that include licenses retirement program and the implantation of an electronic logbook system for a better fishery monitoring and by-catch control.
- The MAPAQ that has the fishery development responsibility on behalf of the Quebec Government has some subsidies programs that are offered to fishermen⁷¹. However, these programs are all oriented towards fishery sustainability. The MAPAQ gave a financial help to fishermen to buy fishing licenses, in collaboration with RPPSG and DFO. MAPAQ also provides financial support for eco-certification of the lobster fishery and the identification and traceability of lobsters. He is also involved in research activities through MERINOV, that has the mission to *contribute to the sustainable development and competitiveness of Québec's fisheries, aquaculture and aquatic biomass conversion industry through research and development, technology transfer, technical assistance and monitoring*.
- The *Bureau d'Accréditation des pêcheurs et des Aides-Pêcheurs du Québec* (BAPAP) issues certificates attesting that the applicants qualify to carry on their trade of fishers or assistant fishers according to commercial fishing requirements⁷²; it advises the Minister on any matter relating to the professional qualifications of fishers and assistant fishers. The board mission and its actions take in account fishery sustainability; in the different courses followed by fishermen, there is a section on the subject.

The management system of Gaspé LFA 19, 20 and 21, contains several measures that are incentives to sustainable fisheries such as:

- Limited entry licensing
- Increase of legal size lobster (from 76 to 82 mm reached in 2002)
- V-notched voluntary marking of berried females
- Selective events legal imposition in 1993 and biodegradable clips
- Maximum size possession limit from 2007

These measures were applied to increase egg production, ameliorate the population structure and abundance, prevented from catch of juvenile lobsters.

In addition, other measures were applied to reach a reduction of fishing effort: license buyback, implantation of only one trap hauling per day, from 2006 decrease of number of fishing days from 70 to 68 and decrease of number of traps per fisherman from 250 to 235. These measures together permit a fishing effort reduction of 16%.

It is noted that abundance indicators increased also since 2008. In 2011, landing was 872t, that is higher (15%) of those of 2008 and higher also the mean landing of the last 25 years. Landings have

⁷⁰ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/lobster-homard/alsm-mdih-eng.htm>

⁷¹ <http://www.mapaq.gouv.qc.ca/fr/Peches/md/Programmes/Pages/Programmes-Peches.aspx>

⁷² <http://www.bapap.qc.ca/eng/info1.htm#haut>

continued to increase with landings of 1032 t in 2012, 1233 t in 2013 and 1519 t in 2014 (preliminary data, DFO 2014). These results come from the sum of efforts by all the parties to achieve common goals to increase lobster population and exploit the resource on a sustainability basis. The RPPSG is deeply involved in the management procedure from different manners and the success attained depends in a large part to fishermen effort.

Today, we could say that fishermen are especially aware of lobster stock conservation. The RPPSG website presents sustainability as a principal outcome for the association. It is involved from different ways in management system and research activities and conduct itself different projects as development of artificial reefs, development of artificial baits, lobster stock evaluation after the fishing season in collaboration with DFO Research team, traceability measures to guarantee lobster provenance.

In summary, the assessment team considers that the management system for the LFA 19, 20 and 21 lobster fishery is on a stable footing in regards to future landings. This situation is mainly the result of a proactive approach between the lobster industry and the governments in managing the resource and the implication of fishermen themselves through their association.

4.5.5 Fishery Specific Objectives

Up to now, there is no IFMP. However, a draft is to be completed until the end of 2014. DFO and RPPSG reached a consensus on fishery specific objectives and planning. The final document was made by RPPSG in 2009 (RPPSG 2009). The objectives presented in the document had been endorsed by DFO:

1. A better biological productivity improvement by:

- a) Sufficient egg production in order to protect the potential recruitment
 - Increase of legal minimal length to 83 mm to double the number of egg per recruit
 - Setting up of a conventional trap to limit the fishing effort increase for 2012
 - Setting up in 2010 a minimal traps per line and limiting the distance between the traps to a better fishing repartition and creation of non-fishing zones
 - Preservation of a maximal length in the catch to protect large spawning lobsters to sustain egg production and ameliorate stock structure. It is intended to harmonize to some extent the total legal length with American regulation
 - Develop a technical mean to return to the water berried females
- b) Important fishing effort reduction by two measures :
 - Continuity of the license buy-back program to attain the fishing capacity reduction of 14% (28 licenses) until 2015.
 - Continuity of the business merger project that increase the fisher enterprise viability and contribute to fishing effort reduction by the automatic reduction of 15% of traps in the new license

2. Production of reliable reports by:

- Initiate and put in place an electronic log-book for fishermen.
- Develop in a short term the electronic log-book by agreement between DFO and RPPSG
- Put in place an post-season evaluation program for 2011

- Analyze the feasibility to put in place a self-dependent catch verification at dock

3. Diminution of ecosystem impacts by:

- The reduction of biodegradable clips diameter in 2012 to decrease the ghost-fishing in case of trap lost.
- A better attachment of escaping events on wooden side trap
- Analyze data on by-catch in the electronic logbook from 2010
- Maintain the management system of trap lost
- Intensify the lobster larvae stocking until 2012 (RPPSG project)
- Development of artificial reefs in non-suitable ground for lobster along the Gaspé coast.

Proposals from DFO Science include also specific objectives for this fishery that are presented mainly in the Science Advisory reports (DFO 2009 and 2012a) published in CSAS website. These research objectives are currently used:

- Fishing effort reduction to decrease exploitation rates and improve size structure to have a fishery less dependent of annual recruitment
- Increase the proportion of multiparous females
- Keep a well-balanced sex ratio
- Define more refined biological reference points for the application of the precautionary approach

In addition, the recent research program made in 2014 presents research outcomes and goals until 2017 for the assessed stock. The objectives for the future that have to be shared with all stakeholders address the issues of stock evaluation, biology and lobster population dynamics, population connectivity, additional research to support industry and communities and ecosystem issues (presented more deeply in a next section).

4.5.6 Decision-Making Process

Data collecting cycle

Each year, during the fishery data are collected by different groups:

- DFO Science on biological parameters of lobster stock and stock evaluation,
- DFO Fishery Officers on fishing data through on-board and dock-side inspections and on verifications to ensure that measures and license conditions are respected by harvesters,
- Some data sources on landings are available. The principal data came principally from sales slips that are collected by DFO and entered into the department data base. The electronic log-book, in force since 2012, is also a source of data on lobster catches and by-catches of fishes and other shellfishes. This log-book is a way to compare and refine sales slip information and to estimate lobster amount that are not sell through the processors industry. Supporting reports from MAPAQ are also available; the processing industry is regulated by MAPAQ through license system and data are collected on processed lobster quantities. Officers of this department are present during the fishing season in processing plants mainly for product quality inspection and oversee lobster quantity bought from fishermen and processed.

Decision process

The decision-making system is based on shared information and transparent discussions between government representatives and the industry. The Advisory Committee, co-chaired by DFO and the industry, is the central tool where information is presented, management propositions are debated and decisions are made on a consensus basis. The decision-making process is still influenced by the 2004 Quebec regional consultations policy framework⁷³ that presents following principles and objectives:

Principles

- Process transparency
- Process application that is consistent
- The industry responsibility
- Listening to representatives with respect

Objectives

- Provide an optimal information sharing
- Consensus seek
- Provide a well-documented decision-making
- Encourage groupings of enterprises
- Reinforce industry positions
- Reinforce the role of representatives

From this framework, the administrative responsibility to make adjustments to the management system, both in matters of policy and operations was delegated to the DFO Area Director of Gaspé, who has the entire responsibility to pursue its mandate in collaboration with stakeholders. This functioning-mode proves to be very efficient when management has to be change rapidly. This type of governance approach permits a better industry involvement in the decision-making process and could be used easily in lobster fisheries, where there is no inter-regional or inter-provincial resource splitting and a unique type of fishery and gear.

The Advisory Committee meetings are held at each three years following the production of Science Advisory Report on lobster stock. Following a meeting, a preliminary meeting report is sent to participants for comment and then finalized. The final report is distributed to all committee members, who have the responsibility to spread it within their organization. In some cases, if required by the importance of adjustments of the management plan, the Area Director will brief the Regional Director, Fisheries Management and Aquaculture who is located in Quebec City. At the end of the consultation process, DFO issues a Notice to Fish Harvesters⁷⁴ on its website with presents the policy and specific measures that will be in effect for the upcoming fishing season.

In the Science process of stock status determination and review of biological parameters, industry and provincial government (MAPAQ) representatives have the occasion to present their opinions. The CSAS peer-review process is a rigorous mechanism where a consensus is seek; participation to meeting is by invitation only and participants should be chosen on their knowledge of the topic and informed of their role and responsibility in the decision-making process. Of note is the policy respecting attendance by observers which was introduced in November 2011, and the policy respecting the principle of consensus which became effective in December 2010. Participants should be chosen for their knowledge of the topic(s) (e.g., species, modeling) under review. Participants

⁷³ POLITIQUE RÉGIONALE POUR LES CONSULTATIONS DE L'INDUSTRIE DES PÊCHES, Région du Québec Gestion des pêches, Pêches et Océans Canada, Juin 2004, 10pp.

⁷⁴ <http://www.qc.dfo-mpo.gc.ca/peches-fisheries/avis-notice/homard-19-p-2014-eng.html>

must understand the nature of peer review, their role as contributors of knowledge and perspective, and in controlling the quality of information and advice resulting from the meeting through constructive criticism and consensus decision-making⁷⁵.

4.5.7 Monitoring, Control and Surveillance

The Conservation and Protection (C&P) program is the enforcement arm of DFO and seeks to facilitate harvester compliance with the *Fisheries Act* (the Act) and supporting regulations relating to the conservation and sustainable use of Canada's fisheries resources, the protection of species at risk, fish habitat and oceans. The Director General C&P, as the senior DFO enforcement officer, promulgates technical policies and procedures to facilitate the delivery of a quality professional departmental compliance and enforcement program. Program delivery is decentralized under the Regional Directors General and Area Directors, who are advised by C&P Regional Directors.

National Program Internal Audit

The conservation and protection governance was audited a few times in the past years. The last audit was made in 2012⁷⁶. The 2012 audit has found that, overall, the Conservation and Protection governance framework and control activities for Commercial and Aboriginal Fisheries are well established; however, the program is currently not assessing the effectiveness of the controls to ensure that compliance with relevant regulations and legislation is maintained and achieved.

The audit 2012 team identified the following observations:

- The Conservation and Protection governance framework is well established and operational plans are linked to Fisheries and Oceans Canada's strategic outcome for sustainable fisheries. However, the collaborative relationship between Conservation and Protection and Resource Management with regards to initiatives within Ecosystems and Fisheries Management needs improvement.
- The selection and review of control activities for Commercial and Aboriginal Fisheries does not effectively include consideration of their relevance and appropriateness to the risk and related objective. The allocation of resources is not aligned to Conservation and Protection's enforcement strategy.
- The intelligence-gathering systems and processes do not allow Conservation and Protection to share intelligence across regions nor do they assist in determining where to effectively focus enforcement efforts.
- Performance measures have been identified; however, the performance indicators are largely output based and do not provide useful information in terms of results to allow the program to adjust course as needed to ensure compliance efforts are strategically focused.
- Financial controls are appropriate to carry out operational plans. There is adequate monitoring of budgets, forecasts, and resource allocations. However, the manner with which funds are allocated to Major Case Management and special investigations does not adequately address the financial needs of this activity.
- Conservation and Protection lacks a national training program for Major Case Management and Special Investigations.
- Recruitment strategies are in place but do not consider the current and future needs of the intelligence program.

⁷⁵ <http://www.dfo-mpo.gc.ca/csas-sccs/process-processus/process-processus-fra.htm>

⁷⁶ <http://www.dfo-mpo.gc.ca/ae-ve/audits-verifications/11-12/6B236-eng.htm>

DFO Management was reportedly in agreement with the audit findings and recommendations and undertook to develop Action Plans along with implementation timeframes.

C&P Organization in Gaspé, LFA 19, 20 AND 21

The conservation and protection activities are highly dependent of type of fishing. For lobster fisheries there is no quota or individual transferable quota. The lobster Gaspé fishery is managed by several measures as limited entry licensing, fishery season defined, minimum legal carapace size and maximum legal size, obligation to return berried females at sea and traps limits per fishermen. In addition, some other measures minimize fishery impacts on species-at-risk and protection of the ecosystem. The MCS regime is adapted to the fishing particularity and management measures. One of a new measure that is in place since 2012 is the mandatory electronic logbook that is now implanted in every boat. This data collecting system is still to be implanted and have to be well understood by fishermen; it will surely become the fishing information basis in the next years.

C&P Staff and Operations

1. Organization

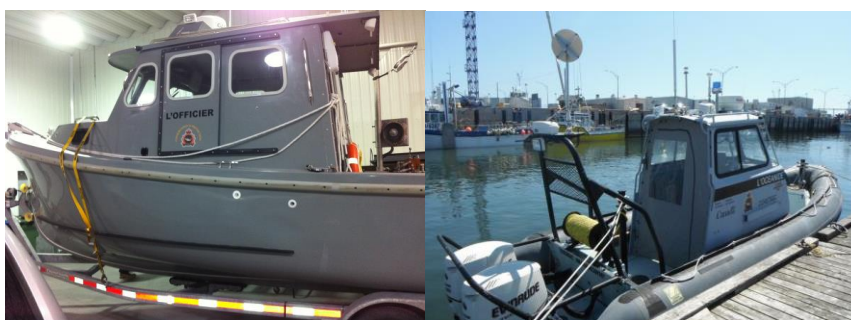
The C&P organization along Gaspé coast consists of three offices: 2 district offices in North-Gaspé (Sainte-Anne-des-Monts and Gaspé), and one located in South-Gaspé (Grande-Rivière). In north-Gaspé, there are a total of 42 fishermen and 134 in South-Gaspé. These offices are under the authority of a C&P chief who is located in Gaspé. The C&P director office is located in Quebec city and has the responsibility of operations for all fisheries in Côte-Nord, Îles-de-la-Madeleine and Gaspé.

2. Operational activities⁷⁷

Weekly planning is performed to choose priorities and actions choose dock-side operations to realize, at-sea inspections and special operations. The operations are principally targeted on the better probability to find infractions instead of random inspections. The actions are chosen mainly from selected problems or fisherman personal data (fishing history, conformity analysis using logbook data).

On need, joint operations between districts are done for important operations. Situation should arise where other enforcement agencies, as *Sûreté du Québec*, are solicited to work with fishery officers to verify trucks that transport fishes including lobster.

Dock side and at-sea inspections are performed routinely during the fishing season. At-sea operations are made mainly to verify the trap conformity (numbers of traps and design conformity). The department owns on boat equipped to haul traps. Each office is equipped with a Zodiac boat to board fishing vessels for catch inspection and trap conformity.



⁷⁷ Information from a C&P meeting in Gaspé during June site visit

From time to time vessels may be subject to a catch audit if a serious infraction is suspected or reported through the Poaching Alert program. Inspections of lobster catch are also performed at the processing plants to verify the catches conformity. Similar inspections are also performed on the fishery of the 4 aboriginal communities that are involved in commercial fishing (3 groups) and fish for subsistence (1 group).

Table 13 summarizes C&P activities for recent years (cumulated data furnished by DFO staff during the site visit of June 2014).

Table 13. Gaspé C&P's activities in recent years for the lobster fishery. Source: C&P's compilation

Year	2010	2011	2012	2013
Surveillance activities (hours)	2323	1923,5	2317	1666
Verifications (numbers)	283	173	282	156
At-sea verifications (%)	45	40	50	30
Warnings	19	16	19	17
Infractions	13	8	16	11
Complaints from public (numbers)	32	19	23	18
Case of poaching	1	5	5	2

Results indicate that:

1. Hours of surveillance activities are relatively stable year to year, except for 2013. Variations observed are due to the necessity to split interventions between different species during the lobster season. This was the case in 2013; a special inspection on spring herring fishery necessitates more efforts resulting on effort reduction on lobster fishery. However, the surveillance activities on Gaspé lobster are one of the main C&P's activities, representing between 24%-37% of total annual surveillance effort in the area from 2010 to 2013.
2. Same trend is observed in the verification numbers. At-sea verifications represent between 16 and 23% of total verifications. Most effort is targeted on dock-side inspection.
3. The mean ratio between sea-boarding inspections and boats numbers (180) is about 20%; we could extrapolate that at least 1 boat on 4 is boarding and inspected. However, this data is imprecise, as the targeted boats for inspection are chosen from fishermen history data and complaints from public.
4. The warnings and infractions are relatively stable from year to year. The numbers of identified offenses (warnings and infractions) per year may indicate that the surveillance is efficient (targeted inspections).

Time to time, special operations are done at sea to verify equipment conformity to license conditions. Table 14 presents infractions observed and sentences given to fishermen who had breaking the regulation from 2008 to 2013.

Table 14. Infractions and Sentences related to special operations.

Year	Special operations	Sentence
2008	Lobster caught in a red plaice net and kept	750\$ fine + lobsters seized
2008	Special operation at sea with 2 C&P boats. Number of traps exceeding license conditions.	700\$ fine + traps seized
2009	Special operation at sea and dockside non tagged traps and begin fishing before season starts	800\$ fine + traps seized
2010	Special operation with MRNF (Ministère des Ressources Naturelles et de la Faune). Bait fishing without permit and possession of three striped bass	2000\$ fine + net seized
2011	Possession of an atlantic halibut with a length less than 85cm during lobster fishing activities	500\$ fine
2011	Possession of cod during lobster fishing activities	500\$ fine
2011	Large scale operation on three 3 fishermen for trap number exceeding license conditions and non-tagged traps	500\$ fine each
2013	Special at-sea operation Fish in zone not mentioned in the license (2 fishermen)48 traps seized, 2 offenses each,	Judgment is going on
2013	Special at-sea operation Trap number exceeding license conditions, closed escaping events, common crab females used as baits	4500\$ fine + 20 traps seized

Sentences related to infractions appeared relatively low, and RPPSG executive is trying to convince Justice Representatives to increase fines. However, for more serious offenses or for recidivist, sentences are much more important as described in the following table.

Table 15. Substantial fines for repeat offender and for more serious infractions.

Year	Infraction	Sentence
2005	Possession of 16 lobsters smaller than length legal size and a V-notch female. Repeat offender	7,000\$ fine
2007	Possession of 28 lobsters smaller than length legal size Repeat offender	1,000\$ fine and permit suspension of 5 days at the beginning of the fishing season (the appealed court lowered the sentence to 2 days)
2009	Possession of 42 lobster smaller than length legal size and to V-notch females Repeat offender in 2010, possession of 1 berried females	3500\$ fine and permit suspension of 3 days in the beginning of the fishing season 1000\$ fine
	Possession of 32 lobster smaller than length legal size and to 2 berried females	4000\$ fine
	Possession of 11 lobster smaller than length legal size and to 3 berried females	3350\$ fine

2011	Possession of 3 berried females	2250\$ fine
2013	Traps on excess of maximum permitted, possession of females common crab and closed escaping events	4500\$ fine and 20 traps seized

During the June 2014 site visit, the Assessment Team had the opportunity to interact with departmental enforcement staff and industry representatives on a variety of enforcement outcomes including their perceptions on the enforcement effectiveness. The following comments were done:

- Both DFO staff and RPPSG representatives believe that taking in account fishermen and fishing trip numbers the amount of offenses is relatively low; part of warnings cases in 2012 and 2013 are associated with defaults to use the electronic log-book. The general opinion is that effective surveillance, general public and fishermen judgment on non-compliance effect on stock conservation has a positive effect to prevent offenses.
- Courts judgments and sentences have a positive impact to prevent offenses. To the advice of RPPSG representatives, fines could be higher to increase this impact. The Department has enacted sentencing guidelines that are applied regionally when a variety of offences are brought before the courts. These guidelines are for the benefit of federal lawyers and serve to ensure consistent sentencing recommendations, and include sentencing of repeat offenders. Maximum impact is obtained with license suspension; in the case of the license suspension at the beginning of the fishing season the violator must stay ashore at the opening of the lobster fishery for the duration of the suspension. When he is legally permitted to fish, the best fishing spots have all been taken. The suspension is a significant monetary penalty since the person cannot make up the lost revenues. In addition, the violator is faced with in to public and fishermen disapproval.
- Compliance promotion through education and shared stewardship from meetings with harvesters and from individual discussions is also important. The regional C&P program includes not only management enforcement; educational activity on the reason of management measures and on the adverse impact of non-compliance on stock preservation is an important part of C&P strategy. Compliance promotion is also performed by RPPSG with its members; the association is deeply involved stock preservation and management itself.
- Publication of court judgments against fishermen has also a real deterrence effect. The list of court judgments is published on DFO Website⁷⁸ and in some local media.
- For poaching-related offences (ie by non-licensed fish harvesters), the courts have routinely ordered the forfeiture of all equipment used in the commission of the offence, including vehicles, small boats and motors, and diving equipment in addition to imposing a monetary fine.

⁷⁸ <http://www.dfo-mpo.gc.ca/media/charges-inculpations/2012/qr-rq52-eng.htm>

4.5.8 Research Plan

DFO Science research program and some other non-governmental initiatives are conducted which constitute the basis for management and provide scientific information on Gaspé lobster stock in line with the MSC Principle 1 and 2. These projects are oriented towards knowledge of stock status, ecosystem interactions and include constant monitoring of biological indicators and of the fishery itself. Industry contributes from several ways, in participating to fix research priorities and helping to data at-sea collecting and take charge of special research projects. The industry is involved yearly on multi-group meetings as CSAS peer review.

The DFO Science research process

1. Yearly data collection.

- Plant sales slips are recorded, as well as results from at-sea samplings of commercial data. These data are compiled to give abundance indicators; these indicators year to year to analyze abundance trend.
- Biological parameters are also collected by catches samplings, as size structure and weight, jumbo lobster abundance and sex-ratio.
- Data on stock productivity are also collected (berried females abundance, egg production and pre-recruits abundance).
- Temperature and depth data that are used to better characterize lobster habitat;
- Data from the electronic logbook (in force since 2012) complement at-sea data sampling (2011) to evaluate by-catch.

At-sea samplings in fishing boats has been conducted since 1986 in LFA 20 (La Malbaie, Sainte-Thérèse and Shigawake/Saint Godefroi), the main fishery area. Sampling effort were also oriented towards LFA 21 and 19, principally since 1997.

Since 2006, a project was developed with fishermen to elaborate a recruitment index. Experimental fishery is performed using both traps with closed escape vent and without to evaluate pre-recruit lobster abundance. These data can be used as an index of fishery recruitment.

2. Stock assessment

The stock assessment process is interconnected with the management process that is scheduled at every 3 years. The stock assessment is the core of information to guide the advisory committee in its work.

- Every three years, research team in charge conduct a stock evaluation and process data to determine the stock status.
- The assessment is peer-reviewed during a Regional science meeting involving also industry stake holders. Raised issues in these sessions are taken in account to later provide answers.
- The determination of reference points and harvest control rules.

3. Other research. The RPPSG is also engaged in research joined-projects with DFO and MERINOV:

- Larval production in hatchery to experiment lobster stoking on suitable sea-bed;
- Creation of artificial reefs to ameliorate lobster habitat;
- Development of artificial baits to decrease fish-bait dependency;
- Participation to post-season stock evaluation;

- Development of a traceability strategy to identify formally Gaspé lobster in processing and marketing activities.
- Implementation of the electronic logbook within its members as an efficient way to monitor daily catches.

Research Plan

A research plan *Programme de recherche stratégique sur le Homard d'Amérique (Homarus americanus) 2013-2017 (PRSH)* was produced in 2014 that provides mid and long-term research orientations⁷⁹. The document identifies 5 research fields to take in account: stock evaluation, lobster biology and population dynamics, population interconnection, supporting research to industry and communities, eco-systemic considerations.

The research plan applies to lobster fisheries in the Quebec region, including Gaspé area (LFA 19, 20 and 21).

1. Stock evaluation. This field is a permanent and recurrent activity essential to fishery management.
 - Analysis of indicators trends that reflect the stock status using a reference period and taking in account conservation objective
 - A Precaution Approach was developed for Quebec lobster including LFA 19, 20 and 21 and will be used for 2015 fishing season. In the future, it is intended to develop other indicators than landings to apply the AP that are not sensible to fishing measures.
 - Model for stock evaluation. It is planned to develop the utilization of a stock estimation model to evaluate the impacts of management measures on lobster stock.
 - Data collection and management. Different data are taken during fishing season (electronic logbook data, at sea and on dock sampling program. Other come from sampling research (after season prerecruit estimation for Gaspé lobster) completed the data bank managed by Quebec region staff.
2. Biology and population dynamics. Experimental projects are done on fishing recruitment and benthic recruitment after larval phases
 - Reproduction biology by the observation of eggs development on berried females and spermatid caps on just-moulting females;
 - Lobster population strength/ physical conditions indices

Lobster population inter-connectivity that is the subject of the Réseau Canadien CRSNG research program. The program has two elements:

- Demographic and genetic inter-connectivity
 - Pelagic-benthic transition
3. Supporting research for the industry and communities. DFO works with industries and several other organisms involved in fishery research activities (MERINOV, UQAR, ISMER, in other projects (larval production, and artificial reefs).
 4. Ecosystemic considerations.
 - From this year, DFO Science will put more effort to analyze by-catch from lobster fishery using the electronic log-book data. The analysis will be integrated to stock assessment reports and research documents.

⁷⁹ Programme de recherche stratégique sur le Homard d'Amérique (*Homarus americanus*) 2013-2017, MPO-Région du Québec, Direction des Sciences Benthiques et Démersales IML, Mont-Joli, QC, 17pp.

- Aquaculture impact on resource. The project objective is to evaluate the possible impact of bivalve aquaculture in benthic crustaceans as lobster. The work is conducted in collaboration with MERINOV and is situated actually in the Iles-de-la-Madeleine, where this type of aquaculture already exists.
- Lobster adaptation to climatic changes. The project is to help manager to decide on the opening date of lobster fishery season using environmental factors. Actually, the research is conducted for the Iles-de-la-Madeleine lobster stock.
- Invasive species. The green crab comes from Europe and North-Africa and is considered as nuisance species that could interact with lobster juveniles. Potential impact of this species on young lobsters is a concern to preserve population and lobster industry. The project is conducted in conjunction with MERINOV.

4.5.9 Monitoring and Evaluation of the Lobster Management System

The IFMP is an important tool to monitor and evaluate the management system. This document indeed usually includes objectives and goals for the fishery but also performance indicators to mark progress in reaching these objectives. Up to now, there is no such a document for Gaspé lobster fishery, but one is in preparation. A first draft is planned for the end of 2014 and the document will be ready for the 2015 season. However, despite this fact, the LFA 19, 20 and 21 fishery is managed with clear mid and long term objectives provided mainly from Science stock evaluation and biological characteristics of the lobster population (1998, 2005).

Some other objectives were also formalized by RPPSG in cooperation with DFO regional staff in 2009 (RPPSG 2009); most of these objectives are still used. The advisory committee itself plays in important role to evaluate the progress made related to objectives and to figure the remaining steps to achieve them. The general view of DFO and Industry representatives is that the annual Fisheries Management and Science Regional Advisory Process sessions constitute an external review of the monitoring and evaluation of the fishery management system as both industry and non-industry members are invited to participate.

Additionally to the annual management system process, a certain number of organizations are involved in internal and external review of the management system:

1. DFO Fishery Decision-Making Framework incorporating the Precautionary Approach⁸⁰. This particular tool is useful not only to implement a precautionary approach in the management system but also to evaluate strategy to adopt depending on stock status stock. DFO also produces for internal use a Fisheries Sustainability Checklist which serves as a useful tool for measuring the effectiveness of the management system in place for a particular fishery.
2. SCSAS formal peer-review process. The advices that are published in the SCAS website contain key-information for the management system (stock assessment, research documents, proceedings).
3. Ecosystem Interactions. Scientific research and monitoring are currently going on to observe lobster fishery interactions with other species ;
4. Compliance and Enforcement. Post-season review by office and for the region is done involving the C&P Gaspé Chief and director. The review is the occasion to identify possible gaps and problems in the system and find solutions. The review outcomes are presented to advisory committee for discussion and decision.

⁸⁰ <http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precaution-eng.htm>

5. Fishery's Management Measures. The post-season review involving various DFO regional is after presented to the advisory committee.
6. The Parliament of Canada has two Committees pertaining to Fisheries and Oceans: the Standing Committee on Fisheries and Oceans of the House of Commons and the Standing Committee on Fisheries and Oceans of the Senate. These standing committees regularly examine various aspects of fishery management in Canada, call witnesses, and prepare public reports of their finding and conclusions. Occasionally the Standing Committee on Fisheries and Oceans (SCOFO) or the Federal Parliament published studies on Canadian lobster fishery. This was the case in 1995 and 2009⁸¹.
7. The Auditor General of Canada has the mandate and does review Canada's fisheries management system on an ad hoc basis and publishes results. For example, he audited the managing Atlantic Shellfish in his April 1999 report (Chapter 4—Fisheries and Oceans—Managing Atlantic Shellfish in a Sustainable Manner) that includes lobster fisheries⁸².
8. DFO undertakes regular (formal) program audits and evaluations of its fisheries management program on a scheduled basis and it also publishes its findings and recommendations⁸³.
9. The FRCC was appointed by DFO to produce studies for different fisheries. He also published reports on Atlantic lobster fisheries (FRCC 1995 and 2007).

⁸¹ <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4144289&Mode=1&Parl=40&Ses=2&Language=E>

⁸² http://www.oag-bvg.gc.ca/internet/English/parl_oag_199904_04_e_10133.html

⁸³ <http://www.dfo-mpo.gc.ca/dpr-rmr/2012-13/dpr-rmr-3-eng.html>

5. Evaluation Procedure

5.1 Harmonised Fishery Assessment

Certification Bodies assessing fisheries that have areas of overlap are required to ensure consistency of outcomes so as not to undermine the integrity of MSC fishery assessments. The CR requirements section Annex CI provides guidance for harmonisation where a fishery in assessment overlaps with an already certified fishery. There are no areas of overlap that require harmonisation to the best knowledge of the assessment team.

Overlapping with the already certified Eastern Canada offshore lobster (LFA 41), Iles-de-la-Madeleine lobster fishery (LFA 22), the Maine lobster fisheries (U.S.), and PEI lobster fishery (LFAs 24, 25, 26A) and the under assessment Bay of Fundy, Scotian Shelf and Southern Gulf of St Lawrence lobster fisheries (LFAs 23, 24, 25, 26A and 26B; LFAs 27-33; and LFA 34; and LFAs 35-38) does not occur as the Gaspésie lobster stock is distinct from these lobster stocks. In its 1995 Report, the FRCC has defined Lobster Productivity Areas (LPAs) distinct from the LFAs which are management units. The LPAs were defined based on lobster biological characteristics (growth, recruitment), environmental characteristics (water temperature, substrate), and the possibility of lobster exchange between LPAs (adult migration, larval dispersal) (Figure 47). LPAs were defined for conservation purposes.

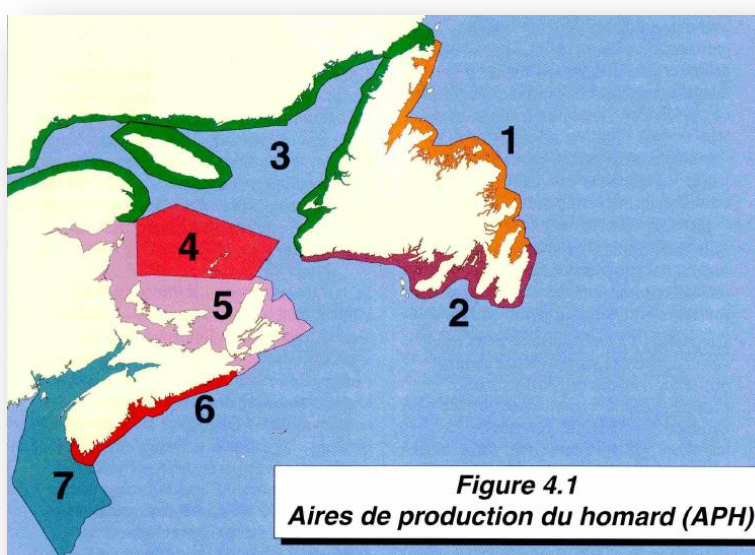


Figure 47. Lobster Productivity Areas (LPAs). Western Newfoundland/Gulf North Shore/ Gaspé North and East Shore: LPA 3, Iles-de-la-Madeleine: LPA 4, SGSL: LPA 5, Eastern and South Shore Nova Scotia and Southwest Nova Scotia/ Bay of Fundy/Offshore: LPA 7. Source: FRCC 1995.

In a recent genetic study, Kenchington et al. (2009) found that samples in the Gulf of St. Lawrence, with low genetic differentiation, differed from samples from Fundy to Cape Cod, in which genetic differentiation is higher. This is postulated to result from a shelf-edge post-glacial colonisation process, in which lobsters forced onto the southern continental slopes by low temperature and falling water level during the last ice age later re-colonised northwards along the slope and into newly available embayments as the ice retreated, thus creating a south-north genetic difference that is now maintained by contemporary patterns of bathymetry, temperature, and circulation.

5.2 Previous assessments

The fishery has not been previously assessed against MSC Principles and Criteria.

5.3 Assessment Methodologies

The MSC Principle and Criteria for Sustainable Fishing Standard sets out the requirements for a certified fishery. The Certification Methodology adopted by the MSC involves the interpretation of these Principles and Criteria into specific Performance Indicators against which the performances of the fishery can be measured according to pre-specified guideposts. A fishery is assessed against three Principles. The default assessment tree developed by the MSC includes 31 Performance Indicators. Principle 1 addresses the need to maintain the target stock at a sustainable level; Principle 2 addresses the need to maintain the ecosystem in which the target stock belongs to; and Principle 3 addresses the need for an effective fishery management system to fulfil Principles 1 and 2 and ensure compliance with national and international regulations.

PRINCIPLE 1: Sustainable fish stock

A fishery must be conducted in a manner that does not lead to overfishing or depletion of the exploited populations, and for those populations that are depleted, the fishery must be conducted in a manner that demonstrably leads to their recovery.

The intent of this principle is to ensure that the productive capacities of resources are maintained at high levels of abundance designed to retain their productivity, provide margins of safety for error and uncertainty, and restore and retain their capacities for yields over the long term.

Criteria

- 5.1. The fishery shall be conducted at catch levels that continually maintain the high productivity of the target population(s) and associated ecological community relative to its potential productivity.
- 5.2. Where the exploited populations are depleted, the fishery will be executed such that recovery and rebuilding is allowed to occur to a specified level consistent with the precautionary approach and the ability of the populations to produce long-term potential yields within the specified time frame.
- 5.3. Fishing is conducted in a manner that does not alter the age or genetic structure or sex composition to a degree that impairs reproductive capacity.

PRINCIPLE 2: Minimizing environment impact

Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependent and ecologically related species) on which the fishery depends.

The intent of this principle is to encourage the management of fisheries from an ecosystem perspective under a system designed to assess and restrain the impacts of the fishery on the ecosystem.

Criteria

1. The fishery is conducted in a way that maintains natural functional relationships among species and should not lead to trophic cascades or ecosystem state changes.

2. The fishery is conducted in a manner that does not threaten biological diversity at genetic, species or population levels and avoids or minimizes mortality of, or injuries to endangered, threatened or protected species.
3. Where the exploited populations are depleted, the fishery will be executed such that recovery and rebuilding is allowed to occur to a specified level consistent with the precautionary approach and the ability of the populations to produce long-term potential yields within the specified time frame.

PRINCIPLE 3: Effective management

The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.

The intent of this principle is to ensure that there is an institutional and operational framework for implementing Principle 1 and 2, appropriate to the size and scale of the fishery.

Management system Criteria

1. The fishery shall not be conducted under controversial unilateral exemption to an international agreement.

The management system shall:

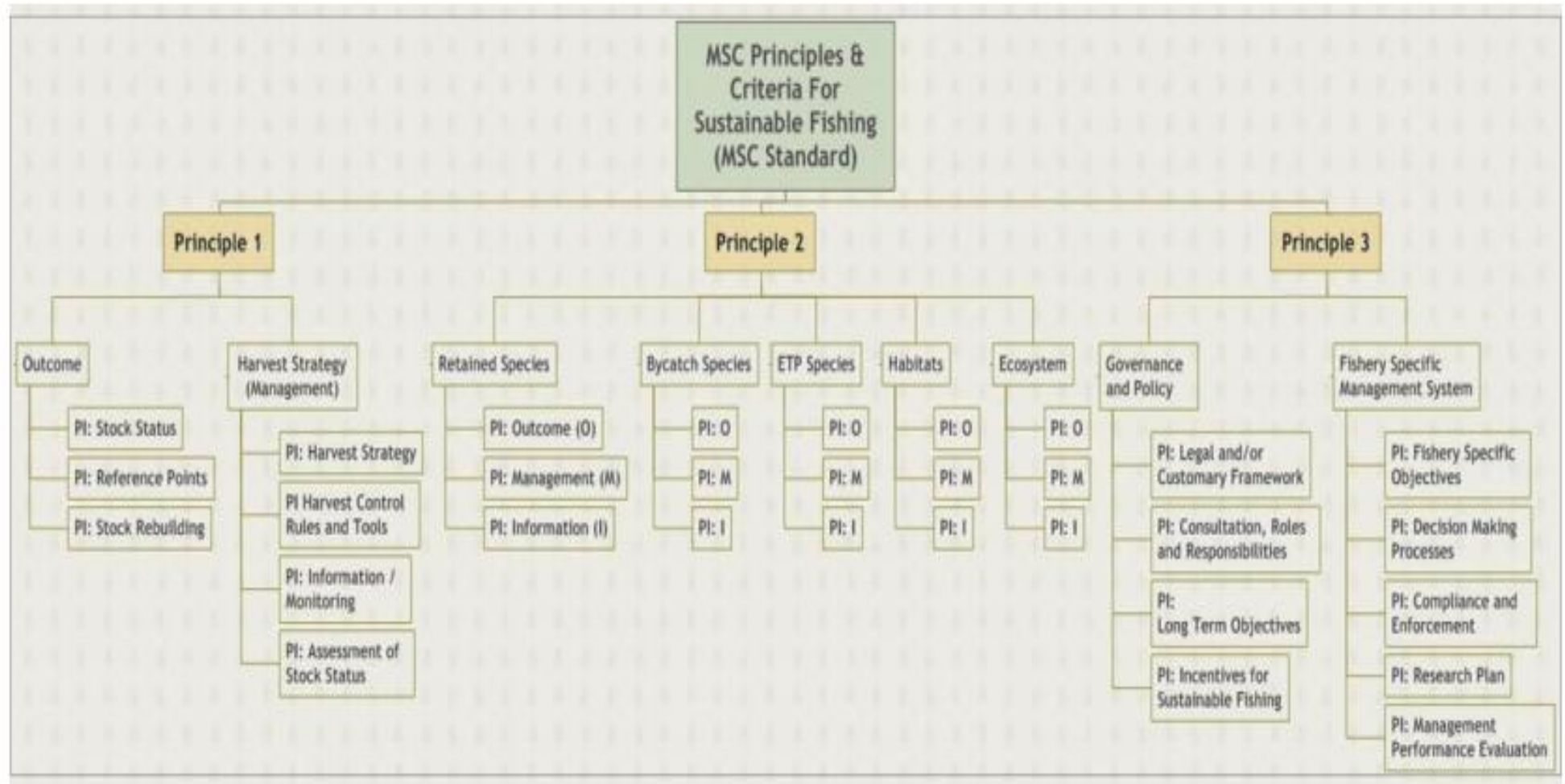
2. demonstrate clear long-term objectives consistent with MSC Principles and Criteria and contain a consultative process that is transparent and involves all interested and affected parties so as to consider all relevant information, including local knowledge. The impact of fishery management decisions on all those who depend on the fishery for their livelihoods, including, but not confined to subsistence, artisanal, and fishery-dependent communities shall be addressed as part of this process.
3. appropriate to cultural context, scale and intensity of the fishery – reflecting specific objectives, incorporating operational criteria, containing procedure for implementation and a process for monitoring and evaluating performance and acting on findings;
4. observe the legal and customary and long term interests of people dependent on fishing for food and livelihoods, in a manner consistent with ecological sustainability;
5. incorporate an appropriate mechanism for the resolution of disputes arising within the system;
6. provide economic and social incentives that contributes to sustainable fishing and shall not operate with subsidies that contribute to unsustainable fishing;
7. act in a timely and adaptive fashion on the basis of the best available information using a precautionary approach particularly when dealing with scientific uncertainty;
8. incorporate a research plan - appropriate to the scale and intensity of the fishery – that addresses the information needs of management and provides for the dissemination of research results to all interest parties in a timely fashion;
9. require that assessments of the biological status of the resource and impacts of the fishery have been and are periodically conducted;
10. specify measures and strategies that demonstrably control the degree of exploitation of the resource;
11. contains appropriate procedures to effective compliance, monitoring, control, surveillance and enforcement which ensure that established limits to exploitation are not exceeded and specifies corrective actions to be taken in the event that they are.

Operational Criteria

Fishing operations shall:

12. make use of fishing gear and practices designed to avoid the capture of non-target species (and non-target size, age, and/or sex of the target species); minimize mortality of this catch where it cannot be avoided, and reduce discards of what cannot be released alive;
13. implement appropriate fishing methods designed to minimize adverse impacts on habitat, especially in critical and sensitive zones such as spawning and nursery areas;
14. not use destructive fishing practices such as fishing with poisons or explosives;
15. minimize operational waste such as lost fishing gear, oil spills, on-board spoilage of catch, etc.;
16. be conducted in compliance with the fishery management system and all legal and administrative requirements; and
17. assist and co-operate with management authorities in the collection of catch, discard, and other information of importance to effective management of the resources and the fishery.

MSC Current Scheme Documents	Version
MSC Fishery Standard - Principles and Criteria for Sustainable Fishing	1.1
MSC Certification Requirements	1.3
Guidance to MSC Certification Requirements	1.3
MSC Guidance to Certification Bodies on Stakeholder Consultation in Fishery Assessment	2
MSC Full Assessment Reporting Template	1.3
MSC PSA Worksheet	1.1



5.4 Evaluation Processes and Techniques

5.4.1 Site Visit

Initial consultation meetings were held in Gaspésie in June 2014. The objectives of the consultation meetings were to provide information and understanding of the activities of the CAB and to discuss the fishery management organizational roles in the management of the lobster resources. The consultation meetings were designed to be inclusive of all organizations and representatives of the lobster fisheries. However, the consultation plan was designed to strategically capture sufficient information to ensure understanding and confidence with respect to full assessment scoring.

The on-site consultation also served other important functions. These included:

- Responding to questions and comments raised by participants in the fishery at this initial stage in the assessment.
- The client group provided information, documents, and a list of stakeholders as required by SAI Global. This served to allow the assessment team to collect general information on the fisheries, identify information gaps and identify key stakeholders for the information gathering exercise.
- Following the collation of general information on the fishery, a number of meetings with key stakeholders who expressed an interest to meet were scheduled by the team to fill in information gaps and to explore and discuss areas of concern.

Meetings were held in Gaspé and Chandle are recorded in Table 17.

5.4.2 Consultations

Public announcements of the progression of the full assessment were made as follow:

Table 16. Stakeholder consultation process

Date	Purpose	Media
10/04/2014	Fishery Enters Full Assessment	Notification on MSC website Direct email
10/04/2014	Assessment Team Nominations	Notification on MSC website Direct email/letter
22/04/2013	Assessment Team Confirmation	Notification on MSC website Direct email
24/04/2013	Default Assessment Tree with use of the RBF Released for Comments	Notification on MSC website Direct email
24/04/2013	Site Visit Scheduled	Notification on MSC website Direct email
From 10/06/2014 to 12/06/2014	Site Visit	Stakeholder Consultation Meetings
14/02/2014	Preliminary Draft Report	Notification to Client
18/09/2014	Peer reviewers proposed	Notification on MSC website Direct email
30/09/2014	Peer reviewers confirmation	Notification on MSC website Direct email

20/11/2014	Public Comment Draft Report released	Notification on MSC website Direct email
06/01/2015	Revised Timeline	Notification on MSC website Direct email
22/01/2015	Final Report and Determination released	Notification on MSC website Direct email

Table 17. Summary of consultation meetings during the June 2014 site visit.

Date	Organization	Location	Staff Represented	Overview/Key Items
Monday, June 9th 2014				
11.00 pm to 11.30 pm	Assessment Team Internal Meeting	Gîte Cap-de-Rosiers, Gaspé	SAI Assessment Team	Priority information requests. Key discussion points.
Tuesday, June 10th 2014				
9.00 am to 4.00 pm	DFO Science and Management	DFO offices, Gaspé	SAI Assessment Team Vincent Maloin Louise Gendron Magaly Hardy David Courtemanche Stéphane Boulay Cédric Arseneau	Stock assessment, reference points and HCRs, retained species, ETP species, habitat maps, IFMP, transparency of decision-making, compliance and enforcement, fishery-specific objectives, precautionary approach, research plan
Wednesday, June 11th 2014				
9.00 am to 10.45 am	MAPAQ	MAPAQ Offices, Gaspé	SAI Assessment Team Marcel Roussy Danièle Bouchard Léon Boulet	MAPAQ role, MAPAG programs to support sustainable fishing, involvement in decision-making processes, consultation of the management system, traceability
2.00 pm to 5.00 pm	RBF meeting, all stakeholders	Motel Chandler meeting room, Chandler	SAI Assessment Team Marcel Roussy Priscilla Doiron Joël Berthelot Louise Gendron Vincent Maloin Cédric Arseneau Alain Langelier Emmanuel Duguay O'Neil Cloutier Jean Côté Damien Greton	Presentation of the MSC program, Presentation of MSC's RBF set of methods, SICA and PSA for PI 1.1.1 Stock Status. Discussion about retained and bycatch species
Thursday, June 12th 2014				
9.00 am to 12.00 am	Assessment team scoring meeting	Motel Chandler meeting room, Chandler	SAI Assessment Team	Review of the information/data, Scoring of PIs from 1.1.1 to 3.2.5
2.00 pm to 4.00 pm	RPPSG	RPPSG offices, Chandler	SAI Assessment Team O'Neil Cloutier Jean Côté Daniel Mercier Joël Berthelot	Brief overview of main issues in the fishery, fleet structure, species used as bait, sustainable fishing practices in place, agreement with

			Christian Huard	Forillon Park and Île de Bonaventure Park, consultation process, decision-making process, compliance, traceability, challenges in the Gaspésie lobster fishery
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5.4.3 Evaluation Techniques

Each PI under each Principle is weighted so that each of the three Principles is equal to one other.

At the Level of the Performance Indicator, the performance of the fishery is assessed as a 'score'. In order for the fishery to achieve certification, an overall weighted average score of 80 is necessary for each of the three Principles and no Indicator should score less than 60. Accordingly, 100 represents a theoretically ideal level of performance and 60 a measureable shortfall.

The Scoring Guideposts (SGs) identify the level of performance necessary to achieve 100, 80 (a pass score), and 60 scores for each Performance Indicator.

The scoring methodology is fully explained in the MSC Fisheries Assessment Methodology. It can be summarized as follow:

- Scoring is a qualitative process, involving discussion between team members and arrival at a joint agreed score. Scores should be normally assigned in divisions of 5 points
- The only narrative guidance that is available is at 60, 80 and 100 SGs. Intermediate scores must therefore reflect;
 - A failure to meet all the scoring issues⁸⁴ specified in a SG.
- The following system should then be used to determine the overall score for the PI from the scores of the different scoring issues. This system combines a primary approach based on the combination of scores achieved by the individual scoring issues (the a) to i) list below):
 - a) Score = 60: all issues meet SG60, and only SG60. Any scoring issues within a PI which fails to reach SG60, represents a failure against the MSC standard and no score shall be assigned.
 - b) 65: all issues meet SG60; a few achieve higher performance, at or exceeding SG80, but most do not meet SG80.
 - c) 70: all issues meet SG60; some achieve higher performance, at or exceeding SG80, but some do not meet SG80 and require intervention action to ensure they get there.
 - d) 75: all issues meet SG60; most achieve higher performance, at or exceeding SG80; only a few fail to achieve SG80 and require intervention action.
 - e) 80: all issues meet SG80.
 - f) 85: all issues meet SG80; a few achieve higher performance, but most do not meet SG100.
 - g) 90: all issues meet SG80; some achieve higher performance at SG100 but some do not.
 - h) 95: all issues meet SG80; most achieve higher performance, at SG100; only a few fail to achieve SG100.
 - i) 100: all issues meet SG100

⁸⁴ Scoring issues: The different parts of a single scoring guidepost, where more than one part exist covering related but different topics.

Table 18. Weights assigned to each component and PI within the Assessment tree structure.

Principle	Wt (L1)	Component	Wt (L2)	PI No.	Performance Indicator (PI)	Wt (L3)	Weight in Principle	
One	1	Outcome	0.5	1.1.1	Stock status	0.5	0.25	0.333
				1.1.2	Reference points	0.5	0.25	0.333
				1.1.3	Stock rebuilding			0.333
		Management	0.5	1.2.1	Harvest strategy	0.25	0.125	
				1.2.2	Harvest control rules & tools	0.25	0.125	
				1.2.3	Information & monitoring	0.25	0.125	
				1.2.4	Assessment of stock status	0.25	0.125	
Two	1	Retained species	0.2	2.1.1	Outcome	0.333	0.0667	
				2.1.2	Management	0.333	0.0667	
				2.1.3	Information	0.333	0.0667	
		By-catch species	0.2	2.2.1	Outcome	0.333	0.0667	
				2.2.2	Management	0.333	0.0667	
				2.2.3	Information	0.333	0.0667	
		ETP species	0.2	2.3.1	Outcome	0.333	0.0667	
				2.3.2	Management	0.333	0.0667	
				2.3.3	Information	0.333	0.0667	
		Habitats	0.2	2.4.1	Outcome	0.333	0.0667	
				2.4.2	Management	0.333	0.0667	
				2.4.3	Information	0.333	0.0667	
		Ecosystem	0.2	2.5.1	Outcome	0.333	0.0667	
				2.5.2	Management	0.333	0.0667	
				2.5.3	Information	0.333	0.0667	
Three	1	Governance and policy	0.5	3.1.1	Legal & customary framework	0.25	0.125	
				3.1.2	Consultation, roles & responsibilities	0.25	0.125	
				3.1.3	Long term objectives	0.25	0.125	
				3.1.4	Incentives for sustainable fishing	0.25	0.125	
		Fishery specific management system	0.5	3.2.1	Fishery specific objectives	0.2	0.1	
				3.2.2	Decision making processes	0.2	0.1	
				3.2.3	Compliance & enforcement	0.2	0.1	
				3.2.4	Research plan	0.2	0.1	
				3.2.5	Management performance evaluation	0.2	0.1	

6. Traceability

6.1 Eligibility Date

In accordance with CR Requirements CR 27.6 MSC product eligibility date may be up to a maximum 6 months prior to the publication of the Public Comment Draft Report (PCDR). The client representative has indicated the client member groups desire to have the opportunity, if they so wish, to take full advantage of this 6 month period. It will allow the identification of any existing lobster product from the under assessment fishery and held in frozen storage by supply chain entities that are already certified to the MSC Chain of Custody Programme. This product may become eligible for identification with an MSC claim on eventual certification of the fishery.

The PCDR is published on the 20th November 2014. Therefore, the proposed target eligibility date is estimated to be 20th May 2014.

6.2 Traceability within the Fishery

Lobster fishing permits in Gaspésie are held by individuals and communities. Lobster permit holders are not allowed to fish lobster in an area outside the UoC. Permits can be transferred from one to another and the transferal process is managed by the DFO Regional Office. This Office holds the official list of registered permit holders for the lobster fishery. With respect to the MSC certification of the Client Group, it is confirmed that all registered and licensed fishing vessels operating in the certified areas are eligible to be covered by the MSC certification. A list of fishing vessels with the registered permits holders has been provided to the Assessment team.

Location of landings is within the geographic region of Gaspésie. Permits holders within this region “covered 100% by the UoC” and all current permit holders can only land within this jurisdiction. Purchase slips identify the place of landing and also the catcher vessel.

The system in use for tracing product to the LFA and hence identifiable UoC is the government regulatory system which is based on at sea logbooks and registered buyer purchase slips. First of all, all vessel captains must fill out a logbook for each fishing trip identifying captures and LFA, and return to the local DFO office on a weekly basis. All buyers of lobsters must be registered with the Province of Quebec and all purchases of lobsters must be documented on a purchase slip by the registered buyer containing details of purchasers within a week. Information includes the name of the permit holder, the name of the fishing vessel, place of landing, the quantity and size (large or small) of product per permit holder. Purchase slips are submitted to the local Provincial office.

At-Sea Processing

There is no at sea processing activity associated with this UoC. Harvesters do not hold permits to process lobster at sea. All lobsters are landed alive.

At-sea transshipment

There is no at sea transshipment activity associated with the UoC.

Electronic LogBook

E-logbooks are mandatory since the 2012 fishing season and can be used to record information that confirms the traceability to the UoC. The logbook consists of a record of every fishing trip. As a condition for license, all harvesters fishing for lobster are required to record catch details in this logbook. Relevant information recorded for traceability purposes includes vessel name and registration number, location fished on a daily basis (by sub-area) and estimation of weight of lobster. The logbook returns will be made to the Regional DFO office.

Purchase slips

All buyers are registered with the provincial government 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. Purchase slips must be generated for each landing purchased and contain vessel identification, landing port, date, landed weight and value.

Tag on lobster

The RPPSG has implemented a lobster tag project. In 2014, every lobster harvested around the Gaspé Peninsula will bear a blue tie and tag on one of its appendages⁸⁵. The tag will allow consumers to see exactly where the crustacean came from, ensuring them that they're buying a lobster from Gaspésie.

By visiting the RPPSG website and entering the alphanumerical code stamped on the blue tag attached to the lobster, it is possible to see the name of the lobster fishing vessel's skipper and the fishing area.

With reference to the blue origin tags, as this is a product of origin logo, it is not necessarily MSC linked. However, as the UoC currently includes all LFA's that are within the Gaspésie UoC definition there is 100% overlap.

6.3 Eligibility to Enter Further Chains of Custody

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 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 Assessment 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.

⁸⁵ <http://monhomard.ca/?lang=en>

6.4 Eligibility of Inseparable or Practically Inseparable (IPI) stock(s) to Enter Further Chains of Custody.

This fishery does not fall within the scope criteria for IPI stock(s) to Enter Further Chains of Custody and so is not considered such as. This section is not applicable.

7. Evaluation Results

The Gaspésie lobster trap fishery achieved a score of 80 or higher on each of the three MSC Principles independently and did not score less than 60 against any indicator. Score achieved in each Principle and for each Performance Indicator are shown in Table 19 and Table 20, respectively.

Although the assessment team found the UoC in overall compliance, it also found the performance of the Gaspésie lobster fishery on three PIs (PI 2.1.1 Retained Species Outcome, PI 2.1.2 Retained Species Management, and PI 3.2.1 Fishery-specific Objectives) to be below the established compliance mark (Table 20). Therefore, three conditions were attached to the fishery, which must be addressed within a specific timeframe. Full explanation of these conditions is provided in Appendix 1.3. Also, a full explanation of how the Client intends to meet these conditions is provided in the Client Action Plan in Appendix 1.3.

7.1 Principle level score

Table 19. Final Principle Scores

Final Principle Scores	
Principle	Score
Principle 1 – Target Species	82.0
Principle 2 – Ecosystem	85.3
Principle 3 – Management System	91.8

7.2 Summary of Scores

Score assigned to PIs are shown in Table 20.

Table 20. Performance Indicators scoring assigned to the Gaspésie lobster trap fishery.

Principle	Wt (L1)	Component	Wt (L2)	PI No.	Performance Indicator (PI)	Wt (L3)	Weight in Principle	Score	Approach
One	1	Outcome	0.5	1.1.1	Stock status	0.5	0.25	83	RBF
				1.1.2	Reference points	0.5	0.25	80	Default
				1.1.3	Stock rebuilding	0.333	0.1667	NS	FAM
		Management	0.5	1.2.1	Harvest strategy	0.25	0.125	90	FAM
				1.2.2	Harvest control rules & tools	0.25	0.125	80	FAM
				1.2.3	Information & monitoring	0.25	0.125	80	FAM
				1.2.4	Assessment of stock status	0.25	0.125	80	Default
Two	1	Retained species	0.2	2.1.1	Outcome	0.333	0.0667	60	FAM
				2.1.2	Management	0.333	0.0667	60	FAM
				2.1.3	Information	0.333	0.0667	90	FAM
		By-catch species	0.2	2.2.1	Outcome	0.333	0.0667	80	FAM
				2.2.2	Management	0.333	0.0667	90	FAM
				2.2.3	Information	0.333	0.0667	80	FAM
		ETP species	0.2	2.3.1	Outcome	0.333	0.0667	100	FAM
				2.3.2	Management	0.333	0.0667	95	FAM
				2.3.3	Information	0.333	0.0667	80	FAM
		Habitats	0.2	2.4.1	Outcome	0.333	0.0667	80	FAM
				2.4.2	Management	0.333	0.0667	95	FAM
				2.4.3	Information	0.333	0.0667	90	FAM
		Ecosystem	0.2	2.5.1	Outcome	0.333	0.0667	100	FAM
				2.5.2	Management	0.333	0.0667	100	FAM
				2.5.3	Information	0.333	0.0667	80	FAM
Three	1	Governance And policy	0.5	3.1.1	Legal & customary framework	0.25	0.125	90	FAM
				3.1.2	Consultation, roles & responsibilities	0.25	0.125	100	FAM
				3.1.3	Long term objectives	0.25	0.125	100	FAM
				3.1.4	Incentives for sustainable fishing	0.25	0.125	100	FAM
		Fishery specific management system	0.5	3.2.1	Fishery specific objectives	0.2	0.1	60	FAM
				3.2.2	Decision making processes	0.2	0.1	95	FAM
				3.2.3	Compliance & enforcement	0.2	0.1	95	FAM
				3.2.4	Research plan	0.2	0.1	90	FAM
				3.2.5	Management performance evaluation	0.2	0.1	90	FAM

7.3 Summary of Conditions

Table 21. Summary of Conditions

Condition number	Condition	Performance Indicator	Related to previously raised condition? (Y/N/N/A)
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 Canadian mackerel stock.	2.1.1	NA
2	The client must provide evidence that a partial strategy is in place to ensure the Gaspésie lobster fishery does not hinder the recovery and rebuilding of the Canadian mackerel stock. Also, the client must provide some evidence that the partial strategy is being implemented successfully.	2.1.2	NA
3	The client must provide evidence that short and long-term objectives which are consistent with achieving the outcomes expressed by MSC's Principle 1 and 2 are explicit within the fishery's management system. To do so, the client must provide evidence that the IFMP under development, identifying the lobster fishery-specific objectives, has been finalized and adopted for use for the fishery.	3.2.1	NA

7.4 Certification Recommendation

On completion of the assessment and scoring process, the assessment team has recommended that the Gaspésie Lobster Trap Fishery is eligible to be certified according to the MSC Principles and Criteria for Sustainable Fishing.

7.5 Determination, Formal Conclusion and Agreement

The Certification Committee of SAI Global has determined that:

- The **Gaspésie Lobster Trap Fishery** is to be awarded certification to the Marine Stewardship Council Sustainable Fishing Standard.

SAI Global hereby publicly announces its intention to certify the Fishery Unit and upon issue of a certificate, the client shall have the right to claim the fishery as a “well managed and sustainable fishery” in accordance with the MSC Principles and Criteria for Sustainable Fishing. Fishery material thereof is deemed eligible for entry the MSC Chain of Custody according to requirements.

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List of websites

Fisheries and Oceans Canada (DFO)

<http://www.dfo-mpo.gc.ca>

DFO – DFO landings statistics

<http://www.dfo-mpo.gc.ca/stats/commercial/sea-maritimes-eng.htm>

DFO – Atlantic Lobster Sustainability Measures (ALSM) program

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

DFO – Decision making processes incorporating the Precautionary Approach

<http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precaution-back-fiche-eng.htm>

DFO – Marine Protected Areas

<http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/mpa-zpm/index-eng.htm>

MAPAQ

<http://www.mapaq.gouv.qc.ca/fr/Pages/Accueil.aspx>

FAO species fact sheet

<http://www.fao.org/fishery/species/3482/en>

St. Lawrence Global Observatory – American Lobster

<http://slgo.ca/en/lobster/context.html>

Appendices

Appendix 1 Scoring and Rationales

Appendix 1.1 Performance Indicator Scores and Rationale

Evaluation Table for PI 1.1.1

PI 1.1.1		The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	It is likely that the stock is above the point where recruitment would be impaired.	It is highly likely that the stock is above the point where recruitment would be impaired.	There is a high degree of certainty that the stock is above the point where recruitment would be impaired.
	Met?	(Y/N)	(Y/N)	(Y/N)
	Justification	RBF used for scoring, see Tables 1.2.1 (SICA) AND 1.2.2 (PSA) in Appendix 1.2.		
b	Guidepost		The stock is at or fluctuating around its target reference point.	There is a high degree of certainty that the stock has been fluctuating around its target reference point, or has been above its target reference point, over recent years.
	Met?		(Y/N)	(Y/N)
	Justification	RBF used for scoring, see Tables 1.2.1 (SICA) AND 1.2.2 (PSA) in Appendix 1.2.		
References		<p>DFO. 2014. Development of reference points in the context of a precautionary approach (PA) for lobster of the Gaspé (LFAs 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/027.</p> <p>DFO. 2012. Assessment of Lobster Stocks of the Gaspé (LFAs 19, 20 and 21), Quebec in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/015. Emond, K, Sainte-Marie, B. &</p> <p>Gendron L. 2010. Relative growth, life history phases and sexual maturity of American Lobster, <i>Homarus americanus</i>. Can. J. Zool. 88: 347-358.</p> <p>Gendron, L. and Savard, G. 2012. Lobster stock status in the coastal waters of Québec (LFAs 15 to 22) in 2011 and determination of reference points for the implementation of a precautionary approach in the Magdalen Islands (LFA 22). DFO Can. Sci. Advis. Sec. Res. Doc. 2012/010.</p> <p>Steneck, R.S., Vavrinc, J., Leland, A.V. 2004. Accelerating Trophic-level Dysfunction in Kelp Forest Ecosystem of the Western North Atlantic. Ecosystems 7: 323-332.</p>		

PI 1.1.1	The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing		
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Stock Status relative to Reference Points			
	Type of reference point	Value of reference point	Current stock status relative to reference point
Target reference point	[e.g. Bmsy]	[Include value specifying units. e.g. 100,000t total stock biomass]	[Include current stock status in the same units as the reference point e.g. 90,000/Bmsy=0.9]
Limit reference point	[e.g. Blim]	[Include value specifying units. e.g. 50,000t total stock biomass]	[Include current stock status in the same units as the reference point e.g. 90,000/Blim=1.8]
OVERALL PERFORMANCE INDICATOR SCORE:			83
CONDITION NUMBER (if relevant):			NA

Evaluation Table for PI 1.1.2

PI 1.1.2	Limit and target reference points are appropriate for the stock		
Scoring Issue	SG 60	SG 80	SG 100
a	Guidepost	Generic limit and target reference points are based on justifiable and reasonable practice appropriate for the species category.	Reference points are appropriate for the stock and can be estimated.
	Met?	(Y/N)	(Y/N)
	Justification	Default score of 80 as RBF used for PI 1.1.1 Stock Status.	
b	Guidepost	The limit reference point is set above the level at which there is an appreciable risk of impairing reproductive capacity.	The limit reference point is set above the level at which there is an appreciable risk of impairing reproductive capacity following consideration of precautionary issues.
	Met?	(Y/N)	(Y/N)

PI 1.1.2		Limit and target reference points are appropriate for the stock		
	Justification	Default score of 80 as RBF used for PI 1.1.1 Stock Status.		
c	Guidepost		The target reference point is such that the stock is maintained at a level consistent with B_{MSY} or some measure or surrogate with similar intent or outcome.	The target reference point is such that the stock is maintained at a level consistent with B_{MSY} or some measure or surrogate with similar intent or outcome, or a higher level, and takes into account relevant precautionary issues such as the ecological role of the stock with a high degree of certainty.
	Met?		(Y/N)	(Y/N)
	Justification	Default score of 80 as RBF used for PI 1.1.1 Stock Status.]		
d	Guidepost		For key low trophic level stocks, the target reference point takes into account the ecological role of the stock.	
	Met?		Not relevant	
	Justification			
References		<p>DFO 2014c. Development of reference points in the context of a precautionary approach (PA) for lobster of the Gaspé (LFAs 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/027.</p> <p>FRCC (Fisheries Resource Conservation Council) 1995. A conservation framework for Atlantic lobster. Report to the Minister of Fisheries and Oceans. November 1995. 49 p. + appendices.</p> <p>Fogarty, M.J. and L. Gendron 2004. Biological reference points for American lobster (<i>Homarus americanus</i>) populations: limits to exploitation and the precautionary approach. Canadian Journal of Fisheries and Aquatic Science 61: 1392-1403.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				80
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 1.1.3

PI 1.1.3		Where the stock is depleted, there is evidence of stock rebuilding within a specified timeframe		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Where stocks are depleted rebuilding strategies, which have a reasonable expectation of success, are in place.		Where stocks are depleted, strategies are demonstrated to be rebuilding stocks continuously and there is strong evidence that rebuilding will be complete within the specified timeframe.
	Met?	(Y/N)		(Y/N)
	Justification	Lobster stock is not depleted.		
b	Guidepost	A rebuilding timeframe is specified for the depleted stock that is the shorter of 30 years or 3 times its generation time. For cases where 3 generations is less than 5 years, the rebuilding timeframe is up to 5 years.	A rebuilding timeframe is specified for the depleted stock that is the shorter of 20 years or 2 times its generation time. 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 one generation time for the depleted stock.
	Met?	(Y/N)	(Y/N)	(Y/N)
	Justification	Lobster stock is not depleted.]		
c	Guidepost	Monitoring is in place to determine whether the rebuilding strategies are effective in rebuilding the stock within a specified timeframe.	There is evidence that they are rebuilding stocks, or it is highly likely based on simulation modelling or previous performance that they will be able to rebuild the stock within a specified timeframe.	
	Met?	(Y/N)	(Y/N)	
	Justification	Lobster stock is not depleted.		

PI 1.1.3	Where the stock is depleted, there is evidence of stock rebuilding within a specified timeframe	
References	<p>DFO. 2012a. Assessment of Lobster Stocks of the Gaspé (LFAs 19, 20 and 21), Quebec in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/015.</p> <p>DFO 2014c. Development of reference points in the context of a precautionary approach (PA) for lobster of the Gaspé (LFAs 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/027.</p> <p>Gendron, L. and Savard, G. 2012. Lobster stock status in the coastal waters of Québec (LFAs 15 to 22) in 2011 and determination of reference points for the implementation of a precautionary approach in the Magdalen Islands (LFA 22). DFO Can. Sci. Advis. Sec. Res. Doc. 2012/010.</p>	
OVERALL PERFORMANCE INDICATOR SCORE:		NS
CONDITION NUMBER (if relevant):		NA

Evaluation Table for PI 1.2.1

PI 1.2.1		There is a robust and precautionary harvest strategy in place		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	The harvest strategy is expected to achieve stock management objectives reflected in the target and limit reference points.	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving management objectives reflected in the target and limit reference points.	The harvest strategy is responsive to the state of the stock and is designed to achieve stock management objectives reflected in the target and limit reference points.
	Met?	Y	Y	Y
	Justification	<p>The harvest strategy is responsive to the state of the stock and is designed to achieve stock management objectives reflected in the target and limit reference points.</p> <p>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).</p> <p>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.</p> <p>The harvest strategy defined in 1998 intended to respond to the state of the stock. The strategy was designed and implemented to achieve the target of doubling the egg production. The objective was reached, as recognized by the FRCC in 2007. Considering that the reference point was doubling egg production, it is possible to say that the harvest strategy is designed to achieve stock management objectives reflected in the target and limit reference points. Therefore, the elements 60a, 80a are met.</p> <p>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 B_{MSY}. The median landing for the 1985-2009 period for the entire Gaspésie is proposed as a proxy value for B_{MSY}. The USR value is defined as 80% of B_{MSY} and the LRP is defined as 40% of B_{MSY}. Landings from 2011 indicate that the stock is in the healthy zone, above both the USR and B_{MSY} 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.</p> <p>A harvest strategy is in place and has shown to be responsive to the state of the stock. The strategy was designed and implemented to initially achieve the target of doubling the egg production, and in the recent years to maintain a the high reproductive capacity of the stock.</p> <p>Therefore, 100a is met.</p>		

PI 1.2.1		There is a robust and precautionary harvest strategy in place		
b	Guidepost	The harvest strategy is likely to work based on prior experience or plausible argument.	The harvest strategy may not have been fully tested but evidence exists that it is achieving its objectives.	The performance of the harvest strategy has been fully evaluated and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.
	Met?	Y	Y	N
	Justification	<p>The harvest strategy may not have been fully tested but evidence exists that it is achieving its objectives.</p> <p>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. Evidence exists that the strategy has achieved its objective. Both SG60 and 80 are met.</p> <p>However, the assessment team assigned a N to SG100 as 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.</p>		
c	Guidepost	Monitoring is in place that is expected to determine whether the harvest strategy is working.		
	Met?	Y		
	Justification	<p>Monitoring is in place that is expected to determine whether the harvest strategy is working.</p> <p>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.</p> <p>The new mandatory electronic log-book will improve data gathering and the monitoring of the fishery. SG is met.</p>		
d	Guidepost			The harvest strategy is periodically reviewed and improved as necessary.
	Met?			Y
	Justification	<p>The harvest strategy is periodically reviewed and improved as necessary.</p> <p>The global performance of the fishery is evaluated every three years through the Regional Advisory Process.</p> <p>The harvest strategy is analyzed 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.</p> <p>Therefore SG100 is met.</p>		

PI 1.2.1		There is a robust and precautionary harvest strategy in place		
e	Guidepost	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.	There is a high degree of certainty that shark finning is not taking place.
	Met?	Not relevant	Not relevant	Not relevant
	Justification			
References		<p>DFO. 2014c. Development of reference points in the context of a precautionary approach (PA) for lobster of the Gaspé (LFAs 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/027.</p> <p>DFO. 2012a. Assessment of Lobster Stocks of the Gaspé (LFAs 19, 20 and 21), Quebec in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/015.</p> <p>FRCC (Fisheries Resource Conservation Council) 1995. A conservation framework for Atlantic lobster. Report to the Minister of Fisheries and Oceans. November 1995. 49 p. + appendices.</p> <p>FRCC (Fisheries Resource Conservation Council) 2007. Sustainability framework for Atlantic lobster. Report to the Minister of Fisheries and Oceans. July 2007. 54 p. + appendices.</p> <p>Gendron, L. and Savard, G. 2012. Lobster stock status in the coastal waters of Québec (LFAs 15 to 22) in 2011 and determination of reference points for the implementation of a precautionary approach in the Magdalen Islands (LFA 22). DFO Can. Sci. Advis. Sec. Res. Doc. 2012/010.</p> <p>Regroupement des pêcheurs professionnels du sud de la Gaspésie. 2009. Plan de conservation du homard proposé au ministère des Pêches et des Océans, 16 pp.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				90
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 1.2.2

PI 1.2.2		There are well defined and effective harvest control rules in place		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Generally understood harvest rules are in place that are consistent with the harvest strategy and which act to reduce the exploitation rate as limit reference points are approached.	Well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.	
	Met?	Y	Y	
	Justification	<p>Well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.</p> <p>In 2014, a new set of references points based on landings and harvest control rules, were peer-reviewed and approved. Landings are used as the stock status indicator and as a proxy for the estimation of B_{MSY}. The median landing for the 1985-2009 period for the entire Gaspésie is proposed as a proxy value for B_{MSY}. The USR value is defined as 80% of B_{MSY} and the LRP is defined as 40% of B_{MSY}. Landings from 2011 indicate that the stock is in the healthy zone, above both the USR and B_{MSY} values.</p> <p>Three categories of management measures apply in the lobster fishery: escapement measures, input control measures and output control measures. For each of the three categories, there is a set of tools described in the "tool box" in FRCC (1995). Escapement measures include size limits (minimum, maximum or a closed window of sizes), V-notching and discarding certain categories of lobster such as berried females. Input control measures include those designed to limit the various components of the fishing effort such as the number of fishing days allowed, the number of traps, trap dimensions, and those limiting fishing operations such as daily hours of fishing operation, the number of daily hauls, the length of trap lines and the number of traps per line. Input control measures could also include the implementation of fishing exclusion zones. Output control measures are intended to control the amount of landings; and such these measures rely on quotas.</p> <p>In the AP for lobster in the Gaspé, it will be possible, depending on stock status zones, to use these measures successively and additively. Presently, we consider that the stock is in the healthy zone. Although considered high, the current exploitation rate is acceptable and under current environmental and ecological conditions, it does not endanger the health of the stock. Management measures may remain unchanged as long as the stock remains in this area. Target reference points can still be defined if needed, based on imperatives other than biological. Escapement and input control measures can be considered when the stock will be in the cautious zone. If the stock reaches the critical zone, it may be necessary to use output controls. However, the measures mentioned above are not all equivalent in terms of their effect on reducing the removal rate. Escapement measures have an immediate impact on the stock. For example, increasing the minimum catch size has an immediate effect on reducing the removal rate because it allows a direct and complete protection of an additional fraction of the population. Measures to control fishing effort have less direct effects on reducing the removal rate, especially in situations where there is initially a fishing overcapacity.</p>		
b	Guidepost		The selection of the harvest control rules takes into account the main uncertainties.	The design of the harvest control rules takes into account a wide range of uncertainties.

PI 1.2.2		There are well defined and effective harvest control rules in place		
	Met?		Y	N
	Justification	<p>The selection of the harvest control rules takes into account 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.</p> <p>However, it is not possible to affirm that the HCR take into account a wide range of uncertainties, preventing the fishery from meeting SG100.</p>		
c	Guidepost	There is some evidence that tools used to implement harvest control rules 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 harvest control rules.	Evidence clearly shows that the tools in use are effective in achieving the exploitation levels required under the harvest control rules.
	Met?	Y	Y	N
	Justification	<p>Available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the harvest control rules.</p> <p>Harvest control rules include a fixed number of licenses, a maximum number of traps per license, a maximum trap size, escape vent, fixed fishing season. Exploitation is well controlled, the fishery meets SG60.</p> <p>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)</p> <p>The tools have demonstrated to be effective to achieve the targets defined in the harvest strategy and in the newly defined precautionary approach. Therefore, SG80 is met.</p> <p>There is no clear evidence that the tools are effective. Stock status is only expressed in relative terms, based on empirical indicators. Landings are used by default as a proxy for B_{MSY} and it is not evident that the current exploitation level is adapted to the stock productivity, even if landings are increasing. This prevents 100c to be met.</p>		
References		<p>DFO. 2014c. Development of reference points in the context of a precautionary approach (PA) for lobster of the Gaspé (LFAs 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/027.</p> <p>DFO. 2012a. Assessment of Lobster Stocks of the Gaspé (LFAs 19, 20 and 21), Quebec in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/015.</p> <p>FRCC (Fisheries Resource Conservation Council) 1995. A conservation framework for Atlantic lobster. Report to the Minister of Fisheries and Oceans. November 1995. 49 p. + appendices.</p> <p>FRCC (Fisheries Resource Conservation Council) 2007. Sustainability framework for Atlantic lobster. Report to the Minister of Fisheries and Oceans. July 2007. 54 p. + appendices.</p> <p>Regroupement des pêcheurs professionnels du sud de la Gaspésie. 2009. Plan de conservation du homard proposé au ministère des Pêches et des Océans, 16 pp.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				80

PI 1.2.2	There are well defined and effective harvest control rules in place	
CONDITION NUMBER (if relevant):		NA

Evaluation Table for PI 1.2.3

PI 1.2.3		Relevant information is collected to support the harvest strategy		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Some relevant information related to stock structure, stock productivity and fleet composition is available to support the harvest strategy.	Sufficient relevant information related to stock structure, stock productivity, fleet composition and other data is available to support the harvest strategy.	A comprehensive range of information (on stock structure, stock productivity, fleet composition, stock abundance, fishery removals and other information such as environmental information), including some that may not be directly related to the current harvest strategy, is available.
	Met?	Y	Y	N
	Justification	Sufficient relevant information related to stock structure, stock productivity, fleet composition and other data is 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. However, while the number of indicators is quite high, they are not comprehensive. <i>E.g.</i> : stock abundance estimates rely on indirect indicators (CPUEs), and natural fluctuations due to environment is uncertain, preventing the fishery from meeting 100a.		
b	Guidepost	Stock abundance and fishery removals are monitored and at least one indicator is 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.	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?	Y	Y	N

PI 1.2.3		Relevant information is collected to support the harvest strategy		
c	Justification	<p>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.</p> <p>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, at-sea sampling activities (1986-present), and voluntary recruitment-index program. Fishery-independent data are being developed and consist of post-season trap survey, and SCUBA survey indices. SG60 is met.</p> <p>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”). SG80 is met.</p> <p>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. SG100 is not met.</p>		
	Guidepost		There is good information on all other fishery removals from the stock.	
	Met?		y	
	Justification	<p>There is good information on all other fishery removals from the stock.</p> <p>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.</p> <p>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.</p>		
References		<p>DFO. 2014c. Development of reference points in the context of a precautionary approach (PA) for lobster of the Gaspé (LFAs 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/027.</p> <p>DFO. 2012a. Assessment of Lobster Stocks of the Gaspé (LFAs 19, 20 and 21), Quebec in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/015.</p> <p>Gendron, L. and Savard, G. 2012. Lobster stock status in the coastal waters of Québec (LFAs 15 to 22) in 2011 and determination of reference points for the implementation of a precautionary approach in the Magdalen Islands (LFA 22). DFO Can. Sci. Advis. Sec. Res. Doc. 2012/010.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				80
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 1.2.4

PI 1.2.4		There is an adequate assessment of the stock status		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost		The assessment is appropriate for the stock and for the harvest control rule.	The assessment is appropriate for the stock and for the harvest control rule and takes into account the major features relevant to the biology of the species and the nature of the fishery.
	Met?		(Y/N)	(Y/N)
	Justification	Default 80 RBF used for 1.1.1 Stock status.		
b	Guidepost	The assessment estimates stock status relative to reference points.		
	Met?	(Y/N)		
	Justification	Default 80 RBF used for 1.1.1 Stock status.		
c	Guidepost	The assessment identifies major sources of uncertainty.	The assessment takes uncertainty into account.	The assessment takes into account uncertainty and is evaluating stock status relative to reference points in a probabilistic way.
	Met?	(Y/N)	(Y/N)	(Y/N)
	Justification	Default 80 RBF used for 1.1.1 Stock status.		
d	Guidepost			The assessment has been tested and shown to be robust. Alternative hypotheses and assessment approaches have been rigorously explored.
	Met?			(Y/N)

PI 1.2.4		There is an adequate assessment of the stock status		
	Justification	Default 80 RBF used for 1.1.1 Stock status.		
e	Guidepost		The assessment of stock status is subject to peer review.	The assessment has been internally and externally peer reviewed.
	Met?		(Y/N)	(Y/N)
	Justification	Default 80 RBF used for 1.1.1 Stock status.		
References		<p>DFO. 2014c. Development of reference points in the context of a precautionary approach (PA) for lobster of the Gaspé (LFAs 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/027.</p> <p>DFO. 2012a. Assessment of Lobster Stocks of the Gaspé (LFAs 19, 20 and 21), Quebec in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/015.</p> <p>Gendron, L. and Savard, G. 2012. Lobster stock status in the coastal waters of Québec (LFAs 15 to 22) in 2011 and determination of reference points for the implementation of a precautionary approach in the Magdalen Islands (LFA 22). DFO Can. Sci. Advis. Sec. Res. Doc. 2012/010.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				80
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 2.1.1

PI 2.1.1		The fishery does not pose a risk of serious or irreversible harm to the retained species and does not hinder recovery of depleted retained species		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Main retained species are likely to be within biologically based limits (if not, go to scoring issue c below).	Main retained species are highly likely to be within biologically based limits (if not, go to scoring issue c below).	There is a high degree of certainty that retained species are within biologically based limits and fluctuating around their target reference points.
	Met?	Y for fall-spawning herring N for Canadian mackerel	Y for fall-spawning herring N for Canadian mackerel	N
	Justification	<p>Under licence conditions male rock crabs are allowed to be landed. But in actual fishing practices, male rock crab is discarded.</p> <p>With respect to bait use, according to DFO, MERINOV and lobster harvesters, the main species used as bait in the Gaspésie lobster fishery are fall-spawning herring (local fisheries) and Atlantic mackerel. The mackerel used as bait comes from mainly local fisheries and in a small portion from U.S. fisheries. The US mackerel is then not considered as a main retained species. Although data on the real amount of mackerel uses as bait from the since 2012 mandatory e-log are not available yet, a survey carried out by MERIVOV during the 2012 fishing season (69 days for LFAs 20 and 21, and 71 days for LFA 19) estimated the daily amount of bait used between 194 lb and 298 lb, except for the last week where it was 147 lb. According the fishermen, approximately 60% of the bait used is mackerel.</p> <p>The fall-spawning herring is managed under a two-year SGSL conservation and harvesting plan for 2012-2013 including input and output control measures. As a result of the last stock assessment, the exploitation rate in 2011 was 21% below $F_{0.1}$ reference level of 25% and the 2012 beginning-of-year spawning stock biomass was estimated to be about 183,800 t which is well above B_{USR}. Therefore, the stock is not overfished, and overfishing is not occurring. The assessment team considers that there is a high degree of certainty that fall-spawning herring is within biologically based limits and fluctuating around target reference point.</p> <p>The Canadian Atlantic mackerel fisheries are managed under an IFMP. Mackerel fisheries are input and output controls fisheries. As a result of the last stock assessment, the biomass of the Canadian Atlantic mackerel contingent has been declining since the mid-2000s, reaching a very low value in 2013. The abundance index from the egg survey dropped again from 2002 to reach since 2005 the lowest values of the series, which reflects the collapse of the stock. The relationship between fishing mortality and spawning biomass indicates that the stock is currently in a critical situation. According to the sequential population analysis, this decline in biomass was caused by fishing mortality levels several times higher than the historic sustainable levels. It is likely that the stock is currently overfished and in a situation of recruitment overfishing, preventing the fishery from meeting 60a and 80a for the Canadian mackerel.</p>		

PI 2.1.1		The fishery does not pose a risk of serious or irreversible harm to the retained species and does not hinder recovery of depleted retained species		
		<p>According to the Guidance for MSC CR GCB 3.2, “The component of P2 may be subject to human impact from sources other than the assessed fishery. For example, retained or bycatch species may be target species in other fisheries...The SGs in P2 are structured to first address the status of the component.</p> <ul style="list-style-type: none"> • If the status is low, for whatever reason, then the operative P2 assessment issues is then if the fishery is hindering recovery. This is different to the treatment of target species in P1, where low status would preclude certification irrespective of the cause of that low status. For example if a retained or bycatch species in the assessed fishery is depleted as a result of targeting in other fisheries then the P2 assessment would be based on the impact of the assessed fishery on recovery of depleted species, even if no effort was being made to recover the species in the other fisheries” <p>A small portion of mackerel comes from the U.S. Atlantic mackerel fishery. The U.S. Atlantic mackerel fishery primarily uses mid-water and bottom trawls. The Atlantic mackerel, well-managed and resilient species, is managed by the Mid-Atlantic Fishery Management Council and the NOAA’s National Marine Fisheries Service under a Fishery Management Plan established in 1978. The FMP includes a number of measures to ensure sustainable harvesting including input (limited access program) and output (quotas) controls, reference points, and protection of mackerel Essential Fish Habitats. As a result of the last stock assessment, fishing mortality remains very low (below $F=0.06$) since 1992, and the Atlantic mackerel spawning stock biomass (SSB) is 2.3 million mt for a SSB_{MSY} of 644,000 mt. Therefore, the stock was not overfished, and overfishing was not occurring at this time. However, giving the uncertainties in the stock assessment pointed out in the 2010 TRAC report and the absence of recent stock assessment since 2006, the assessment team cannot be consider that the US mackerel stock is highly likely to be within biologically based limits.</p> <p>The Assessment team attributes N to 100a as there is a high degree of certainty that only fall-spawning herring are within biologically based limits and fluctuating around target reference point.</p>		
b	Guidepost			Target reference points are defined for retained species.
	Met?			N
	Justification	Target reference points are defined for fall-spawning herring and U.S. mackerel, but not for Canadian mackerel. Therefore the fishery does not meet 100b.		
c	Guidepost	If main retained species are outside the limits there are measures in place that are expected to ensure that the fishery does not hinder recovery and rebuilding of the depleted species.	If main retained species are outside the limits there is a partial strategy of demonstrably effective management measures in place such that the fishery does not hinder recovery and rebuilding.	
	Met?	Y	N	

PI 2.1.1		The fishery does not pose a risk of serious or irreversible harm to the retained species and does not hinder recovery of depleted retained species		
	Justification	<p>As a result of the last stock assessment, it is likely that the Canadian mackerel stock is currently overfished and in a situation of recruitment overfishing.</p> <p>The impact of the Gaspésie lobster fishery on the Canadian mackerel stock is indirect. Canadian mackerel used as bait is purchased by lobster fishermen to local directed fisheries, so the amount of bait used is already accounting into mackerel fisheries management system and taking into account in the Canadian mackerel stock assessment. There are measures or fishing practices in place that are expected to ensure that the lobster fishery does not hinder recovery and rebuilding of the mackerel stock.</p> <p>According to the GCB3.3 "Measures" are individuals actions or tools that may be in place either explicitly to manage impacts on the component or incidentally, being designed primarily to manage impacts on another component, indirectly contribute to management of the component under assessment.</p> <p>The reduction of the number of licences and the reduction of the number of traps per licence over the years are management measures that have contributed to reduce the impact on the Canadian mackerel and other P2 components as a decrease in the number of traps induced less bait used. The number of licences was reduced from 216 licences in 1995 to 164 and 162 licences in 2013 and 2014, respectively. The number of traps was estimated at 2.26 millions in 2011. It was 2.38 millions in 2008 (diminution of 5%) and 3.05 millions in the period 1994-2005 (diminution of 26%). In 2006, the number of trap per license was reduced from 250 to 235.</p> <p>In addition, the high price of bait species is a wide concern in all Atlantic Canada lobster fisheries and has forced lobster harvesters to a better and optimal utilization of bait.</p> <p>However, the assessment team considered that there is no formal partial strategy of demonstrably effective management measures in place in the lobster fishery to ensure that the fishery does not hinder recovery and rebuilding of the Canadian mackerel stock, preventing the fishery from meeting 80c.</p>		
d	Guidepost	If the status is poorly known there are measures or practices in place that are expected to result in the fishery not causing the retained species to be outside biologically based limits or hindering recovery.		
	Met?	Y		
	Justification	<p>Main retained species are SGSL fall-spawning herring, and Canadian mackerel. Stocks of main retrained species are assessed and only the Canadian mackerel is depleted, and as shown in scoring issue a.</p> <p>There are measures or fishing practices in place that are expected to ensure that the lobster fishery does not hinder recovery and rebuilding of the Canadian mackerel stock.</p> <p>Therefore the fishery meets 60d.</p>		
References		<p>DFO 2007a. Integrated Fisheries Management Plan for the Atlantic Mackerel, effective from 2007.</p> <p>DFO 2012e. Assessment of the Atlantic mackerel stock for the Northwest Atlantic (Subareas 3 and 4) in 2011. DFO Can. Sci. Adv. Sec. Sci. Adv. Rep. 2012/031.</p> <p>DFO 2012f. Assessment of Atlantic herring in the southern Gulf of St. Lawrence (NAFO Div. 4T). DFO Can. Sci. Adv. Sec. Sci. Adv. Rep. 2012/014.</p>		

PI 2.1.1	The fishery does not pose a risk of serious or irreversible harm to the retained species and does not hinder recovery of depleted retained species	
	<p>DFO 2014a. Assessment of the Atlantic Mackerel stock for the Northwest Atlantic (Subareas 3 and 4) in 2013. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2014/030.</p> <p>http://www.glf.dfo-mpo.gc.ca/Gulf/FAM/Herring-Information/Herring-2012-2013-CHP</p> <p>Information provided by DFO and lobster fishermen during site visit meeting.</p>	
OVERALL PERFORMANCE INDICATOR SCORE:		60
CONDITION NUMBER (if relevant):		1

Evaluation Table for PI 2.1.2

PI 2.1.2		There is a strategy in place for managing retained species that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to retained species		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	There are measures in place, if necessary, that are expected to maintain the main retained species at levels which are highly likely to be within biologically based limits, or to ensure the fishery does not hinder their recovery and rebuilding.	There is a partial strategy in place, if necessary, that is expected to maintain the main retained species at levels which are highly likely to be within biologically based limits, or to ensure the fishery does not hinder their recovery and rebuilding.	There is a strategy in place for managing retained species.
	Met?	Y	Y for the fall-spawning herring N for Canadian mackerel	Y for the fall-spawning herring N for Atlantic mackerel

PI 2.1.2		There is a strategy in place for managing retained species that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to retained species		
	Justification	<p>Under licence conditions male rock crab are allowed to be landed. But in actual fishing practices, male rock crab is discarded.</p> <p>Formal management strategies are in place in the directed fall-spawning fishery to maintain this species used as bait in the lobster fishery at levels which are highly likely to be within biologically based limits. The fall-spawning herring is managed under a two-year SGSL conservation and harvesting plan for 2012-2013 including input and output control measures.</p> <p>There is a partial strategy in place for the directed Canadian Atlantic mackerel fisheries that is expected to ensure the recovery of the mackerel stock. Canadian Atlantic mackerel fisheries are managed under an IFMP. Mackerel fisheries are input and output controls fisheries. Given the critical situation of the stock, the 2014 TAC, set at 10,000 t, was reduced of 26,000 t compared to 2013. The minimum size was increased from 250 mm to 273 mm.</p> <p>The U.S. Atlantic mackerel is under a Fishery Management Plan established in 1978. The FMP includes a number of measures to ensure sustainable harvesting including input (limited access program) and output (quotas) controls, reference points, and protection of mackerel Essential Fish Habitats.</p> <p>The impact of the Gaspésie lobster fishery on the Canadian mackerel stock is indirect. Canadian mackerel used as bait is purchased by lobster fishermen to local directed fisheries, so the amount of bait used is already accounting into mackerel fisheries management system and taking into account in the Canadian mackerel stock assessment. There are measures or fishing practices in place that are expected to ensure that the lobster fishery does not hinder recovery and rebuilding of the mackerel stock.</p> <p>According to the GCB3.3 "Measures" are individuals actions or tools that may be in place either explicitly to manage impacts on the component or incidentally, being designed primarily to manage impacts on another component, indirectly contribute to management of the component under assessment.</p> <p>The reduction of the number of licences and the reduction of the number of traps per licence over the years are management measures that have contributed to reduce the impact on the Canadian mackerel and other P2 components as a decrease in the number of traps induced less bait used. The number of licences was reduced from 216 licences in 1995 to 164 and 162 licences in 2013 and 2014, respectively. The number of traps was estimated at 2.26 millions in 2011. It was 2.38 millions in 2008 (diminution of 5%) and 3.05 millions in the period 1994-2005 (diminution of 26%). In 2006, the number of trap per license was reduced from 250 to 235.</p> <p>In addition, the high price of bait species is a wide concern in all Atlantic Canada lobster fisheries and has forced lobster harvesters to a better and optimal utilization of bait.</p> <p>However, the assessment team considered that there is no formal partial strategy in place in the lobster fishery to ensure that the fishery does not hinder recovery and rebuilding of the Canadian mackerel stock, preventing the fishery from meeting 80a and 100a.</p>		
b	Guidepost	The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species).	There is some objective basis for confidence that the partial strategy will work, based on some information directly about the fishery and/or species involved.	Testing supports high confidence that the strategy will work, based on information directly about the fishery and/or species involved.
	Met?	Y	Y for the fall-spawning herring	N

PI 2.1.2		There is a strategy in place for managing retained species that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to retained species		
			N for Canadian mackerel	
	Justification	<p>There is some objective basis for confidence that strategies will work, based on evidence from stock assessment results for fall-spawning herring and from fishery characteristics and management. So the fishery meets 60b and 80b for this species.</p> <p>The impact of the Gaspésie lobster fishery on the Canadian mackerel stock is indirect. Canadian mackerel used as bait is purchased by lobster fishermen to local directed fisheries, so the amount of bait used is already accounting into mackerel fisheries management system and taking into account in the Canadian mackerel stock assessment. There are measures or fishing practices in place that are expected to ensure that the lobster fishery does not hinder recovery and rebuilding of the mackerel stock.</p> <p>According to the GCB3.3 "Measures" are individuals actions or tools that may be in place either explicitly to manage impacts on the component or incidentally, being designed primarily to manage impacts on another component, indirectly contribute to management of the component under assessment.</p> <p>The reduction of the number of licences and the reduction of the number of traps per licence over the years are management measures that have contributed to reduce the impact on the Canadian mackerel and other P2 components as a decrease in the number of traps induced less bait used. The number of licences was reduced from 216 licences in 1995 to 164 and 162 licences in 2013 and 2014, respectively. The number of traps was estimated at 2.26 millions in 2011. It was 2.38 millions in 2008 (diminution of 5%) and 3.05 millions in the period 1994-2005 (diminution of 26%). In 2006, the number of trap per license was reduced from 250 to 235.</p> <p>In addition, the high price of bait species is a wide concern in all Atlantic Canada lobster fisheries and has forced lobster harvesters to a better and optimal utilization of bait.</p> <p>However, the assessment team considered that there is no formal partial strategy in place in the lobster fishery to ensure that the fishery does not hinder recovery and rebuilding of the Canadian mackerel stock, preventing the fishery from meeting 80b.</p> <p>Also, based on the same evidence, a N was assigned to 100b.</p>		
c	Guidepost		There is some evidence that the partial strategy is being implemented successfully.	There is clear evidence that the strategy is being implemented successfully.
	Met?		Y for the fall-spawning herring N for Canadian mackerel	N
	Justification	<p>There is some evidence that strategies is being implemented successfully, based on evidence from stock assessment results for fall-spawning herring and from fishery characteristics and management. So the fishery meets 80c for this species.</p> <p>The assessment team considered that there is no formal partial strategy in place in the lobster fishery to ensure that the fishery does not hinder recovery and rebuilding of the Canadian mackerel stock, preventing the fishery from meeting 80c for Canadian mackerel.</p> <p>Based on the same evidence, a N was assigned to 100c.</p>		

PI 2.1.2		There is a strategy in place for managing retained species that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to retained species		
d	Guidepost			There is some evidence that the strategy is achieving its overall objective.
	Met?			N
	Justification	There is no strategy in place for the Canadian mackerel, preventing the fishery from meeting 100d.		
e	Guidepost	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.	There is a high degree of certainty that shark finning is not taking place.
	Met?	Not relevant	Not relevant	Not relevant
	Justification			
References		<p>DFO 2007a. Integrated Fisheries Management Plan for the Atlantic Mackerel, effective from 2007.</p> <p>DFO 2012e. Assessment of the Atlantic mackerel stock for the Northwest Atlantic (Subareas 3 and 4) in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/031.</p> <p>DFO 2012f. Assessment of Atlantic herring in the southern Gulf of St. Lawrence (NAFO Div. 4T). DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/014.</p> <p>DFO 2014a. Assessment of the Atlantic Mackerel stock for the Northwest Atlantic (Subareas 3 and 4) in 2013. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2014/030.</p> <p>http://www.dfo-mpo.gc.ca/decisions/fm-2014-gp/atl-009-eng.htm</p> <p>SGSL herring: http://www.glf.dfo-mpo.gc.ca/Gulf/FAM/Herring-Information/Herring-2012-2013-CHP</p> <p>Information provided by DFO and lobster fishermen during site visit meeting.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				60
CONDITION NUMBER (if relevant):				2

Evaluation Table for PI 2.1.3

PI 2.1.3		Information on the nature and extent of retained species is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage retained species		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Qualitative information is available on the amount of main retained species taken by the fishery.	Qualitative information and some quantitative information are available on the amount of main retained species taken by the fishery.	Accurate and verifiable information is available on the catch of all retained species and the consequences for the status of affected populations.
	Met?	Y	Y	Y
	Justification	<p>Under licence conditions males rock crab are allowed to be landed. But in actual fishing practices, male rock crab is discarded. Main species used as bait in the Gaspésie lobster fishery are herring and Atlantic mackerel (mainly Canadian and US in a small proportion).</p> <p>Accurate and verifiable information on the catch of all retained species is available and the consequences for the status of affected populations, the fishery meeting 100a. Canadian mackerel used as bait is purchased by lobster fishermen to local directed fisheries, so the amount of bait used is already accounting into mackerel fisheries management system and taking into account in the Canadian mackerel stock assessment. According to MERINOV survey, the mean daily amount of bait used in the Gaspésie lobster was for the 2012 fishing season, between 194 lb and 208 lb, except for the last week where it was 174 lb. According the fishermen, approximately 60% of the bait used is mackerel. Moreover, the mandatory e-log implemented since the 2012 fishing season records the species used as bait and the amount of bait used for each fishing day.</p> <p>Landings of mackerel in Québec were 1,345 t, 1,777 t, and 1,282 t in 2011, 2012 and 2013, respectively. Total landings of Canada Atlantic mackerel were 6,468 t and 7,431 t in 2012 and 2013, respectively. Landings of Atlantic mackerel in US were 6,019 t and 5,250 t in 2012 and 2013, respectively. Landings of fall-spawning herring caught by gillnet in the GSL (Zone 4T) were 42,434 t and 36,917 t in 2010 and 2011, respectively. More specifically, fall-spawning herring landings in Gaspésie were 15,803 t and 15,381 t in 2010 and 2011, respectively.</p> <p>Stock status of all bait species is assessed.</p>		
b	Guidepost	Information is adequate to qualitatively assess outcome status with respect to biologically based limits.	Information is sufficient to estimate outcome status with respect to biologically based limits.	Information is sufficient to quantitatively estimate outcome status with a high degree of certainty.
	Met?	Y	Y	N
	Justification	<p>Information is adequate and sufficient to estimate outcome status with respect to biologically based limits, the fishery meeting 80b. Canadian Atlantic mackerel status is assessed using annual landings, catches description (catch-at-age, length frequencies), Fulton condition factor and age at maturity from field samples and productivity indicator from egg surveys. SGSL herring status is assessed using age-disaggregated gillnet catch rate index for ages 4 to 10 and an acoustic index for age 2 and 3. U.S. mackerel status is assessed using landings, age structure of landings, age structure and biomass from research vessel surveys.</p> <p>Information is not sufficient to quantitatively estimate outcomes status with a high degree of certainty for the Canadian mackerel, preventing the fishery for meeting 100b.</p>		

PI 2.1.3		Information on the nature and extent of retained species is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage retained species		
c	Guidepost	Information is adequate to support measures to manage main retained species.	Information is adequate to support a partial strategy to manage main retained species.	Information is adequate to support a strategy to manage retained species, and evaluate with a high degree of certainty whether the strategy is achieving its objective.
	Met?	Y	Y	N
	Justification	Information is adequate to support a strategy to manage retained species, the fishery meeting 80c, but not adequate to evaluate with a high degree of certainty whether the strategy is achieving its objective for the Canadian mackerel as that there is no formal partial strategy in place in the lobster fishery to ensure that the fishery does not hinder recovery and rebuilding of the Canadian mackerel stock, preventing the fishery for meeting 100c.		
d	Guidepost		Sufficient data continue to be collected to detect any increase in risk level (e.g. due to changes in the outcome indicator score or the operation of the fishery or the effectiveness of the strategy)	Monitoring of retained species is conducted in sufficient detail to assess ongoing mortalities to all retained species.
	Met?		Y	Y
	Justification	<p>Sufficient data continue to be collected to detect any increase in risk level, and monitoring of retained species is conducted in sufficient details to assess ongoing mortalities to all retained species, the fishery meeting 80d and 100d.</p> <p>Canadian Atlantic mackerel status is assessed using annual landings, catches description (catch-at-age, length frequencies), Fulton condition factor and age at maturity from field samples and productivity indicator from egg surveys. SGSL herring status is assessed using age-disaggregated gillnet catch rate index for ages 4 to 10 and an acoustic index for age 2 and 3. U.S. mackerel status is assessed using landings, age structure of landings, age structure and biomass from research vessel surveys.</p> <p>The fishery keeps records, via mandatory e-log implemented since 2012, of bait use by the lobster harvesters to determine potential changes in the fishery's impacts on species used as bait. MERINOV conducted surveys in 2012 to gain additional information on the nature and amount of bait used in the Gaspésie lobster fishery.</p> <p>Landings of mackerel in Québec were 1,345 t, 1,777 t, and 1,282 t in 2011, 2012 and 2013, respectively. Total landings of Canada Atlantic mackerel were 6,468 t and 7,431 t in 2012 and 2013, respectively. Landings of Atlantic mackerel in US were 6,019 t and 5,250 t in 2012 and 2013, respectively. Landings of fall-spawning herring caught by gillnet in the GSL (Zone 4T) were 42,434 t and 36,917 t in 2010 and 2011, respectively. More specifically, fall-spawning herring landings in Gaspésie were 15,803 t and 15,381 t in 2010 and 2011, respectively.</p> <p>Therefore, the Assessment team considered that sufficient data continue to be collected to detect any increase in risk level, and monitoring of retained species is conducted in sufficient details to assess ongoing mortalities to all retained species, the fishery meeting 80d and 100d.</p>		
References		DFO 2012e. Assessment of the Atlantic mackerel stock for the Northwest Atlantic (Subareas 3 and 4) in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/031.		

PI 2.1.3	Information on the nature and extent of retained species is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage retained species		
	<p>DFO 2012f. Assessment of Atlantic herring in the southern Gulf of St. Lawrence (NAFO Div. 4T). DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/014.</p> <p>DFO 2014a. Assessment of the Atlantic Mackerel stock for the Northwest Atlantic (Subareas 3 and 4) in 2013. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2014/030.</p> <p>DFO Fisheries Statistics: http://www.dfo-mpo.gc.ca/stats/commercial/sea-maritimes-eng.htm</p> <p>U.S. Atlantic mackerel: http://www.nefsc.noaa.gov/sos/spsyn/pp/mackerel/</p>		
OVERALL PERFORMANCE INDICATOR SCORE:			90
CONDITION NUMBER (if relevant):			NA

Evaluation Table for PI 2.2.1

PI 2.2.1	The fishery does not pose a risk of serious or irreversible harm to the bycatch species or species groups and does not hinder recovery of depleted bycatch species or species groups		
Scoring Issue	SG 60	SG 80	SG 100
a	Guidepost Main bycatch species are likely to be within biologically based limits (if not, go to scoring issue b below).	Main bycatch species are highly likely to be within biologically based limits (if not, go to scoring issue b below).	There is a high degree of certainty that bycatch species are within biologically based limits.
Met?			
	Y	Y	N

PI 2.2.1		The fishery does not pose a risk of serious or irreversible harm to the bycatch species or species groups and does not hinder recovery of depleted bycatch species or species groups		
	Justification	<p>Main bycatch species are highly likely to be within biologically based limits.</p> <p>DFO carried out a first bycatch survey during the 2011 fishing season. A total of 18 species were listed but rock crab is the only species which catches made up more than 5% of the lobster catches (in weight).</p> <p>On the whole, bycatches of other species were considered negligible.</p> <p>There is no biologically based stock assessment for rock crab. The rock crab stock assessment is based on abundance indicators, which are landings and CPUEs, and size of landed crabs. According to the last rock crab stock assessment, catch rates from 2010 to 2012 were above the average 2001-2011, except in zone 12Z where catch rates were slightly below the average. Size structures have been stable in South-Gaspé, and the conclusion was fishing over the last 10 years did not impact the rock crab population. Bigger crabs are observed in North-Gaspésie. Mean size are stable since 2005, and size at 90th centile was higher in 2011 and 2012 than 2005-2010. Size at 25th centile was lower in 2010 and 2011, which could suggest higher recruitment. There is no sign suggesting a negative change in rock crab abundance in the recent years. The actual level of fishing effort does not cause a risk to the rock crab stock in Gaspésie. Rock crab has a high biomass and is widely distributed in the coastal areas of Gaspésie.</p> <p>The assessment team assigned a N to SG100 as there is no estimate of total biomass of rock crab in the Quebec waters, in term of male biomass available to the fishery or estimates of exploitation rates. Also there are uncertainties in the stock assessment (total removals are not known, stock status indicators are almost all fishery-dependent, interpretation of catch rates).</p>		
b	Guidepost	If main bycatch species are outside biologically based limits there are mitigation measures in place that are expected to ensure that the fishery does not hinder recovery and rebuilding.	If main bycatch species are outside biologically based limits there is a partial strategy of demonstrably effective mitigation measures in place such that the fishery does not hinder recovery and rebuilding.	
	Met?	Y	Y	
	Justification	Rock crab is not outside the accepted proxy for biologically based limits. According to the last stock assessment, there is no sign suggesting a negative change in rock crab abundance in the recent years. The actual level of fishing effort does not cause a risk to the rock crab stock in Gaspésie. Rock crab has a high biomass and is widely distributed in the coastal areas of Gaspésie.		
c	Guidepost	If the status is poorly known there are measures or practices in place that are expected to result in the fishery not causing the bycatch species to be outside biologically based limits or hindering recovery.		
	Met?	Y		

PI 2.2.1		The fishery does not pose a risk of serious or irreversible harm to the bycatch species or species groups and does not hinder recovery of depleted bycatch species or species groups	
	Justification	<p>The status of the rock crab stock is not poorly known. Rock crab stock is assessed and the assessment is based on abundance indicators, which are landings and CPUEs, and size of landed crabs.</p> <p>According to the last stock assessment, there is no sign suggesting a negative change in rock crab abundance in the recent years. The actual level of fishing effort does not cause a risk to the rock crab stock in Gaspésie. Rock crab has a high biomass and is widely distributed in the coastal areas of Gaspésie.</p>	
References		<p>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.</p> <p>Gendron, L. et Savard, G. 2013. Évaluation de l'état des stocks de crabe commun (<i>Cancer irroratus</i>) des eaux côtières du Québec en 2012. Secr. Can. De Consult. Sci. du MPO Doc. de Rech. 2013/057. Xi + 85 p.</p>	
OVERALL PERFORMANCE INDICATOR SCORE:			80
CONDITION NUMBER (if relevant):			NA

Evaluation Table for PI 2.2.2

PI 2.2.2		There is a strategy in place for managing bycatch that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to bycatch populations		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	There are measures in place, if necessary, that are expected to maintain the main bycatch species at levels which are highly likely to be within biologically based limits, or to ensure the fishery does not hinder their recovery and rebuilding.	There is a partial strategy in place, if necessary, that is expected to maintain the main bycatch species at levels which are highly likely to be within biologically based limits, or to ensure the fishery does not hinder their recovery and rebuilding.	There is a strategy in place for managing and minimizing bycatch.
	Met?	Y	Y	Y
	Justification	<p>Rock crab is the only main bycatch species, bycatches of other species were considered negligible.</p> <p>The rock crab fishery is managed by a conservation plan which aims to protect the trophic links, particularly with the lobster. The management measures currently in place are intended to protect the reproductive potential by keeping harvesting rates low or moderate. The fishery is managed by controlling fishing effort and by controlling catches. Harvesting is also limited spatially through fishery closures in certain areas. The minimum catch size is 102 mm (carapace width), creating an exclusively male-directed fishery.</p> <p>Escape vents are required on lobster traps, reducing non-target species catch. Moreover, the Assessment team considered that the strategy of fishing effort reduction adopted by DFO and the RPPSG from 1998 to 2005 and after 2009 through licence retirement (reducing the number of harvesters), and the reduction of the number of traps per licence would have reduced bycatches. Individuals are immediately and carefully returned to the water, and survival is thought to be high.</p> <p>Therefore the Assessment team considered that there is a strategy in place for managing and minimizing bycatch, the fishery meeting 100a.</p>		
b	Guidepost	The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar fisheries/species).	There is some objective basis for confidence that the partial strategy will work, based on some information directly about the fishery and/or species involved.	Testing supports high confidence that the strategy will work, based on information directly about the fishery and/or species involved.
	Met?	Y	Y	N

PI 2.2.2		There is a strategy in place for managing bycatch that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to bycatch populations		
	Justification	<p>There is some objective basis for confidence that the strategy works.</p> <p>According to last rock crab stock assessment, catch rates from 2010 to 2012 were above the average 2001-2011, except in zone 12Z where catch rates were slightly below the average. Size structures have been stable in South-Gaspé, and the conclusion was fishing over the last 10 years did not impact the rock crab population. Bigger crabs are observed in North-Gaspésie. Mean size are stable since 2005, and size at 90th centile was higher in 2011 and 2012 than 2005-2010. Size at 25th centile was lower in 2010 and 2011, which could suggest higher recruitment. There is no sign suggesting a negative change in rock crab abundance in the recent years. The actual level of fishing effort does not cause a risk to the rock crab stock in Gaspésie. Rock crab has a high biomass and is widely distributed in the coastal areas of Gaspésie.</p> <p>However, as testing is not in place, it cannot be said that the strategy will work based on information provided.</p>		
c	Guidepost		There is some evidence that the partial strategy is being implemented successfully.	There is clear evidence that the strategy is being implemented successfully.
	Met?		Y	N
	Justification	<p>There is some evidence that the partial strategy is being implemented successfully. The rock crab fishery is managed by a conservation plan which aims to protect the trophic links, particularly with the lobster. The management measures currently in place are intended to protect the reproductive potential by keeping harvesting rates low or moderate. The fishery is managed by controlling fishing effort and by controlling catches. Harvesting is also limited spatially through fishery closures in certain areas. The minimum catch size is 102 mm (carapace width), creating an exclusively male-directed fishery.</p> <p>Escape vents are required on lobster traps, reducing non-target species catch. Moreover, the Assessment team considered that the strategy of fishing effort reduction adopted by DFO and the RPPSG from 1998 to 2005 and after 2009 through licence retirement (reducing the number of harvesters), and the reduction of the number of traps per licence would have reduced bycatches. Individuals are immediately and carefully returned to the water, and survival is thought to be high.</p> <p>According to last rock crab stock assessment, catch rates from 2010 to 2012 were above the average 2001-2011, except in zone 12Z where catch rates were slightly below the average. Size structures have been stable in South-Gaspé, and the conclusion was fishing over the last 10 years did not impact the rock crab population. Bigger crabs are observed in North-Gaspésie. Mean size are stable since 2005, and size at 90th centile was higher in 2011 and 2012 than 2005-2010. Size at 25th centile was lower in 2010 and 2011, which could suggest higher recruitment. There is no sign suggesting a negative change in rock crab abundance in the recent years. The actual level of fishing effort does not cause a risk to the rock crab stock in Gaspésie. Rock crab has a high biomass and is widely distributed in the coastal areas of Gaspésie.</p> <p>However, it cannot be said that there is clear evidence that the strategy is being implemented successfully, preventing the fishery from meeting 100c.</p>		

PI 2.2.2		There is a strategy in place for managing bycatch that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to bycatch populations		
d	Guidepost			There is some evidence that the strategy is achieving its overall objective.
	Met?			Y
	Justification	<p>There is some evidence that the strategy is achieving its overall objective. According to last rock crab stock assessment, catch rates from 2010 to 2012 were above the average 2001-2011, except in zone 12Z where catch rates were slightly below the average. Size structures have been stable in South-Gaspé, and the conclusion was fishing over the last 10 years did not impact the rock crab population. Bigger crabs are observed in North-Gaspésie. Mean size are stable since 2005, and size at 90th centile was higher in 2011 and 2012 than 2005-2010. Size at 25th centile was lower in 2010 and 2011, which could suggest higher recruitment. There is no sign suggesting a negative change in rock crab abundance in the recent years. The actual level of fishing effort does not cause a risk to the rock crab stock in Gaspésie. Rock crab has a high biomass and is widely distributed in the coastal areas of Gaspésie.</p>		
References		<p>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.</p> <p>Gendron, L. et Savard, G. 2013. Évaluation de l'état des stocks de crabe commun (<i>Cancer irroratus</i>) des eaux côtières du Québec en 2012. Secr. Can. De Consult. Sci. du MPO Doc. de Rech. 2013/057. Xi + 85 p.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				90
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 2.2.3

PI 2.2.3		Information on the nature and the amount of bycatch is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage bycatch		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Qualitative information is available on the amount of main bycatch species taken by the fishery.	Qualitative information and some quantitative information are available on the amount of main bycatch species taken by the fishery.	Accurate and verifiable information is available on the catch of all bycatch species and the consequences for the status of affected populations.
	Met?	Y	Y	N
	Justification	<p>Qualitative information and some quantitative information are available on the amount of main bycatch species taken by the fishery.</p> <p>DFO carried out a first bycatch survey during the 2011 fishing season. 18 samplings (fishing trips), 6 in North-Gaspé (LFA 19) and 12 in South-Gaspé (LFA 20), were carried out, and all of the bycatch species were identified, counted and weighed. In the DFO report, the % provided referred to the % of total bycatch, not to the % of total lobster catch. The Assessment team, in collaboration with DFO, calculated for each bycatch species the % of total lobster catch making an extrapolation using a “potential” catches of bycatch calculated by the authors (estimated according to the scenario where all the authorized fishing effort would have been deployed).</p> <p>A total of 18 species were listed, among which 7 species which catch is inferior to 0.1% of lobster catch. Bycatch catches during the 2011 lobster season were estimated at 147.8 t, which represents about 17% of lobster landings.</p> <p>Rock crab is the only species which catches made up more than 5% of the lobster catches (in weight), and bycatches of other species were considered negligible.</p> <p>Moreover, the lobster harvesters must record bycatches (species and number, weight for rock crab) in the e-log mandatory since 2012. Analysis of bycatches data from e-log have not been carried out yet and there is no observer coverage in this fishery, so it cannot be said that accurate and verifiable information is available on the catch of all bycatch species and the consequences for the status of affected populations, preventing the fishery from meeting SG100.</p>		
b	Guidepost	Information is adequate to broadly understand outcome status with respect to biologically based limits	Information is sufficient to estimate outcome status with respect to biologically based limits.	Information is sufficient to quantitatively estimate outcome status with respect to biologically based limits with a high degree of certainty.
	Met?	Y	Y	N
	Justification	<p>Information is sufficient to estimate outcome status with respect to biologically based limits.</p> <p>However, information is insufficient to quantitatively estimate outcome status with respect to biologically based limits with a high degree of certainty, as analysis of bycatches data from e-log have not been carried out yet and also there are uncertainties in the rock crab stock assessment (total removals are not known, stock status indicators are almost all fishery-dependent, interpretation of catch rates).</p>		
c	Guidepost	Information is adequate to support measures to manage bycatch.	Information is adequate to support a partial strategy to manage main bycatch species.	Information is adequate to support a strategy to manage bycatch species, and evaluate with a high degree of certainty whether the strategy is achieving its objective.

PI 2.2.3		Information on the nature and the amount of bycatch is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage bycatch		
	Met?	Y	Y	N
	Justification	Information is adequate to support a partial strategy to manage main bycatch species, but is not adequate to support a strategy to manage bycatch species, and evaluate with a high degree of certainty whether the strategy is achieving its objectives, preventing the fishery from meeting SG100.		
d	Guidepost		Sufficient data continue to be collected to detect any increase in risk to main bycatch species (e.g., due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the strategy).	Monitoring of bycatch data is conducted in sufficient detail to assess ongoing mortalities to all bycatch species.
	Met?		Y	N
	Justification	<p>Sufficient data continue to be collected to detect any increase in risk to main bycatch species.</p> <p>DFO carried out a first bycatch survey during the 2011 fishing season. 18 samplings (fishing trips), 6 in North-Gaspé (LFA 19) and 12 in South-Gaspé (LFA 20), were carried out, and all of the bycatch species were identified, counted and weighed. In the DFO report, the % provided referred to the % of total bycatch, not to the % of total lobster catch. The Assessment team, in collaboration with DFO, calculated for each bycatch species the % of total lobster catch making an extrapolation using a “potential” catches of bycatch calculated by the authors (estimated according to the scenario where all the authorized fishing effort would have been deployed).</p> <p>A total of 18 species were listed, among which 7 species which catch is inferior to 0.1% of lobster catch. Bycatch catches during the 2011 lobster season were estimated at 147.8 t, which represents about 17% of lobster landings.</p> <p>Rock crab is the only species which catches made up more than 5% of the lobster catches (in weight), and bycatches of other species were considered negligible.</p> <p>The rock crab stock assessment is based on abundance indicators, which are landings and CPUEs, and size of landed crabs.</p> <p>Moreover, the lobster harvesters must record bycatches (species and number, weight for rock crab) in the e-log mandatory since 2012 to determine potential changes in the fishery’s impacts on bycatch species.</p> <p>However, the assessment team considered that monitoring of bycatch data is not conducted in sufficient detail to assess ongoing mortalities to all bycatch species as the bycatch data from mandatory e-log have not been analyzed yet, preventing the fishery from meeting SG100.</p>		
References		<p>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.</p> <p>Gendron, L. et Savard, G. 2013. Évaluation de l’état des stocks de crabe commun (<i>Cancer irroratus</i>) des eaux côtières du Québec en 2012. Secr. Can. De Consult. Sci. du MPO Doc. de Rech. 2013/057. Xi + 85 p.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				80

PI 2.2.3	Information on the nature and the amount of bycatch is adequate to determine the risk posed by the fishery and the effectiveness of the strategy to manage bycatch
CONDITION NUMBER (if relevant):	NA

Evaluation Table for PI 2.3.1

PI 2.3.1		The fishery meets national and international requirements for the protection of ETP species The fishery does not pose a risk of serious or irreversible harm to ETP species and does not hinder recovery of ETP species		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Known effects of the fishery are likely to be within limits of national and international requirements for protection of ETP species.	The effects of the fishery are known and are highly likely to be within limits of national and international requirements for protection of ETP species.	There is a high degree of certainty that the effects of the fishery are within limits of national and international requirements for protection of ETP species.
	Met?	Y	Y	Y
	Justification	<p>According to MSC (CB3.11.1), ETP species are defined as those that are recognised by national legislation and those that are listed in Appendix 1 of CITES. Species that appear exclusively on non-binding list such as IUCN Red List or that are only the subject of intergovernmental recognition (such as FAO International Plans of Action) and that are not included under national legislation or binding international agreement are not considered as ETP species under MSC standards.</p> <p>Northern wolffish, spotted wolffish, Atlantic wolffish, striped bass and the leatherback turtle are listed under <i>SARA</i>. The leatherback turtle is also listed under the <i>IUCN</i> Red list in Critically Endangered Species of Wild Fauna and Flora, and is included in <i>CITES</i>, which reduces commercial exploitation of species at risk.</p> <p>Marine mammals are abundant in the GSL. The blue whale and the Northern Atlantic right whale are listed as endangered under <i>SARA</i>. The blue whale is also listed by the <i>IUCN</i> Red List as endangered species and is included in the <i>CITES</i>, which reduces commercial exploitation of species at risk, and the fin whale and the right whale are also listed by the <i>IUCN</i> Red list as endangered species.</p> <p>From 2007 to 2013, 3 Atlantic wolffish were caught and all alive while returning to the water. There were no reported catches of leatherback turtle. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the <i>SARA</i> and considered not at risk under the <i>COSEWIC</i>, occurred in the Gaspésie lobster trap fishery trap. No incidental catch has been reported since. The interaction between the Gaspésie lobster fishery and ETP species is thus very low. Therefore there is a high degree of certainty that the fishery are within limits of national and international requirements for protection of ETP Species, the fishery meeting 100a.</p>		
b	Guidepost	Known direct effects are unlikely to create unacceptable impacts to ETP species.	Direct effects are highly unlikely to create unacceptable impacts to ETP species.	There is a high degree of confidence that there are no significant detrimental direct effects of the fishery on ETP species.
	Met?	Y	Y	Y

PI 2.3.1		The fishery meets national and international requirements for the protection of ETP species The fishery does not pose a risk of serious or irreversible harm to ETP species and does not hinder recovery of ETP species		
	Justification	<p>From 2007 to 2013, 3 Atlantic wolffish were caught and all alive while returning to the water. There were no reported catches of leatherback turtle. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the SARA and considered not at risk under the COSEWIC, occurred in the Gaspésie lobster trap fishery trap. No incidental catch has been reported since. The interaction between the Gaspésie lobster fishery and ETP species is thus very low. Therefore there is a high degree of certainty that the fishery are within limits of national and international requirements for protection of ETP Species.</p> <p>Therefore, there is a high degree of confidence that there are no significant detrimental direct effects of the fishery on ETP species, the fishery meeting SG100.</p>		
c	Guidepost		Indirect effects have been considered and are thought to be unlikely to create unacceptable impacts.	There is a high degree of confidence that there are no significant detrimental indirect effects of the fishery on ETP species.
	Met?		Y	Y
	Justification	No indirect effects on ETP species are known to exist in the fishery. Furthermore, the interaction between the fishery and ETP species is considered to be very low.		
References		<p>DFO 2010a. Identification d'innovations en vue de limiter les prises accessoires de mammifères marins. Rapport rédigé par Yves Banville, Consultant.</p> <p>DFO SARA logbook 2006-2013.</p> <p>Information provided by DFO and lobster fishermen during site visit meeting.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				100
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 2.3.2

PI 2.3.2		The fishery has in place precautionary management strategies designed to: <ul style="list-style-type: none"> • Meet national and international requirements; • Ensure the fishery does not pose a risk of serious harm to ETP species; • Ensure the fishery does not hinder recovery of ETP species; and • Minimise mortality of ETP species. 		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	There are measures in place that minimise mortality of ETP species, and are expected to be highly likely to achieve national and international requirements for the protection of ETP species.	There is a strategy in place for managing the fishery'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.	There is a comprehensive strategy in place for managing the fishery's impact on ETP species, including measures to minimise mortality, which is designed to achieve above national and international requirements for the protection of ETP species.
	Met?	Y	Y	Y
	Justification	<p>In Canada the primary management strategies for the protection of ETP species are provided by SARA. Once protected under SARA, ETP species are subject to recovery strategies and management plan.</p> <p>A mandatory SARA logbook must be completed and submitted to DFO as a condition of license. Training courses in release techniques have been provided to license holders. A recovery strategy detailing procedures for expeditious release of wolffish has been established, industry has been trained, reporting procedures of encounters are in place and research on release methods used are monitored to ensure a high level of survival. Under SARA, a recovery strategy has been implemented for the leatherback turtle, the blue whale and the Northern right whale. Moreover the requirement of a minimum of 6 traps per trap line in sub-areas 20BA and 21A when fishing is carried out reduces the total number of buoy lines in the water column allowing reducing the possible interactions with marine mammals and sea turtles.</p> <p>From 2007 to 2013, 3 Atlantic wolffish were caught and all alive while returning to the water. There were no reported catches of leatherback turtle. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the SARA and considered not at risk under the COSEWIC, occurred in the Gaspésie lobster trap fishery trap. No incidental catch has been reported since. The interaction between the Gaspésie lobster fishery and ETP species is thus very low.</p> <p>Therefore, the Assessment team considers that there is a comprehensive strategy in place for managing the fishery's impact on ETP species, including measures to minimize mortality, which is designed to achieve above national and international requirements for the protection of ETP species, the fishery meeting 100a.</p>		
b	Guidepost	The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species).	There is an objective basis for confidence that the strategy will work, based on information directly about the fishery and/or the species involved.	The strategy is mainly based on information directly about the fishery and/or species involved, and a quantitative analysis supports high confidence that the strategy will work.
	Met?	Y	Y	N

PI 2.3.2		The fishery has in place precautionary management strategies designed to: <ul style="list-style-type: none"> • Meet national and international requirements; • Ensure the fishery does not pose a risk of serious harm to ETP species; • Ensure the fishery does not hinder recovery of ETP species; and • Minimise mortality of ETP species. 		
	Justification	<p>From 2007 to 2013, 3 Atlantic wolffish were caught and all alive while returning to the water. There were no reported catches of leatherback turtle. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the SARA and considered not at risk under the COSEWIC, occurred in the Gaspésie lobster trap fishery trap. No incidental catch has been reported since. Thus, the interaction between the Gaspésie lobster fishery and ETP species is thus very low.</p> <p>However, the Assessment Team is not aware of any quantitative analysis that has been conducted to determine the likely success of the approach used to minimize impact of Gaspésie lobster fishery on the ETP species encountered, preventing the fishery from meeting 100b.</p>		
c	Guidepost		There is evidence that the strategy is being implemented successfully.	There is clear evidence that the strategy is being implemented successfully.
	Met?		Y	Y
	Justification	<p>There is clear evidence that the strategy is being implemented successfully.</p> <p>Once protected under SARA, ETP species are subject to recovery strategies and management plan. A mandatory SARA logbook must be completed and submitted to DFO as a condition of license. Training courses in release techniques have been provided to license holders. A recovery strategy detailing procedures for expeditious release of wolffish has been established, industry has been trained, reporting procedures of encounters are in place and research on release methods used are monitored to ensure a high level of survival. Under SARA, a recovery strategy has been implemented for the leatherback turtle, the blue whale and the Northern right whale. Moreover the requirement of a minimum of 6 traps per trap line in sub-areas 20BA and 21A when fishing is carried out using lines reduces the total number of buoy lines in the water column allowing reducing the possible interactions with marine mammals and sea turtles.</p> <p>From 2007 to 2013, 3 Atlantic wolffish were caught and all alive while returning to the water. There were no reported catches of leatherback turtle. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the SARA and considered not at risk under the COSEWIC, occurred in the Gaspésie lobster trap fishery trap. No incidental catch has been reported since. The interaction between the Gaspésie lobster fishery and ETP species is thus very low.</p>		
d	Guidepost			There is evidence that the strategy is achieving its objective.
	Met?			Y
	Justification	<p>There is evidence that the strategy is achieving its objective.</p> <p>From 2007 to 2013, 3 Atlantic wolffish were caught and all alive while returning to the water. There were no reported catches of leatherback turtle. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the SARA and considered not at risk under the COSEWIC, occurred in the Gaspésie lobster trap fishery trap. No incidental catch has been reported since. The interaction between the Gaspésie lobster fishery and ETP species is thus very low.</p>		
References		Atlantic Leatherback Turtle Recovery Team 2006. Recovery Strategy for Leatherback Turtle		

PI 2.3.2	<p>The fishery has in place precautionary management strategies designed to:</p> <ul style="list-style-type: none">• Meet national and international requirements;• Ensure the fishery does not pose a risk of serious harm to ETP species;• Ensure the fishery does not hinder recovery of ETP species; and• Minimise mortality of ETP species.	
	<p>(<i>Dermochelys coriacea</i>) in Atlantic Canada. <i>Species at Risk Act</i> Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa, vi + 45 pp.</p> <p>Kulka, D., C. Hood and J. Huntington. 2007. Recovery Strategy for Northern Wolfish (<i>Anarhichas denticulatus</i>) and Spotted Wolfish (<i>Anarhichas minor</i>), and Management Plan for Atlantic Wolfish (<i>Anarhichas lupus</i>) in Canada. Fisheries and Oceans Canada: Newfoundland and Labrador Region. St. John’s, NL. x + 103 pp.</p> <p>Beauchamp, J., Bouchard, H., de Margerie, P., Otis, N., Savaria, J.-Y., 2009. Recovery Strategy for the blue whale (<i>Balaenoptera musculus</i>), Northwest Atlantic population, in Canada [FINAL]. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa. 62 pp.</p> <p>Brown, M.W., Fenton, D., Smedbol, K., Merriman, C., Robichaud-Leblanc, K., and Conway, J.D. 2009. Recovery Strategy for the North Atlantic Right Whale (<i>Eubalaena glacialis</i>) in Atlantic Canadian Waters [Final]. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada. Vi + 66p.</p> <p>Robitaille, J., M. Bérubé, A. Gosselin, M. Baril, J. Beauchamp, J. Boucher, S. Dionne, M. Legault, Y. Mailhot, B. Ouellet, P. Sirois, S. Tremblay G. Trencia, G. Verreault and D. Villeneuve. 2011. Recovery Strategy for the Striped Bass (<i>Morone saxatilis</i>), St. Lawrence Estuary Population, Canada. <i>Species at Risk Act</i> Recovery Strategy Series. Ottawa : Fisheries and Oceans Canada. xi + 51 p</p> <p>DFO SARA logbook 2006-2013.</p> <p>Information provided by DFO and lobster fishermen during site visit meeting.</p>	
OVERALL PERFORMANCE INDICATOR SCORE:		95
CONDITION NUMBER (if relevant):		NA

Evaluation Table for PI 2.3.3

PI 2.3.3		Relevant information is collected to support the management of fishery impacts on ETP species, including: <ul style="list-style-type: none"> 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 Issue		SG 60	SG 80	SG 100
a	Guidepost	Information is sufficient to qualitatively estimate the fishery related mortality of ETP species.	Sufficient information is available to allow fishery related mortality and the impact of fishing to be quantitatively estimated for ETP species.	Information is sufficient to quantitatively estimate outcome status of ETP species with a high degree of certainty.
	Met?	Y	Y	N
	Justification	Sufficient data is available to allow fishery related mortality and the impact of fishing to be quantitatively estimated for ETP species. A mandatory SARA logbook must be completed and submitted to DFO as a licence condition. From 2007 to 2013, 3 Atlantic wolffish were caught and all alive while returning to the water. There were no reported catches of leatherback turtle. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the SARA and considered not at risk under the COSEWIC, occurred in the Gaspésie lobster trap fishery trap, and none has been reported since. The interaction between the Gaspésie lobster fishery and ETP species is thus very low. However, information is not sufficient to quantitatively estimate outcome status of ETP species with a high degree of certainty as there is no observer coverage to verify the information provided by the fishermen in the SARA logbooks, preventing the fishery from meeting 100a.		
b	Guidepost	Information is adequate to broadly understand the impact of the fishery on ETP species.	Information is sufficient to determine whether the fishery may be a threat to protection and recovery of the ETP species.	Accurate and verifiable information is available on the magnitude of all impacts, mortalities and injuries and the consequences for the status of ETP species.
	Met?	Y	Y	N
	Justification	Information is sufficient to determine whether the fishery may be a threat to protection and recovery of the ETP species. A mandatory SARA logbook must be completed and submitted to DFO as a licence condition. From 2007 to 2013, 3 Atlantic wolffish were caught and all alive while returning to the water. There were no reported catches of leatherback turtle. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the SARA and considered not at risk under the COSEWIC, occurred in the Gaspésie lobster trap fishery trap, and none has been reported since. The interaction between the Gaspésie lobster fishery and ETP species is thus very low. However, the absence of observer coverage in the fishery may produce inadequate data coverage to fully satisfy 100b. It is likely that unreported encounters with ETP species could occur and that the potential exists for this fishery to have some negative impact on the larger ETP species found in the fishery areas.		
c	Guidepost	Information is adequate to support measures to manage the impacts on ETP species.	Information is sufficient to measure trends and support a full strategy to manage impacts on ETP species.	Information is adequate to support a comprehensive strategy to manage impacts, minimize mortality and injury of ETP species, and evaluate with a high degree of certainty whether a strategy is achieving its objectives.

PI 2.3.3		Relevant information is collected to support the management of fishery impacts on ETP species, including: <ul style="list-style-type: none"> • 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. 		
	Met?	Y	Y	N
	Justification	<p>Information is sufficient to measure trends and support a full strategy to manage impacts on ETP species. Once protected under SARA, ETP species are subject to recovery strategies and management plan. A mandatory SARA logbook must be completed and submitted to DFO as a licence condition. From 2007 to 2013, 3 Atlantic wolfish were caught and all alive while returning to the water. There were no reported catches of leatherback turtle. Between 2004 and 2009, 8 incidental catches of Minke whales, species which is listed not listed under the SARA and considered not at risk under the COSEWIC, occurred in the Gaspésie lobster trap fishery trap, and none has been reported since. The interaction between the Gaspésie lobster fishery and ETP species is thus very low.</p> <p>However, the absence of observer coverage in the fishery may produce inadequate data coverage to fully satisfy 100c. It is likely that unreported encounters with ETP species could occur and that the potential exists for this fishery to have some negative impact on the larger ETP species found in the fishery areas.</p>		
References		<p>Atlantic Leatherback Turtle Recovery Team 2006. Recovery Strategy for Leatherback Turtle (<i>Dermochelys coriacea</i>) in Atlantic Canada. <i>Species at Risk Act Recovery Strategy Series</i>. Fisheries and Oceans Canada, Ottawa, vi + 45 pp.</p> <p>Kulka, D., C. Hood and J. Huntington. 2007. Recovery Strategy for Northern Wolfish (<i>Anarhichas denticulatus</i>) and Spotted Wolfish (<i>Anarhichas minor</i>), and Management Plan for Atlantic Wolfish (<i>Anarhichas lupus</i>) in Canada. Fisheries and Oceans Canada: Newfoundland and Labrador Region. St. John's, NL. x + 103 pp.</p> <p>Beauchamp, J., Bouchard, H., de Margerie, P., Otis, N., Savaria, J.-Y., 2009. Recovery Strategy for the blue whale (<i>Balaenoptera musculus</i>), Northwest Atlantic population, in Canada [FINAL]. <i>Species at Risk Act Recovery Strategy Series</i>. Fisheries and Oceans Canada, Ottawa. 62 pp.</p> <p>Brown, M.W., Fenton, D., Smedbol, K., Merriman, C., Robichaud-Leblanc, K., and Conway, J.D. 2009. Recovery Strategy for the North Atlantic Right Whale (<i>Eubalaena glacialis</i>) in Atlantic Canadian Waters [Final]. <i>Species at Risk Act Recovery Strategy Series</i>. Fisheries and Oceans Canada. Vi + 66p.</p> <p>Robitaille, J., M. Bérubé, A. Gosselin, M. Baril, J. Beauchamp, J. Boucher, S. Dionne, M. Legault, Y. Mailhot, B. Ouellet, P. Sirois, S. Tremblay G. Trencia, G. Verreault and D. Villeneuve. 2011. Recovery Strategy for the Striped Bass (<i>Morone saxatilis</i>), St. Lawrence Estuary Population, Canada. <i>Species at Risk Act Recovery Strategy Series</i>. Ottawa : Fisheries and Oceans Canada. xi + 51 p.</p> <p>DFO SARA logbook 2006-2013</p> <p>DFO licence conditions for LFAs 19, 20 and 21</p> <p>Information provided by DFO and lobster fishermen during site visit meeting.</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				80
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 2.4.1

PI 2.4.1		The fishery does not cause serious or irreversible harm to habitat structure, considered on a regional or bioregional basis, and function		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	The fishery is unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm.	The fishery is highly unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm.	There is evidence that the fishery is highly unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm.
	Met?	Y	Y	N
	Justification	<p>The fishery is highly unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm. Traps are passive gear types that rely on bait to attract the target species. 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.</p> <p>Gaspé peninsula inshore area is not considered as a significant area for corals and sponges. There is no to very low interactions between eel grass and fishing activity during the lobster fishery. Despite a focus on impacts of fishing on habitats as part of Canada's efforts to implement an ecosystem approach to management, there have been no issues or concerns identified to indicate negative habitat impacts of lobster fishing. However, whilst it is evident that no habitat impact issues have been identified justifying a score of 80, there is no specific evidence derived from a habitat specific study in relation to the fishery that support the statement it is highly likely to reduce habitat structure and function to a point where there would be serious or irreversible harm, preventing the fishery from meeting SG100.</p>		
References		<p>DFO. 2010. Potential impacts of fishing gears (Excluding mobile bottom-contact gears) on marine habitats and communities. Can. Sci. Adv. Sec. Sci. Adv. Rep. 2010/003.</p> <p>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.</p> <p>Fuller S., C. Picco, J. Ford, C.-F. Tsao, L. E. Morgan, D. Hangaard, R. Chuenpagdee 2008. How We Fish Matters: Addressing the Ecological Impacts of Canadian Fishing Gear. Ecology Action Centre, Living Oceans Society, and Marine Conservation Biology Institute. ISBN 978-0-9734181-7-0.</p> <p>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.</p> <p>DFO Policy for the management of Fish Habitat: http://www.dfo-mpo.gc.ca/Library/23654.pdf </p>		
OVERALL PERFORMANCE INDICATOR SCORE:				80
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 2.4.2

PI 2.4.2		There is a strategy in place that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to habitat types		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	There are measures in place, if necessary, that are expected to achieve the Habitat Outcome 80 level of performance.	There is a partial strategy in place, if necessary, that is expected to achieve the Habitat Outcome 80 level of performance or above.	There is a strategy in place for managing the impact of the fishery on habitat types.
	Met?	Y	Y	Y
	Justification	<p>There is a strategy in place for managing the impact of the fishery on habitats, the fishery meeting 100a.</p> <p>On June 29, 2013 amendments to the <i>Fisheries Act</i> have been approved. The Fisheries Protection Program and its Policy Statements (November 2013) support changes made to the <i>Fisheries Act</i>. The mandate of the Fisheries Protection Program is to maintain the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries. The Fisheries Protection Policy Statement (FPPS) focuses on the management of impacts to fish resulting from habitats degradation or loss and alterations to fish passage and flow.</p> <p>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 <i>Fisheries Act</i>.</p> <p>The prohibition against <i>serious harm to fish</i> applies to fish and fish habitat that are part of or support commercial, recreational or Aboriginal fisheries. Section 35 of the <i>Fisheries Act</i> prohibits <i>serious harm to fish</i> which is defined in the Act as “the death of fish or any permanent alteration to, or destruction of, fish habitat”.</p> <p>In 2009, DFO published the <i>Policy for Managing the Impact of Fishing on Sensitive Benthic Areas</i> under the auspices of the Sustainable Fisheries Framework in response to the 2006 United Nations Resolution 61/105. 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.</p> <p>DFO and Park Canada have a number of MPAs designated under the <i>Ocean Act</i> (1996), including several areas of interest that are at various stages of progress towards designation. Also there is one MPA part of the Québec’s National Park Network.</p> <p>Impacts on habitats are limited by restricting the number and size of traps in use, the number of fishermen and the fishing season. It is not authorized to haul the traps more than once per day and fishermen do not voluntary fish on Sundays. Moreover, the strategy of fishing effort reduction adopted by DFO and the RPPSG from 1998 to 2005 and after 2009 would reduce the impacts on habitats.</p>		
b	Guidepost	The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar fisheries/habitats).	There is some objective basis for confidence that the partial strategy will work, based on information directly about the fishery and/or habitats involved.	Testing supports high confidence that the strategy will work, based on information directly about the fishery and/or habitats involved.
	Met?	Y	Y	N

PI 2.4.2		There is a strategy in place that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to habitat types		
	Justification	<p>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. A study carried out by Fuller et al (2008) examined the ecological impacts of the most common types of fishing gear used in Canada and assessed the relative severity of these impacts to seafloor habitat and discarded bycatch of target and non-target species. They determined that traps used on the west and east coasts of Canada have a medium low impact on the seafloor. They pointed out that inshore lobster traps are often smaller and lighter than fish traps so cause less damage. There is no indication that the lobster fishery causes serious or irreversible harm to habitats.</p> <p>However, whilst there is some objective basis for confidence that the partial strategy will work justifying a Y for 80b, there has been no direct testing by way of before-and-after-fishing comparison of the fishing grounds, preventing the fishery from meeting 100b.</p>		
c	Guidepost		There is some evidence that the partial strategy is being implemented successfully.	There is clear evidence that the strategy is being implemented successfully.
	Met?		Y	Y
	Justification	<p>There is clear evidence that the strategy is being implemented successfully.</p> <p>Several Policies have been implemented to support habitat protection and 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.</p> <p>DFO and Park Canada have a number of MPAs designated under the <i>Ocean Act</i> (1996), including several areas of interest that are at various stages of progress towards designation. Also there is a MPA part of the Québec's National Park Network.</p> <p>In addition, six protection areas are closed to sea cucumber exploratory fishery in Gaspésie to protect lobster habitat and carry out studies on the impact of the fishery on habitats. Also, there are restrictions for the scallop fishery to protect lobster habitat.</p> <p>Impacts on habitats are limited by restricting the number and size of traps in use, the number of fishermen and the 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 would reduce the impacts on habitats.</p>		
d	Guidepost			There is some evidence that the strategy is achieving its objective.
	Met?			Y
	Justification	<p>There is some evidence that the strategy is achieving its objective. Despite the focus on impacts of fishing on habitats as part of Canada's effort to implement an ecosystem approach to fisheries management, there have been no issues or concerns identified to indicate negative habitat impacts of lobster fishing.</p>		
References		<p>Fuller S., C. Picco, J. Ford, C.-F. Tsao, L. E. Morgan, D. Hangaard, R. Chuenpagdee 2008. <i>How We Fish Matters: Addressing the Ecological Impacts of Canadian Fishing Gear</i>. Ecology Action Centre, Living Oceans Society, and Marine Conservation Biology Institute. ISBN 978-</p>		

PI 2.4.2	There is a strategy in place that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to habitat types	
	<p>0-9734181-7-0.</p> <p>DFO 2013a. Plan de pêche axé sur la conservation. Concombre de mer, Zones A, B et C (Gaspésie) 2013-2016. Amendé le 4 Juin 2014.</p> <p>DFO 2013b. Notice to Fishers. 2013-2014-2015 Management Plan Scallop – Area 19, Gaspé – Lower St. Lawrence Area.</p> <p>DFO 2014b. Notice to Fishers. Competitive exploratory fishery sea cucumber- Gaspésie areas A, B and C.</p> <p>DFO Fisheries Protection Program: http://www.dfo-mpo.gc.ca/pnw-ppe/fpp-ppp/index-eng.html</p> <p>Policy for Managing the impacts of Fishing on Sensitive Benthic Habitat http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/benthi-eng.htm</p> <p>Overview of the Sensitive Benthic Areas Ecological Risk Assessment http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/risk-ecolo-risque-back-fiche-eng.html</p> <p>Marine Protected Areas http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/mpa-zpm/index-eng.htm</p>	
OVERALL PERFORMANCE INDICATOR SCORE:		95
CONDITION NUMBER (if relevant):		NA

Evaluation Table for PI 2.4.3

PI 2.4.3		Information is adequate to determine the risk posed to habitat types by the fishery and the effectiveness of the strategy to manage impacts on habitat types		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	There is basic understanding of the types and distribution of main habitats in the area of the fishery.	The nature, distribution and vulnerability of all main habitat types in the fishery are known at a level of detail relevant to the scale and intensity of the fishery.	The distribution of habitat types is known over their range, with particular attention to the occurrence of vulnerable habitat types.
	Met?	Y	Y	Y
	Justification	The nature and the distribution of all main habitat types in the lobster fishery are known at a level of detail relevant to the scale and the intensity of the fishery as coastal and epipelagic habitats of the Gulf of St. Lawrence have been mapped, including Gaspé Peninsula and Chaleur Bay. Eel grass meadows are considered “fish habitats” and are therefore protected from harmful alteration, disruption and destruction (HADD) unless authorized under <i>Section 35 of the Fisheries Act</i> . Eel grass meadows are observed in protected and shallow estuaries, lagoons, barachois with soft bottom (mainly mud). Under the <i>Fisheries Act</i> , corals and sponges are defined as “fish” and “fish habitat” and are therefore protected from harmful alteration, disruption and destruction (HADD) unless authorized under <i>Section 35 of the Fisheries Act</i> . Gaspésie is not considered as a significant area for corals and sponges.		
b	Guidepost	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.	Sufficient data are available to allow the nature of the impacts of the fishery on habitat types to be identified and there is reliable information on the spatial extent of interaction, and the timing and location of use of the fishing gear.	The physical impacts of the gear on the habitat types have been quantified fully.
	Met?	Y	Y	N
	Justification	The impacts of traps on habitats have been widely studied, the distribution of the lobster fishery and habitats are well known, and the fishery is temporally restricted. Gaspésie is not considered as a significant area for corals and sponges. There is no to very low interactions between eel grass and fishing activity during the lobster fishery. However, whilst sufficient data are available to allow the nature of the impacts of the fishery on habitat types to be identified and there is reliable information on the spatial extent of interaction, and the timing and location of use of the fishing gear, justifying a Y for 80b, there has been no direct testing by way of before-and-after-fishing comparison of the fishing grounds, preventing the fishery from meeting 100b.		

PI 2.4.3		Information is adequate to determine the risk posed to habitat types by the fishery and the effectiveness of the strategy to manage impacts on habitat types		
c	Guidepost		Sufficient data continue to be collected to detect any increase in risk to habitat (e.g. due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures).	Changes in habitat distributions over time are measured.
	Met?		Y	N
	Justification	<p>Sufficient data continue to be collected to detect any increase in risk in habitat. 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 fishing effort and the lobster population components will continue to be monitored annually as they have been for many years. As part of Canada's commitment to implementation of an ecosystem approach to management, habitat impact of fishing activity will continue to be researched and monitored.</p> <p>However, although there are studies on the nature and the distribution of all main habitat types in the GSL including Gaspé peninsula and Chaleur Bay, the Assessment team did not find any formal documents describing the changes in the habitat distribution over the time in Gaspésie, preventing the fishery from meeting 100c.</p>		
References		<p>DFO. 2010. Potential impacts of fishing gears (Excluding mobile bottom-contact gears) on marine habitats and communities. Can. Sci. Adv. Sec. Sci. Adv. Rep. 2010/003.</p> <p>Chuenpagdee, R., Morgan, L.E., Maxwell, S.M., Norse, E.A., and Pauly, D. 2003. Shifting gears: collateral impacts of fishing methods in U.S. waters. <i>Frontiers in Ecology and Environment</i> 1(10): 517-524.</p> <p>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. <i>Can. Tech. Rep. Fish. Aquat. Sci.</i> 3009: ix + 87 pp.</p> <p>Fuller S., C. Picco, J. Ford, C.-F. Tsao, L. E. Morgan, D. Hangaard, R. Chuenpagdee 2008. <i>How We Fish Matters: Addressing the Ecological Impacts of Canadian Fishing Gear</i>. Ecology Action Centre, Living Oceans Society, and Marine Conservation Biology Institute. ISBN 978-0-9734181-7-0.</p> <p>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. <i>DFO Can. Sci. Advis. Sec. Res. Doc.</i> 2010/041. Vi + 202 pp.</p> <p>Martel, M.-C., Provencher, L., Grant, C., Ellefsen, H.-F. and Pereira, S. 2009. Distribution and description of eelgrass beds in Québec. <i>DFO Can. Sci. Advis. Sec. Res. Doc.</i> 2009/050. Viii + 37 p</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				90
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 2.5.1

PI 2.5.1		The fishery does not cause serious or irreversible harm to the key elements of ecosystem structure and function		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	The fishery is unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	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.	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.
	Met?	Y	Y	Y
	Justification	<p>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.</p> <p>Larvae lobster are omnivorous, they feed on zooplankton (copepods, crab larvae, 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 (Boudreau and Worm 2010).</p> <p>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.</p> <p>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, retained, bycatch 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, main retained and bycatch species and information is available to show the negligible impact on ETP species. There is no indication that the fishery causes serious or irreversible harm to habitats.</p>		
References		<p>Bianchi, G., Gislason, H., Graham, K., Hill, L., Jin, X., Koranteng, K., Manickchand-Heileman, S., Payá, I., Sainsbury, K., Sanchez, F., and Zwanenburg, K. 2000. Impact of fishing on size composition and diversity of demersal fish communities. ICES Journal of Marine Sciences, 57: 558-571.</p> <p>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.</p> <p>Goñi R. 1998. Ecosystem effects of marine fisheries: an overview. Ocean & Coastal Management 40: 37-64.</p> <p>Grabowski J.H., J. Gaudette, E.J. Clesceri, P.O. Yund 2009. The role of food limitation in</p>		

PI 2.5.1	The fishery does not cause serious or irreversible harm to the key elements of ecosystem structure and function	
	<p>lobster population dynamics in coastal Maine, United States, and New Brunswick, Canada. New Zealand Journal of Marine and Freshwater Research 43: 185-193.</p> <p>Hanson, J.M. 2009. Predator-prey interactions of American lobster (<i>Homarus americanus</i>) in the Southern Gulf of St. Lawrence, Canada. New Zealand Journal of Marine and Freshwater Research 43: 69-88.</p> <p>Pauly D., V. Christensen, J. Dalsgaard, R. Froese, F. Jr. Torres 1998. Fishing Down Marine Food Webs. Science 279: 860-863.</p> <p>http://slgo.ca/en/lobster/context/foodchain.html</p>	
OVERALL PERFORMANCE INDICATOR SCORE:		100
CONDITION NUMBER (if relevant):		NA

Evaluation Table for PI 2.5.2

PI 2.5.2		There are measures in place to ensure the fishery does not pose a risk of serious or irreversible harm to ecosystem structure and function		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	There are measures in place, if necessary.	There is a partial strategy in place, if necessary.	There is a strategy that consists of a plan, in place.
	Met?	Y	Y	Y

Justification	<p>There is a full and comprehensive strategy that consists in a plan, in place to document and address ecosystem impacts associated with fishing activities in Canadian waters.</p> <p>Based on cooperation between the Governments of Canada and Quebec, the St. Lawrence Action Plan 2011-2016 identified 3 priority issues which are Biodiversity conservation, Sustainable use, and Improve water quality.</p> <p>Under the <i>Oceans Act</i> and the <i>Policy and Operational Framework for Integrated Management of Estuarine, Coastal and Marine Environments in Canada</i>, 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. The governance, regulation and management of activities within and surrounding the Gulf are shared between a wide variety of government departments and agencies involved in, or with an interest in, the use and management of resources within its coastal, estuarine and marine environments. The process is intended to involve all stakeholders. There is a strategy in place that is being implemented and will continue to develop under new national policies.</p> <p>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 ecosystem-based and precautionary approach to fisheries management in Canada.</p> <p>DFO and Park Canada have a number of MPAs designated under the <i>Ocean Act</i> (1996), including several areas of interest that are at various stages of progress towards designation.</p> <p>Also there is a MPA part of the Québec's National Park Network.</p> <p>In addition, six protection areas are closed to sea cucumber exploratory fishery in Gaspésie to protect lobster habitat and carry out studies on the impact of the fishery on habitats. Also, there are restrictions for the scallop fishery to protect lobster habitat.</p> <p>The management of Gaspésie lobster fishery limits harm to ecosystem structure and function by restricting the number of fishermen, the number and size of traps in use, and the fishing season. A MLS, a maximum size, and the release of berried lobster female are required in all LFAs. Escape vents are required on traps to reduce non-target species catch. Moreover, the Assessment team considered that the strategy of fishing effort reduction adopted by DFO and RPPSG from 1998 to 2005 and after 2009 through licence retirement (reducing the number of harvesters), and the reduction of the number of traps per licence would have reduced impacts on ecosystem components.</p>
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b	Guidepost	The measures take into account potential impacts of the fishery on key elements of the ecosystem.	The partial strategy takes into account available information and is expected to restrain impacts of the fishery on the ecosystem so as to achieve the Ecosystem Outcome 80 level of performance.	<p>The strategy, which consists of a plan, contains measures to address all main impacts of the fishery on the ecosystem, and at least some of these measures are in place. The plan and measures are based on well-understood functional relationships between the fishery and the Components and elements of the ecosystem.</p> <p>This plan provides for development of a full strategy that restrains impacts on the ecosystem to ensure the fishery does not cause serious or irreversible harm.</p>
	Met?	Y	Y	Y

The strategy, which consists of a plan, contains measures to address all main impacts of the fishery on the ecosystem, and at least some of these measures are in place. The plan and measures are based on well-understood functional relationships between the fishery and the Components and elements of the ecosystem. This plan provides for development of a full strategy that restrains impacts on the ecosystem to ensure the fishery does not cause serious or irreversible harm. Therefore, the fishery meets 100b.

Based on cooperation between the Governments of Canada and Quebec, the St. Lawrence Action Plan 2011-2016 identified 3 priority issues which are Biodiversity conservation, Sustainable use, and Improve water quality.

The management of Gaspésie lobster fishery limits harm to ecosystem structure and function by restricting the number of fishermen, the number and size of traps in use, and the fishing season. A MLS, a maximum size, and the release of berried lobster female are required in all LFAs. Escape vents are required on traps to reduce non-target species catch. Moreover, the Assessment team considered that the strategy of fishing effort reduction adopted by DFO and RPPSG from 1998 to 2005 and after 2009 through licence retirement (reducing the number of harvesters), reduction of the number of traps per licence and fishing only six days per week would have reduced impacts on ecosystem components..

The Ecosystem Science Framework was developing to provide an effective and comprehensive approach for identifying, monitoring, and interpreting trends important to ecosystem sustainability and integrating knowledge about the effects of human activities on ecosystem components. A Five-Years Research Plan (2008-2013) has been developed to support the ecosystem science through its 20 components and their connections.

In 2000, the GOSLIM project was thus 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.

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. The governance, regulation and management of activities within and surrounding the Gulf are shared between a wide variety of government departments and agencies involved in, or with an interest in, the use and management of resources within its coastal, estuarine and marine environments. The process is intended to involve all stakeholders. There is a strategy in place that is being implemented and will continue to develop under new national policies.

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 ecosystem-based and precautionary approach to fisheries management in Canada.

DFO and Park Canada have a number of MPAs designated under the *Ocean Act* (1996), including several areas of interest that are at various stages of progress towards designation.

Also there is a MPA part of the Québec's National Park Network.

In addition, six protection areas are closed to sea cucumber exploratory fishery in Gaspésie to protect lobster habitat and carry out studies on the impact of the fishery on habitats. Also, there are restrictions for the scallop fishery to protect lobster habitat.

c	Guidepost	The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/ecosystems).	The partial strategy is considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/ecosystems).	The measures are considered likely to work based on prior experience, plausible argument or information directly from the fishery/ecosystems involved.
	Met?	Y	Y	Y
	Justification	<p>The measures are considered likely to work based on plausible argument and information from the fishery/ecosystem involved. Despite an ongoing focus on ecological research as part of Canada's efforts to implement an ecosystem approach to management, no issues with Gaspésie lobster fishing have been identified and there is no indication that the fishery causes any form of ecosystem disruption or harm to ecosystem structure and function.</p> <p>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, retained, bycatch 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, main retained and bycatch species and information is available to show the negligible impact on ETP species. There is no indication that the fishery causes serious or irreversible harm to habitats.</p>		
d	Guidepost		There is some evidence that the measures comprising the partial strategy are being implemented successfully.	There is evidence that the measures are being implemented successfully.
	Met?		Y	Y

Justification	<p>There is evidence that the measures are being implemented successfully.</p> <p>DFO and Park Canada have a number of MPAs designated under the <i>Ocean Act</i> (1996), including several areas of interest that are at various stages of progress towards designation.</p> <p>Also there is a MPA part of the Québec's National Park Network.</p> <p>In addition, six protection areas are closed to sea cucumber exploratory fishery in Gaspésie to protect lobster habitat and carry out studies on the impact of the fishery on habitats. Also, there are restrictions for the scallop fishery to protect lobster habitat.</p> <p>Based on cooperation between the Governments of Canada and Quebec, the St. Lawrence Action Plan 2011-2016 identified 3 priority issues which are Biodiversity conservation, Sustainable use, and Improve water quality.</p> <p>Despite an ongoing focus on ecological research as part of Canada's efforts to implement an ecosystem approach to management, no issues with the Gaspésie lobster fishing have been identified and there is no indication that the fishery causes any form of ecosystem disruption or harm to ecosystem structure and function.</p> <p>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, retained, bycatch 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, main retained and bycatch species and information is available to show the negligible impact on ETP species. There is no indication that the fishery causes serious or irreversible harm to habitats.</p>	
	<p>Dufour, R. and Ouellet, P. 2007. Estuary and Gulf of St. Lawrence marine ecosystem overview and assessment report. Can. Tech. Rep. Fish. Aquat. Sci. 2744E: vii + 112 p.</p> <p>St Lawrence Action Plan 2011-2016 http://planstlaurent.qc.ca/en/home.html</p> <p>Sustainable Fisheries Framework http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overview-cadre-eng.htm</p> <p>Marine Protected Areas http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/mpa-zpm/index-eng.htm</p> <p>DFO Five-Year Research Plan 2008-2013 http://www.dfo-mpo.gc.ca/science/publications/fiveyear-plan-quinquennal/index-eng.html</p>	
	OVERALL PERFORMANCE INDICATOR SCORE:	100
	CONDITION NUMBER (if relevant):	NA

Evaluation Table for PI 2.5.3

PI 2.5.3		There is adequate knowledge of the impacts of the fishery on the ecosystem		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Information is adequate to identify the key elements of the ecosystem (e.g., trophic structure and function, community composition, productivity pattern and biodiversity).	Information is adequate to broadly understand the key elements of the ecosystem.	
	Met?	Y	Y	
	Justification	<p>Information is adequate to broadly understand the key elements of the ecosystem.</p> <p>The physical environment and the chemical environment including suspended particulate matter, nutrients, oxygen, organic carbon and contaminants in the Gulf of St. Lawrence are studied and well known.</p> <p>The Gulf comprises a vibrant marine ecosystem with high biodiversity. The main groups and species found in the waters of the Gulf are: phytoplankton, zooplankton, invertebrates, forage fish, large ichthyophagous fish species, birds and marine mammals. At the base of any marine ecosystem, there is the phytoplankton. Benthic invertebrates feed on them when they fall to the bottom but zooplankton is almost its only predator. Zooplankton in turn is consumed by small forage fish species, e.g. capelin, sand lance, herring and mackerel. Forage species play a key role in transferring energy from secondary producers (zooplankton) towards fish and other higher trophic levels. Large ichthyophagous fish species include cod, redfish and flatfish. Overall, cetaceans, seals, cod and redfish are the main predators of forage species. Marine birds also feed on them. The benthic community of invertebrates mostly made up of shellfish, molluscs, sea urchins and worms, and includes species such as the northern shrimp, snow crab have an important role in the transfer of energy. Marine mammals form an unavoidable component in the trophic links in the Gulf. They are at the top of the food web.</p> <p>Larvae lobster are omnivorous, they feed on zooplankton (copepods, crab larvae, 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 (Boudreau and Worm 2010).</p>		

PI 2.5.3		There is adequate knowledge of the impacts of the fishery on the ecosystem		
b	Guidepost	Main impacts of the fishery on these key ecosystem elements can be inferred from existing information, and have not been investigated in detail.	Main impacts of the fishery on these key ecosystem elements can be inferred from existing information and some have been investigated in detail.	Main interactions between the fishery and these ecosystem elements can be inferred from existing information, and have been investigated.
	Met?	Y	Y	N
	Justification	Main impacts of the fishery on these key ecosystem elements can be inferred from existing information and some have been investigated in detail. Main impacts of the fishery on target, retained, bycatch and ETP species, and habitat are identified. There is a comprehensive assessment of the target species, main retained and bycatch species. The distribution of fishing effort is known. Regarding the ETP species catch, a mandatory SARA logbook must be completed and submitted to DFO as a condition of license. Interaction between the lobster fishery and eel grass is very low. Corals and sponges distribution has been investigated showing no overlapping with lobster fishing grounds. However, analysis of bycatches data from mandatory e-log has not been carried out yet and there have been no direct impacts on habitats testing by way of before-and-after-fishing comparison of the fishing grounds. Therefore, main interactions between the fishery and ecosystem elements have not been fully investigated, preventing the fishery from meeting 100b.		
c	Guidepost		The main functions of the Components (i.e., target, Bycatch, Retained and ETP species and Habitats) in the ecosystem are known.	The impacts of the fishery on target, Bycatch, Retained and ETP species are identified and the main functions of these Components in the ecosystem are understood.
	Met?		Y	N
	Justification	The main function of the target, bycatch, retained and ETP species and habitats are known and understood but analysis of bycatches data from mandatory e-log has not been carried out yet to assess ongoing mortalities to all bycatch species and there has been no direct testing by the way of before-after fishing comparison of the fishing grounds, preventing the fishery from meeting 100c.		

PI 2.5.3		There is adequate knowledge of the impacts of the fishery on the ecosystem		
d	Guidepost		Sufficient information is available on the impacts of the fishery on these Components to allow some of the main consequences for the ecosystem to be inferred.	Sufficient information is available on the impacts of the fishery on the Components and elements to allow the main consequences for the ecosystem to be inferred.
	Met?		Y	N
	Justification	Sufficient information is available on the impacts of the fishery on these Components to allow some of the main consequences for the ecosystem to be inferred but there is insufficient information on the impacts of the fishery on the Components and elements to allow the main consequences for the ecosystem to be inferred as analysis of bycatches data from mandatory e-log has not been carried out yet to assess ongoing mortalities to all bycatch species and there has been no direct testing by the way of before-after fishing comparison of the fishing grounds, preventing the fishery from meeting 100d.		
e	Guidepost		Sufficient data continue to be collected to detect any increase in risk level (e.g., due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures).	Information is sufficient to support the development of strategies to manage ecosystem impacts.
	Met?		Y	N
	Justification	Sufficient data continue to be collected to detect any increase in risk level. Fishery-dependent data, bycatches data, data on bait, and ETP species catch continue to be collected. As part of Canada's commitment to implementation of an ecosystem approach to management, habitat impact of fishing activity will continue to be researched and monitored. However information is insufficient to support the development of strategies to manage ecosystem impacts as analysis of bycatches data from mandatory e-log has not been carried out yet to assess ongoing mortalities to all bycatch species, there has been no direct testing by the way of before-after fishing comparison of the fishing grounds, and there is no observer coverage to verify the information provided by the fishermen in the SARA logbooks, preventing the fishery from meeting 100e.		
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		

PI 2.5.3	There is adequate knowledge of the impacts of the fishery on the ecosystem	
	<p>surveys. Marine Ecology Progress Series 403: 181-191.</p> <p>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.</p> <p>Hanson, J.M. 2009. Predator-prey interactions of American lobster (<i>Homarus americanus</i>) in the Southern Gulf of St. Lawrence, Canada. New Zealand Journal of Marine and Freshwater Research 43: 69-88.</p> <p>DFO 2005b. The Gulf of St. Lawrence, A Unique Ecosystem. The stage for the Gulf of St. Lawrence Integrated Management (GOSLIM). DFO Oceans and Science Branch. Cat. No. FS 104-2/2005.</p> <p>DFO 2007b. Ecologically and biologically significant areas (EBSA) in the estuary and Gulf of St. Lawrence: Identification and characterization. DFO Can. Sci. Advis. Sec. SAR 2007/016.</p> <p>Dufour, R. and Ouellet, P. 2007. Estuary and Gulf of St. Lawrence marine ecosystem overview and assessment report. Can. Tech. Rep. Fish. Aquat. Sci. 2744E: vii + 112 p.</p> <p>Galbraith, P.S., Chassé, J., Larouche, P., Gilbert, D., Brickman, D., Pettigrew, B., Devine, L., and Lafleur, C. 2013. Physical Oceanographic Conditions in the Gulf of St. Lawrence in 2012. DFO Can. Sci. Advis. Sec. Res. Doc. 2013/026. v + 89 p.</p>	
OVERALL PERFORMANCE INDICATOR SCORE:		80
CONDITION NUMBER (if relevant):		NA

Evaluation Table for PI 3.1.1

PI 3.1.1		<p>The management system exists within an appropriate legal and/or customary framework which ensures that it:</p> <ul style="list-style-type: none"> Is capable of delivering sustainable fisheries in accordance with MSC Principles 1 and 2; and 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 Issue		SG 60	SG 80	SG 100
a	Guidepost	There is an effective national legal system and a framework for cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2	There is an effective national legal system and <u>organised and effective cooperation</u> with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2.	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.
		Y	Y	N
	Justification	<p>There is an effective national legal system and organized and effective cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2.</p> <p>The Fishery and Oceans Federal Department is responsible for the management of the lobster resource all over the Canadian regions, as for all marine species in Canadian waters. The Canadian fishery management system is based on a package of Laws giving to the DFO the full power to manage and regulate fisheries and apply international accepted strategies as the precautionary approach in management and protection of endangered Species and ecosystems. The management is done through regulations that prove to be very effective to guaranty sustainable fisheries in accordance with MSC Principles 1 and 2. Therefore the Canadian management system is linked to entities to lead regional fisheries management organizations towards a sustainable, science-based management approach that will ensure the sustainability of fisheries. As example, DFO participate actively to Northwest Atlantic Fisheries Organization (NAFO) as well as many others.</p> <p>The management system includes also systematic and well framed consultations with all parties that are involved with the sustainable development of resources as provincial governments, fishermen associations, processors and all other stakeholders. The information is also available to general public.</p> <p>Even with all these relations with other organisms to achieve the management mandate, the assessment team did not find clear binding procedures governing cooperation in every case with other parties. It seems that DFO develops other mechanisms as agreements and formal consultation committees and systematic participation to international assemblies. For this reason, the SG100 is not met.</p>		

PI 3.1.1		<p>The management system exists within an appropriate legal and/or customary framework which ensures that it:</p> <ul style="list-style-type: none"> Is capable of delivering sustainable fisheries in accordance with MSC Principles 1 and 2; and 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. 		
b	Guidepost	The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system.	The management system incorporates or is subject by law to a transparent mechanism for the resolution of legal disputes which is considered to be effective in dealing with most issues and that is appropriate to the context of the fishery.	The management system incorporates or 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.
	Met?	Y	Y	Y

PI 3.1.1	<p>The management system exists within an appropriate legal and/or customary framework which ensures that it:</p> <ul style="list-style-type: none"> • Is capable of delivering sustainable fisheries in accordance with MSC Principles 1 and 2; and • 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.
Justification	<p>The management system incorporates or 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.</p> <p>The Canadian federal government has clear management responsibility to manage fisheries as well as other marine activities and this situation prevent to a certain extent from legal disputes that could arise in the management implementation with other parties such as provincial governments.</p> <p>The consultation approach by the means of the advisory committee, such as the Gaspésie advisory committee, contributes to solve many disputes that could arise with any management decisions. The discussions and consensus generally reached prevent that disputes degenerate into legal actions against DFO. The Committee meetings results were largely diffused to stake holders.</p> <p>The policy on which a disputed decision has been made cannot be appealed. However, in some cases such as when a fisherman is dissatisfied with a licensing policy decision, fisherman can seek to have the decision re-assessed by an independent Appeal Board which may recommend a different course of action to the Minister.</p> <p>In case of unsolved disputes, legal action could be brought to the federal or provincial legal court; they constitute independent and transparent organisms and guaranty fairness in decision. However, few legal disputes were brought to the Canadian legal courts. That was the case in the past with native population claims about marine resources. In this case DFO adapts the objectives and rules to court decision and generates a large negotiation with natives groups involved to integrate them to the fishery.</p> <p>Face with court decisions on aboriginal fishing rights in 1990 (Sparrow judgment) and Marshall judgment in 1999, the Fishery and Oceans negotiated with First Nations and put in place in 1992 an Aboriginal fishery Strategy (AFS) to include aboriginal groups in several fisheries.</p> <p>DFO's Aboriginal Fisheries Strategy (AFS):</p> <ol style="list-style-type: none"> 1. Provide the framework for the management of fishing by aboriginal groups, 2. Provide the Aboriginal groups with an opportunity to participate in the management of fisheries, thereby improving conservation, management and enhancement of the resource 3. Contributes to the economic self-sufficiency of Aboriginal communities, 4. Provide a foundation for the development of self-government agreements and treaties, 5. Provide the opportunity to improve the fisheries management skills and capacity of Aboriginal groups. <p>The AFS results in the negotiation of mutually acceptable and time-limited fisheries agreements and also management measures agreement between DFO and Aboriginal groups.</p>

PI 3.1.1		The management system exists within an appropriate legal and/or customary framework which ensures that it: <ul style="list-style-type: none"> Is capable of delivering sustainable fisheries in accordance with MSC Principles 1 and 2; and 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. 		
d	Guidepost	The management system has a mechanism to generally respect 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 observe 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 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.
	Met?	Y	Y	N
	Justification	<p>The management system has a mechanism to observe 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.</p> <p>Face with court decisions on aboriginal fishing rights in 1990 (Sparrow judgment) and Marshall judgment in 1999, the Fishery and Oceans negotiated with First Nations and put in place in 1992 an Aboriginal fishery Strategy (AFS) to include aboriginal groups in several fisheries.</p> <p>DFO's Aboriginal Fisheries Strategy (AFS):</p> <ol style="list-style-type: none"> 6. Provide the framework for the management of fishing by aboriginal groups, 7. Provide the Aboriginal groups with an opportunity to participate in the management of fisheries, thereby improving conservation, management and enhancement of the resource 8. Contributes to the economic self-sufficiency of Aboriginal communities, 9. Provide a foundation for the development of self-government agreements and treaties, 10. Provide the opportunity to improve the fisheries management skills and capacity of Aboriginal groups. <p>The AFS results in the negotiation of mutually acceptable and time-limited fisheries agreements and also management measures agreement between DFO and Aboriginal groups. For the assessed lobster fishery in Gaspé, the aboriginal community, the Mi'kmaq group, that is also present in New Brunswick, possess 11 from the 179 lobster fishing licenses along the Gaspé coast. FSC licenses are issued annually and conditions are enforceable under the Aboriginal Communal Fishing Licenses Regulations. Communal fishing licenses may specify fishing area, times, species, allocations, methods or other restrictions depending on agreement reached between DFO and the aboriginal community.</p> <p>While the management system respects and observes the legal rights, it does not formally commit to such rights until they have been legally proven or established by law, preventing the fishery from meeting SG100.</p>		
References		http://www.dfo-mpo.gc.ca/acts-lois/acts-lois-eng.htm http://www.dfo-mpo.gc.ca/decisions/fm-2012-gp/atl-015-eng.htm http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/afs-srapa-eng.htm http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/marshall/index-eng.htm http://www.dfo-mpo.gc.ca/fm-gp/aboriginal-autochtones/afs-srapa-eng.htm		

PI 3.1.1	<p>The management system exists within an appropriate legal and/or customary framework which ensures that it:</p> <ul style="list-style-type: none"> • Is capable of delivering sustainable fisheries in accordance with MSC Principles 1 and 2; and • 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.
OVERALL PERFORMANCE INDICATOR SCORE:	90
CONDITION NUMBER (if relevant):	NA

Evaluation Table for PI 3.1.2

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		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are generally understood.	Organisations and individuals involved in the management process have been identified. Functions, roles and responsibilities are explicitly defined and well understood for key areas of responsibility and interaction.	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.
	Met?	Y	Y	y
	Justification	<p>Organizations 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.</p> <p>Management process is well understood by stakeholders and collaboration between regional DFO managers and fishermen association is very effective. In the last years, several common actions were decided to reduce fishing effort and increase stock productivity (reduced number of traps per fishermen, reduced numbers of licenses, reduction of fishing season, increase of the legal length).</p> <p>The Lobster Advisory Committee is the core organization for consultation on management decisions; harvesters, processors, aboriginal groups (Mickmack) and government agencies participated to this committee. The fisher association, the RPPSG, representing all fishermen of LFA 19, 20 and 21, are especially aware of the obligation to maintain a good health stock and clearly understand the responsibility of the fishermen to protect the resource. The fishermen proposed and undertake in the past precise actions in coordination of governments agencies to make decrease the impact of the fishing on lobster stock.</p> <p>The regional research DFO team that is involved in stock evaluation works in many aspects with fishermen in at-sea samplings and research. The fishermen association is itself involved in research on larval stocking and on artificial reefs.</p> <p>The high level of cooperation observed between DFO (managers and scientific team) and the industry clearly attest that fishermen and local transformers understand the management system, approve its objectives and measures, and participate actively to put in place these measures.</p>		
b	Guidepost	The management system includes consultation processes that obtain relevant information from the main affected parties, including local knowledge, to inform the management system.	The management system includes consultation processes that regularly seek and accept relevant information, including local knowledge. The management system demonstrates consideration of the information obtained.	The management system includes consultation processes that regularly seek and accept relevant information, including local knowledge. The management system demonstrates consideration of the information and explains how it is used or not used.
	Met?	Y	Y	Y

PI 3.1.2		<p>The management system has effective consultation processes that are open to interested and affected parties.</p> <p>The roles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties</p>		
	Justification	<p>The management system includes consultation processes that regularly seek and accept relevant information, including local knowledge. The management system demonstrates consideration of the information and explains how it is used or not used.</p> <p>The consultation process and the advisory committee meetings are the occasion to all members to present relevant information, especially local knowledge from fishermen. The Lobster Advisory Committee meets annually. When major problems of management arise or when management modification proposal that has to be analyzed in great details, workshops are held on the subject, to find a common point of view and find a solution. These workshops are organized about each 2 years. This solution is thereafter presented to the advisory committee for decision. This particular approach implies to consider all the available information (from scientists as well as fishermen and aboriginal groups). At the end of the exercise, everybody participating understands what is the result of the information sharing and is deeply involved in the decision reached.</p> <p>Along the consultation process, information is available to stakeholders through written briefs, reports and e-mails; meeting reports are spread to all processors and harvesters through their committee representatives.</p> <p>DFO representatives interact especially during the fishing season with stakeholders that bring relevant information which could be used to ameliorate the management system. DFO also consults the parties on other management system issues such as species-at-risk listings, regulatory and policy development and amendments, and changes to service delivery levels. DFO seeks, accepts and considers relevant information that it receives.</p> <p>In summary, the Assessment team considers that the multiple information, written reports and day to day relations with fisherman representatives give to all a very good view of how the information is used. In addition, the constant implication of harvesters in the management system itself through advisory meetings and workshops gives them an excellent vision of what is used and what is not retained in the available information.</p>		
c	Guidepost		The consultation process provides opportunity 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?		Y	Y

PI 3.1.2		<p>The management system has effective consultation processes that are open to interested and affected parties.</p> <p>The roles and responsibilities of organisations and individuals who are involved in the management process are clear and understood by all relevant parties</p>
	Justification	<p>The consultation process provides opportunity and encouragement for all interested and affected parties to be involved, and facilitates their effective engagement.</p> <p>As said before, there is a high degree of implication of the fishermen, through their association, in the management system as well as in the implementation of fishing measures. The advisory committee meetings are public. While the lobster advisory committee meetings are very good opportunity and encouragement for all interested and affected parties to be involved, the workshops organized par DFO on special and important management issue is a real occasion to the parties to share the information, build together answers to problems. Especially for fishermen, these workshops facilitate their effective engagement and their commitment in the measures in the field. The RPPSG supports actively in several ways the management process (implantation of the electronic log-book in boats, distribution and management of trap identification tag to fishermen. Meetings with parties in June 2014 during the site visit bring us at the conclusion that there is actually a high degree of confidence between the regional DFO representatives, the provincial department, the <i>Ministère de l'Agriculture, des Pêches et de Alimentation</i> (MAPAQ) and the fishermen.</p>
References		<p>POLITIQUE RÉGIONALE POUR LES CONSULTATIONS DE L'INDUSTRIE DES PÊCHES, Région du Québec Gestion des pêches, Pêches et Océans Canada, Juin 2004, 10pp.</p> <p>Information obtained from assessment team June site visit</p>
OVERALL PERFORMANCE INDICATOR SCORE:		100
CONDITION NUMBER (if relevant):		NA

Evaluation Table for PI 3.1.3

PI 3.1.3		The management policy has clear long-term objectives to guide decision-making that are consistent with MSC Principles and Criteria, and incorporates the precautionary approach		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Long-term objectives to guide decision-making, consistent with the MSC Principles and Criteria and the precautionary approach, are implicit within management policy	The consultation process provides opportunity and encouragement for all interested and affected parties to be involved, and facilitates their effective engagement.	Clear long-term objectives that guide decision-making, consistent with MSC Principles and Criteria and the precautionary approach, are explicit within and required by management policy.
	Met?	Y	Y	Y
	Justification	<p>Clear long-term objectives that guide decision-making, consistent with MSC Principles and Criteria and the precautionary approach are explicit within management policy.</p> <p>DFO management system is defined as long term in objectives, principles and strategies that attest the willpower of the department to assure the long term exploitation of the marine resources</p> <p>DFO nationally has developed a suite of statements (vision, mission) and policy frameworks with operational guidelines that define clear long-term objectives and how they can be implemented in a manner that is consistent with MSC Principles and Criteria and the precautionary approach. Policy frameworks have been developed for DFO's Fisheries Management, Science, 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 Quebec.</p>		
References		<p>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</p> <p>DFO's Oceans Management Approach http://www.dfo-mpo.gc.ca/oceans/management-gestion/index-eng.htm</p> <p>A New Ecosystem Science Framework in Support of Integrated Management http://www.dfo-mpo.gc.ca/science/Publications/Ecosystem/index-eng.htm</p> <p>Ecosystem Considerations in Fisheries Management http://www.dfo-mpo.gc.ca/fgc-cgp/documents/parsons_e.pdf</p> <p>Guidelines on Evaluating Ecosystem Overviews and Assessments http://www.dfo-mpo.gc.ca/csas/Csas/status/2005/SAR-AS2005_026_e.pdf</p> <p>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</p>		

PI 3.1.3	The management policy has clear long-term objectives to guide decision-making that are consistent with MSC Principles and Criteria, and incorporates the precautionary approach	
	<p>Canada's Ocean Strategy – Policy and Operational Framework http://www.dfo-mpo.gc.ca/oceans/publications/cosframework-cadresoc/pdf/im-gieng.pdf</p> <p>Sustainable Fisheries Framework http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overviewcadre-eng.htm</p> <p>A Fishery Decision-Making Framework Incorporating the Precautionary Approach http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/precautioneng.htm</p> <p>Policy on Managing Bycatch http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/bycatch-policyprise-access-eng.htm</p> <p>Application of the Sustainable Fisheries Framework through the Integrated Fisheries Management Planning Process http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/ifmp-pgip-backfiche-eng.htm</p>	
OVERALL PERFORMANCE INDICATOR SCORE:		100
CONDITION NUMBER (if relevant):		NA

Evaluation Table for PI 3.1.4

PI 3.1.4		The management system provides economic and social incentives for sustainable fishing and does not operate with subsidies that contribute to unsustainable fishing		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	The management system provides for incentives that are consistent with achieving the outcomes expressed by MSC Principles 1 and 2.	The management system provides for incentives that are consistent with achieving the outcomes expressed by MSC Principles 1 and 2, and seeks to ensure that perverse incentives do not arise.	The management system provides for incentives that are consistent with achieving the outcomes expressed by MSC Principles 1 and 2, and explicitly considers incentives in a regular review of management policy or procedures to ensure they do not contribute to unsustainable fishing practices.
	Met?	Y	Y	Y
	Justification	<p>The management system provides for incentives that are consistent with achieving the outcomes expressed by MSC Principles 1 and 2, and explicitly considers incentives in a regular review of management policy or procedures to ensure they do not contribute to unsustainable fishing practices.</p> <p>There is no capital or subsidies that are available from the provincial and federal governments to fishery industry that could affect the outcomes expressed by MSC principles 1 and 2. To the contrary, development programs principally offered by DFO and MAPAQ to harvesters and processors take into account the outcomes of sustainability of the fishery and MSC principles. As example, the buy-back license program that was sponsored by both government levels targeted the decreasing of fishing effort considered too high to maintain lobster abundance.</p> <p>In fact, the rationalization of the fishery that take place (decreasing of licenses, diminution of number of traps by fishermen, modification of fishing season, augmentation of legal length, determination of a maximum length) was a powerful incentive for the fishermen to exploit the resource in a sustain manner. The fishery rationalization bear fruit since lobster abundance increase significantly in the last years.</p> <p>The rationalization process contributed to engender a great sense of stewardship in fishermen themselves. To the opinion of both DFO and fishermen association representatives, fishermen are aware of the importance to maintain the lobster stock in good shape. RPPSG is directly involved in some actions to maintain the stock (joint research with DFO research team, participation in trap identification procedure).</p> <p>Incentives reviews are regularly done throughout the management policy and procedures review. Management policy and procedures for the lobster fishery are reviewed regularly, at the end of each fishing season. This review, which is adaptable, is done internally at DFO and externally through the advisory committee meetings</p>		
References		http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/lobster-homard/alsm-mdih-eng.htm http://www.mapaq.gouv.qc.ca/fr/Peches/md/Programmes/Pages/Programmes-Peches.aspx http://www.bapap.qc.ca/eng/info1.htm#haut		
OVERALL PERFORMANCE INDICATOR SCORE:				100
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 3.2.1

PI 3.2.1		The fishery has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Objectives, which are broadly consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are implicit within the fishery's management system	Short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery's management system.	Well defined and measurable short and long-term objectives, which are demonstrably consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery's management system.
	Met?	Y	N	N
	Justification	<p>For the assessed fishery there are no specific objectives documented per se to achieve the outcomes expressed by MSC's principles 1 and 2.</p> <p>However, these objectives are implicit within the fishery's management system. From meeting held in Gaspé in June with DFO regional officers and managers, it is clear that stock conservation and sustainable fishery are the key outcomes of stock management to guaranty good economic returns from the fishery.</p> <p>In addition, DFO take into account impact of the fishery to the ecosystem, in particular for overlapped stock of other species (rock crab, common crab, scallops and red plaice with lobster stock). Protection zones are in force for some species (common crab, sea cucumber, urchin and scallops). In addition, DFO take into account impact of the fishery to the ecosystem, in particular for overlapped stock of other species (rock crab, common crab, scallops and red plaice with lobster stock). Protection zones are in force for some species (common crab, sea cucumber, urchin and scallops. Regarding the main retained species bait, although there are no specific management measures or partial strategy to ensure that the fishery does not hinder the recovery and rebuilding of the Canadian mackerel stock, the reduction of the number of licences and the number of traps per licence are management measures that have contributed to reduce the impact on the Canadian mackerel and other P2 components as a decrease in the number of traps induced less bait used.</p> <p>An Integrated Fisheries Management Plan (IFMP) is to be now prepared and will be completed at the end of 2014.</p> <p>While lobster conservation plans contain specific objectives that are in line with the outcomes expressed by MSC's principles 1 and 2, they are not included in the management system as targets to attain and not supported by performance indices to see the progression on a time scale.</p> <p>The assessor team considers that the management system must be based on short and long term objectives, measurable on a time frame and adjusted depending on stock and fishing fluctuations. In the absence of objectives that are explicit within the fishery management system, the fishery does not meet SG80.</p>		
References		<p>Louise Gendron, 2005. Plan de conservation du homard. Gaspésie, Phase 2. Document non classifié, 4p.</p> <p>Regroupement des pêcheurs professionnels du sud de la Gaspésie. 2009. Plan de</p>		

PI 3.2.1	The fishery has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2	
	conservation du homard proposé au ministère des Pêches et des Océans, 16 pp. DFO 2012a. Assessment of Lobster Stocks of the Gaspé (LFAs 19, 20 and 21), Quebec in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/015	
OVERALL PERFORMANCE INDICATOR SCORE:		60
CONDITION NUMBER (if relevant):		3

Evaluation Table for PI 3.2.2

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 under assessment.		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	There are some decision-making processes in place that result in measures and strategies to achieve the fishery-specific objectives.	There are established decision-making processes that result in measures and strategies to achieve the fishery-specific objectives.	
	Met?	Y	Y	
	Justification	<p>There are established decision-making processes in place that result in measures and strategies to achieve the fishery-specific objectives.</p> <p>On regional basis, the DFO RDG is authorized to approve some changes to improve the management measures or to made minor adjustments required. Thus, for example, the fishing season could be delayed in case of bad weather. The fishermen association, the RPPSG, is always part of the decision. Once the decision is made, fishermen must comply with the change.</p> <p>The stakeholders are always involved with more important changes that had to be made through advisory committee meetings. When these changes affect significantly the fishery, workshops are organized by DFO and were held to find associated solutions to management problem. Ministerial agreement is required when important adjustments are decided on a regional basis.</p> <p>In fact, as other Canadian fisheries, Gaspé lobster management system is supported by DFO general attributes to implement and enforce regulations and by principles and goals of the Department to guaranty the sustainability of the lobster resource, the ecosystem preservation and habitat.</p> <p>The assessment team notes that, even if the decision-making is efficient, explicit long-term objectives, as well as performance indicators, are lacking.</p>		
b	Guidepost	Decision-making processes respond to serious issues 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 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.	Decision-making processes respond to all 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.
	Met?	Y	Y	N

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 under assessment.		
	Justification	<p>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.</p> <p>The consultative committee (taking place each three years) is the place where the results of fishing seasons are analyzed by stakeholders and DFO regional staff and Provincial Government representatives. At this occasion, all information available as scientific research results, monitoring results, compliance reports are presented and discussed. The information could come from harvester association, that are deeply involved in the fishery management process, as well as from the scientific DFO team, that conducts each year at sea scientific monitoring of some biological lobster characteristics and stock evaluation. Serious and important issues, as the management measures that will be in force for the next three years, are decided in the meeting.</p> <p>This decision-making cycle is adjusted timely for special issues that need more discussions. As said before, workshops are organized to discuss the special issues.</p> <p>The wider implications of the decisions are of course discussed during the formal and informal meetings with harvester representatives and especially during workshops.</p> <p>The area DFO director takes the final decision on management measures for the next fishing season and there is usually no obligation to be approved at the Ministerial level.</p> <p>On occasion the fishery management decision-making process has been judged by harvesters to be ineffective and slow to react due to limitations of staff and budget cuts, preventing the fishery from meeting 100b.</p>		
c	Guidepost		Decision-making processes use the precautionary approach and are based on best available information.	
	Met?		Y	
	Justification	<p>Decision-making processes use the precautionary approach and are based on best available information.</p> <p>In 2013, the precaution approach application for ZPH 19, 20, 21 was peer-reviewed by DFO Sciences staff during a special meeting held in November. Reference points for PA were developed based on the best available information on landings that represents actually the best estimation of lobster biomass fluctuations. The reference points of PA are now integrated in the management system. The precaution approach will be part of the next IFMP, who will be finalized at the end of the year. In the future, since landings are not the best indicators of lobster biomass, it is intended to develop other biological reference points.</p> <p>Information on biological parameters and stock status are available from Science research team and stock assessment is performed each three years and peer-reviewed in CSAS process. Stock assessment report is the core of information available to advisory committee.</p>		

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 under assessment.		
d	Guidepost	Some information on fishery performance and management action is generally available on request to stakeholders.	Information on fishery 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 fishery 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?	Y	Y	Y
	Justification	<p>Formal reporting to all interested stakeholders provides comprehensive information on fishery performance and management actions and describes how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.</p> <p>The information on fishery performance and management action is always available on request for stakeholders and public.</p> <p>In addition, there is a very high exchange between DFO representatives and lobster industry stakeholders. The information is spreading from many ways:</p> <ol style="list-style-type: none"> 1. Advisory committee meetings and workshop reports sent to all participant representatives and sent to all their members. The DFO provided routinely explanations for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity. 2. Websites of departmental agencies, DFO and MAPAQ, through reports on lobster fishery; private website as the RPPSG one. 3. Reports of the scientific staff that produce yearly stock evaluation and biological analysis and that are published in CSAS website. <p>A lot of information is available as stock status, research objectives, economic situation of the fishery and trends, enforcement and compliance information, change in fishery management and measures. At the end of the consultation process, DFO issues a Notice to Fish Harvesters in its website, that presents politic and management measures for the next season.</p> <p>Meetings with DFO and RPPSG during the site visit in June 2014 indicate a highly and consistent information exchange between the two. A real complicity exists; as example, the workshops held on management modification are co-chaired both par the DFO and RPPSG.</p>		

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 under assessment.		
e	Guidepost	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?	Y	Y	Y
	Justification	<p>The management system or fishery acts proactively to avoid legal disputes or rapidly implements judicial decisions arising from legal challenges.</p> <p>The management system is itself built to solve disputes that could arise and that could lead to legal disputes. First, proposition of measures that cause an important questioning by the harvesters is discussed within special workshop. Second, stakeholders and especially harvester association are part of the decisions made. RPPG'S representatives have to argue with membership before and after the advisory meeting to obtain a large consensus. The assessment team is of the opinion that the high fishermen implication in the fishery management is the main reason why management measures are not subjected to continuing court challenges.</p> <p>It could occur that the management system has to comply with judicial decisions. In that case, it complies with the decision in a timely fashion (integration of aboriginal groups in lobster fishery is a good example of judicial decision implements par DFO).</p>		
References		<p>Politique régionale pour les consultations de l'Industrie des pêches, Région du Québec Gestion des pêches, Pêches et Océans Canada, Juin 2004, 10pp.</p> <p>DFO 2014c. Development of reference points in the context of a precautionary approach (PA) for lobster of the Gaspé (LFAs 19, 20 and 21). DFO Can. Sci. Advis. Sec. Sci. Resp. 2013/027.</p> <p>DFO. 2012a. Assessment of Lobster Stocks of the Gaspé (LFAs 19, 20 and 21), Quebec in 2011. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2012/015.</p> <p>http://www.qc.dfo-mpo.gc.ca/peches-fisheries/avis-notice/homard-19-p-2014-eng.html</p>		
OVERALL PERFORMANCE INDICATOR SCORE:				95
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 3.2.3

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the fishery's management measures are enforced and complied with		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Monitoring, control and surveillance mechanisms exist, are implemented in the fishery under assessment and there is a reasonable expectation that they are effective.	A monitoring, control and surveillance system has been implemented in the fishery under assessment and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.	A comprehensive monitoring, control and surveillance system has been implemented in the fishery under assessment and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.
	Met?	Y	Y	Y
	Justification	<p>A comprehensive monitoring, control and surveillance system has been implemented in the fishery under assessment and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.</p> <p>A comprehensive control and surveillance system is implanted for the assessed fishery and includes verifications of several data source:</p> <ul style="list-style-type: none"> • Sales slips that give the lobster landings sold to the processor; • Fishing log fill by harvester that give information on lobster catch, as well as on species by-catch and information on catch place; • DFO makes also an estimation of lobster catches non included in sales slip data (consumption by the fisherman and his family, direct public selling) <p>These data could be compared together and could give an adequate picture of each fisherman catch.</p> <p>From data verifications, officers carry out:</p> <ul style="list-style-type: none"> • Dockside and at-sea vessel inspections to enforce conservation measures that include also vehicle inspection. • Registry of trap tags that gives at any time information on traps used by harvesters as well as traps lost. Management of trap tags is done by DFO officers, while RPPSG has the responsibility to distribute tags to fishermen. <p>Details of officers inspection is described in the section <i>Target species background, principle 3</i>. In addition, coaching alert program in force and public complaints about poaching are also important information (18 complaints in 2013).</p> <p>The compliance and enforcement strategy is planned on a weekly basis. The weekly planning is based on identified priorities and take in account special cases, as for example repeat offenders. In 2013, several actions were done to ensure compliance with the measures in force:</p> <ul style="list-style-type: none"> • 1666 total hours spent on lobster enforcement • 156 inspections were done (including 30 at-sea boarding) • 17 warnings were addressed to fishermen • 11 violations were noted <p>Each year, special at-sea operations are done to inspect fishing boats and to search for non-compliance of any measure of the management system. The two 2013 operations resulted in 3 observed violations.</p> <p>C&P program input and outcome data for 2010-2013, presented in the <i>Target species background, principle 3</i>, demonstrate a consistent capacity to enforce relevant management measures, strategies and rules for the fishery.</p>		

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the fishery's management measures are enforced and complied with		
b	Guidepost	Sanctions to deal with non-compliance exist and there is some evidence that they are applied.	Sanctions to deal with non-compliance exist, are consistently applied and thought to provide effective deterrence.	Sanctions to deal with non-compliance exist, are consistently applied and demonstrably provide effective deterrence.
	Met?	Y	Y	N
	Justification	<p>Sanctions to deal with non-compliance exist, are consistently applied and thought to provide effective deterrence.</p> <p>Panoply of sanctions could be imposed in case of violations: license suspension, catch and equipment seizures, monetary fines, fishing season restrictions. Community work could also be imposed depending of the magistrate.</p> <p>In 2013, monetary fines vary from 1500\$ to 2250\$, associated with 100 hours of work in the community for one case, and with equipment confiscation for two other cases.</p> <p>The sanctions imposed are thought to be very effective to provide effective deterrence. RPPSG expressed in the past the necessity of increase the court imposed sanctions to provide a better deterrence. But the fishermen judgment on the violator and public awareness about stock conservation and detrimental effect of poaching is very effective to provide deterrence. The publication of violator names in media is an additional factor that proves to be effective. Recurrence of violation by a single fisherman is low; special inspection effort is put to these very few cases.</p> <p>However there is no formal demonstration that the sanctions imposed and other factors provide effective deterrence and the evaluation team generally considers that the C&P program lacks performance indicators to measure the effectiveness of its activities, including whether sanctions demonstrably provide effective deterrence, preventing the fishery from meeting SG100.</p>		
c	Guidepost	Fishers are generally thought 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.	Some evidence exists 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 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.
	Met?	Y	Y	Y
	Justification	<p>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.</p> <p>RPPSG plays an important role in the decision-making system and, as said before, in advisory committee and all meetings with DFO on the management system. The association also collaborates closely with research team who proceed to at-sea research and samplings. In addition, the association supported the implantation of an electronic logbook system to its members. This logbook is now in force and is used for example to estimate incidental catch of other species. Taking in account the amount of information provided by harvesters and also the high degree of commitment of the fishermen association in the management system, we believe that fishers comply with the management system.</p>		

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the fishery's management measures are enforced and complied with		
d	Guidepost		There is no evidence of systematic non-compliance.	
	Met?		Y	
	Justification	Based on information and program data provided by C&P enforcement staff and comments from industry representatives, and taking into account the dissuasive impact of violation sentences and the side effect of fishermen community pressure, the Assessment Team considers the level of recidivism in the fishery to be extremely low. Therefore, there is no indication of systematic non-compliance in the fishery.		
References		Refer to statistical information, analyses and outcomes provided in the main report		
OVERALL PERFORMANCE INDICATOR SCORE:				95
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 3.2.4

PI 3.2.4		The fishery has a research plan that addresses the information needs of management		
Scoring Issue		SG 60	SG 80	SG 100
a	Guidepost	Research is undertaken, as required, to achieve the objectives consistent with MSC's Principles 1 and 2.	A research plan provides the management system with a strategic approach to research and reliable and timely information sufficient to achieve the objectives consistent with MSC's Principles 1 and 2.	A comprehensive research plan provides the management system with a coherent and strategic approach to research across P1, P2 and P3, and reliable and timely information sufficient to achieve the objectives consistent with MSC's Principles 1 and 2.
	Met?	Y	Y	Y
	Justification	<p>A comprehensive research plan provides the management system with a coherent and strategic approach to research across P1, P2 and P3, and reliable and timely information sufficient to achieve the objectives consistent with MSC's Principles 1 and 2.</p> <p>As other fisheries that are managed by DFO, research data and scientific reports are mandatory to assure sustainability of the resource, preservation of the ecosystem and so achieve the objectives of the management system consistent with MSC's Principles 1 and 2. In fact, scientific results are the core of the data needed by DFO regional managers and consultative committee.</p> <p>In June 2014, a <i>Programme de recherche stratégique sur le Homard d'Amérique (Homarus americanus)</i>, 2013-2017 (PRSH) was finalized by Sciences-DFO and approved. This document presents research goals and projects for the Quebec region including the Îles-de-la-Madeleine, Côte-Nord et Île d'Anticosti and the Gaspésie lobster fisheries.</p>		

PI 3.2.4		The fishery has a research plan that addresses the information needs of management		
b	Guidepost	Research results are available to interested parties.	Research results are disseminated to all interested parties in a timely fashion.	Research plan and results are disseminated to all interested parties in a timely fashion and are widely and publicly available.
	Met?	Y	Y	N
	Justification	<p>Research results are disseminated to all interested parties in a timely fashion.</p> <p>DFO-based research results are widely and publicly available on the CSAS website and occasionally in scientific journals. The results are also explained to, and discussed with, industry stakeholders and others at formal and informal venues. Related research generated by other government departments, academia, and NGOs is also disseminated on various websites and scientific journals.</p> <p>However, the PRSH is new and was not yet objet of deep discussions with stakeholders. Considering that the program was very recently approved (June 2014) and that it is not disseminated to all interested parties, the assessment team assigned a N to SG100.</p>		
References		MPO 2014. Programme de recherche stratégique sur le Homard d'Amérique (<i>Homarus americanus</i>) 2013-2017, MPO-Région du Québec, Direction des Sciences Benthiques et Démersales, IML, Mont-Joli, QC, 17pp.		
OVERALL PERFORMANCE INDICATOR SCORE:				90
CONDITION NUMBER (if relevant):				NA

Evaluation Table for PI 3.2.5

PI 3.2.5		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
a	Guidepost	The fishery has in place mechanisms to evaluate some parts of the management system.	The fishery has in place mechanisms to evaluate key parts of the management system	The fishery has in place mechanisms to evaluate all parts of the management system.
	Met?	Y	Y	Y
	Justification	<p>The fishery has in place mechanisms to evaluate all parts of the management system.</p> <p>Up to now, there is no IFMP for the Gaspé Lobster fishery. It is planned that DFO produce a first version of the document at the end of the year. We could expect that this IFMP for the area 19, 20 and 21 will be in force for the 2015 fishing season. This document should contain tools to evaluate performance from indicators.</p> <p>Meanwhile, it is obvious that the actual management system is evaluated systematically in all its parts and from different ways:</p> <ul style="list-style-type: none"> • Post season meetings (DFO internal meetings, Advisory Committee meetings) allow to revise fisheries management issues during the past fishery and to discuss within the Advisory committee modification to bring to the management system for the next seasons. DFO's sustainability checklist is used to evaluate if the precautionary approach is effectively used. The advisory process is considered an internal and external review of the management system. • Occasionally, intensive review of the management system is done. That was the case with the SCAS report in 2007. • On research-side, formal assessment (every 3 years) is followed by peer review and reports are published in the SCAS website. Annual research monitoring allows the observation of variation in biological indices, stock abundance and interactions with some parts of the ecosystem. • Enforcement and Compliance: DFO and Industry post-season review and local roundtables (annually). • Occasional meetings with DFO representatives of Maritimes regions to compare the management system used. • The Sustainable Development Commissioner linked with the Auditor General of Quebec is mandated to audit any case of sustainable development, including fisheries. • Standing Committee on Fisheries and Oceans (FOPO) could also have some interest in lobster fishery. One of its study is eco-certification in fisheries • Cost earnings study could be requested on need. The MAPAQ time to time produces studies on the subject 		
b	Guidepost	The fishery-specific management system is subject to occasional internal review.	The fishery-specific management system is subject to regular internal and occasional external review.	The fishery-specific management system is subject to regular internal and external review.
	Met?	Y	Y	N

PI 3.2.5		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	
	Justification	<p>The fishery-specific management system is subject to regular internal and occasional external review, but not to regular internal and external review.</p> <p>Occasionally, special external reviews are done. This was the case with the Report of Standing Committee on Fisheries and Oceans (FOPO) on the Canadian Lobster Fishery (2009). Among recommendations of this federal parliament committee, one recommends eco-certification.</p> <p>The internal review mechanisms (defined here as DFO and Industry) are described in the previous section. The external review mechanisms that have been triggered occasionally are listed in the background section of the report.</p>	
References			
OVERALL PERFORMANCE INDICATOR SCORE:			90
CONDITION NUMBER (if relevant):			NA

Appendix 1.2 Risk Based Framework (RBF) Outputs

Appendix 1.2.1 Scale Intensity Consequence Analysis (SICA)

Table 1.2.1.a: Principle 1 SICA Scoring Template Target Species

Performance Indicator	Risk-causing activities	Spatial scale of activity	Temporal scale of activity	Intensity of activity	Relevant subcomponents	Consequence score	MSC Score
Target species outcome: American lobster (<i>Homarus americanus</i>)	Directed trap fishery	6	3	3	Population size		
					Reproductive capacity		
					Age/size/sex structure	2	80
					Geographic range		
Rationale for selecting worst plausible case scenario	<p>During the RBF meeting held in Chandler, the principal activities creating a risk to the lobster stock were identified as:</p> <ul style="list-style-type: none">- Directed lobster trap fishery- Scallop dragging- Sea cucumber dragging- Poaching and illegal fishing- Rock crab trap fishing- Ghost fishing from lost traps- Winter flounder gillnet fishery- Seine fishing <p>The lobster fishery is a single specific, single gear fishery. Traps are highly selective and there is no highgrading. Only one scallop fisher is active. Fishing activity is restricted in depth and occurs after lobster fishing season. The impact is considered to be minor.</p> <p>Cucumber dragging is an exploratory fishery. Two licences were granted in 2008. Fishery takes place deeper than 10 fathoms during a short (10 days) spring season. The main fishery occurs in fall after the lobster season. The impact appears negligible.</p> <p>Poaching and illegal fishing was a problem years ago but is no longer considered as a concern. There is a strong social control ("self-police"), favoured by the small management fishing areas. It has become socially unacceptable. In case of conviction, penalties are effective, which provides incentive to respect regulations. It was estimated that the effect on</p>						

	<p>lobster stock is undetectable.</p> <p>Rock crab fishery is very localised, out of several exclusion zones. Lobster bycatches may exist, but at a local scale, and lobster are released alive. The impact is minor.</p> <p>Ghost fishing from lost traps: The escape vent and the biodegradable twine (which lasts no more than 40 d) prevent ghost fishing. The new iron traps are destroyed faster than the wooden ones. Ghost fishing impact is minor.</p> <p>The winter Flounder gillnet fishing is a bait fishery and impact has diminished recently. Nets must be hauled every day. The impact is considered to be minor.</p> <p>After an agreement between fishermen, seines are not active in Chaleur Bay anymore. So the impact on lobster stock is null.</p> <p>As a consequence, the Assessment team together with stakeholders has identified the directed lobster trap fishing as the activity which poses the greatest risk to target species, and for scoring under SICA, the interaction between lobster trap fishing and the scoring element lobster (<i>Homarus americanus</i>) has been identified as the worst case scenario.</p>
Rationale for Spatial scale of activity	The lobster distribution is widely covered. Some refuge areas exist offshore but the biomass is minimal. It is considered that more than 60% of the lobster distribution is covered by fishing activities.
Rationale for Temporal scale of activity	In the Gaspésie, the commercial lobster fishery is a spring activity that lasts 69 days (LFAs 20 and 21) and 71 days (LFA 19).
Rationale for Intensity of activity	Fishing activities are intense during the fishing season. However, a small fraction of the total population is affected by the fishery. On that fraction, the effect is detectable as the size structure is truncated. Even so, the stock is maintained at high levels, and the abundance of berried females is increasing. The intensity is therefore considered as moderate.
Rationale for choosing most vulnerable sub-component	<p><i>Abundance (population size):</i></p> <p>Landings are above the Upper Stock Reference point since the early 1990s. CPUEs, derived from at-sea sampling, as well as from voluntary recruitment-traps, show an increasing trend since 2007, in area 20, and fluctuate without trend in area 19. The effect of fishing in the population size is not clearly detectable and fishing has no effect on population dynamics. The consequence appears to be between negligible and moderate.</p> <p><i>Reproductive capacity :</i></p> <p>Since the 1995 FRCC's report, conservation efforts were directed to address the reproductive capacity issue. MLS was increased and corresponds now to the size at 50% maturity. Other measures than minimum legal size were implemented: voluntary V-notching and maximum legal size. In Newfoundland, it was found that a "slot fishery" (i.e. minimum and maximum legal size), as implemented in LFA 25, was one of the most efficient tool to improve the reproductive value (i.e. the quantity of eggs that an individual is able to produce during its life time). V-notching was also seen as an efficient tool to improve that reproductive value. While the reproduction relies mostly on primiparous females, production indicators are positive. The abundance of berried females shows an increasing trend since 2002. In 2011, their abundance has been at</p>

	<p>least three times higher than it was when the MLS was 76 mm. In 2011, the egg production index for all of LFA 20 was 3.1 times higher than that calculated for 1994 to 1996, before the increase in the MLS. Also that year, multiparous females contributed to 21% of total egg production.</p> <p>It was then considered that the impact of the fishery on the reproductive capacity lies between minor and moderate.</p> <p><i>Size/age/sex structure</i></p> <p>No changes in the sex structure are observed.</p> <p>Due to the quite high exploitation rate (around 76% of the available stock), the fishery could reduce the abundance of large animals and narrowing the size structure to the recruited size. Is it therefore considered that the size structure is a vulnerable component to exploitation.</p> <p><i>Geographic range</i></p> <p>Despite the high fishing intensity, no detectable negative changes have been observed in the geographic distribution of lobster. Therefore, the consequence of lobster fishery on the geographic range appears to be minor.</p> <p>The retained most vulnerable component is the size structure.</p>
Rationale for Consequence score	<p><i>Size structure</i></p> <p>In LFA 20, the size structures have a truncated appearance and are dominated by a moult class of 82–93 mm for males and 82–89 mm for females corresponding to the year's recruits. Female size distributions are more truncated toward small sizes than male size distributions are. However, due to the increased minimum legal size and the reduction of fishing effort, the effect of fishing in the size structure was reduced, as it is improving, and this effect is less detected than in the past. In LFA 20, the average commercial size was 88.3 mm in 2011, compared to 82.0 mm in 1996, and large individuals (>85 mm LC) are more present. The truncated distribution is not observed in LFA 19, where lobsters > 95 mm LC are abundant.</p> <p>As the production indicators and abundance indices have been showing increasing trends in recent years, it is possible to consider that fishing has no effect on population dynamics.</p> <p>The consequence appears to be moderate, which leads to a score of 2, corresponding to an MSC score of 80.</p>

Appendix 1.2.2 Productivity-Susceptibility Analysis (PSA)

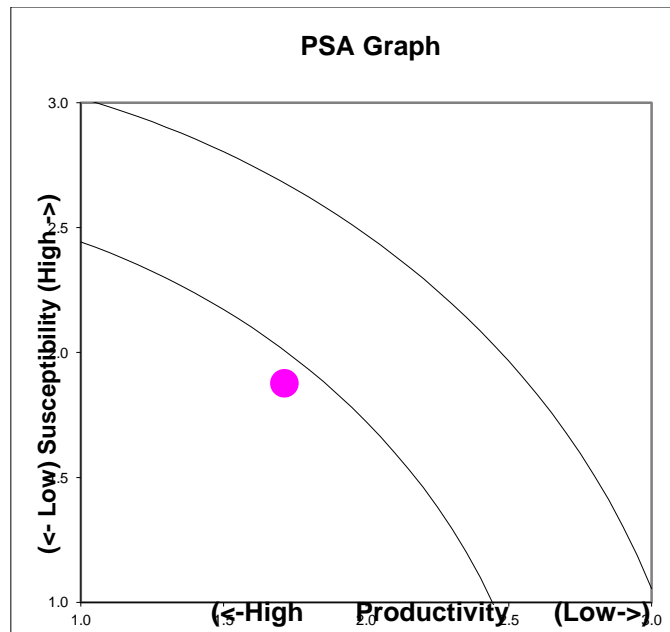
Table 1.2.2.a PSA Principle 1 Rationale Table

Table 1: PI 1.1.1 Stock Status		
PI 1.1.1 Stock Status	American lobster (<i>Homarus americanus</i>)	
Productivity	Rationale	Score
Average age at maturity.	50% mature at 7-8 years	2
Average maximum age	10-25 years	2
Fecundity	Varies from 5000 to 66000 according to size	2
Average maximum size	May reach a maximum carapace length of 200 mm but average maximum size is <100 mm	1
Average size at maturity	50% mature at carapace length around 82 mm	1
Reproductive strategy	Eggs incubated by the female under the tail until hatching into the water column. Reproductive strategy could be compared to demersal oviparity.	2
Trophic level	Generalist feeder – predator of invertebrates and dead animals. Trophic level =3.2	2
Fishery		
Susceptibility	Rationale	Score
Areal Overlap	Spatial scale activity was determined to be >30%, and the species is not impacted by other fisheries.	3
Vertical Overlap	There is a high overlap between lobster and traps as lobster is a benthic species and traps are set on the seafloor.	3
Selectivity	Species regularly found in the trap but traps are highly selective on a fraction, harvestable, population. Smaller individual are not selected, due to escape vent; the diameter of the entrance ring may prevent largest individuals to enter the traps. Important amount of berried female caught. Therefore, the selectivity induces a	2

	medium risk.	
Post capture mortality	<p>Retained species. Important amount of berried female caught (berried females catch represents approximately 20% of the lobster total catch) but good handling and release practices in place and evidence that they are released alive.</p> <p>CC2.4.2.2.5 a.i.) There are no biological factors that limit the potential of the species, like most of the exploited crustacean species, to be captured alive. In fact biological factors support high survivorship. Gaspésie lobster are captured and sold alive; a.ii) Lobster Handling Workshops are organized for fishermen during the winter by the RPPSG, handling and release practices are designed to allow a high post-release survival and to minimize eggs loss. The stock productivity indicators are high. C&P staff field observations confirm that harvesters practices are in high compliance with good handling practices; a.iii) Current fishing practices in place are designed to immediately return discards to the sea as soon as the catch is on the desk; all berried females must be immediately released as required by fishing regulations; a.iv) Due to the handling and release practices, berried females are released in condition permitting a subsequent survival.</p> <p>CC2.4.2.2.5 b. states “<i>observer data or other verified field observations made during the commercial fishing operation that indicate</i>”. During the site visit, the Assessment team met the C&P staff and DFO scientists and confirmation was provided that berried female are cautiously released alive and survivorship is high.</p> <p>CC2.4.2.2.6a.b. During the site visit, the Assessment team met the C&P staff and at-sea enforcement activities confirmed that 100% of berried female are cautiously released alive and survivorship is high. C&P staff has reported a significant high level of compliance by lobster harvesters with fishing regulations.</p>	2

MSC PSA Worksheet for RBF v1.1

							Productivity Scores [1-3]									Susceptibility Scores [1-3]				1.1.1 only					PSA scores (automatic)				
PI	TAXA_NAME	FAMILY_NAME	SCIENTIFIC_NAME	COMMON_NAME	GEAR_TYPE (1.1.1)		Average age at maturity	Average max age	Fecundity	Average max size	Average size at Maturity	Reproductive strategy	Trophic level (fishbase)	Total Productivity (average)		Areal overlap	Vertical overlap	Selectivity	Post-capture mortality	Total (multiplicative)	Catch (tons) (1.1.1)	Weighting (1.1.1)	Weighted Total	Weighted average	Color on PSA plot	PS A Score	MS C Score	Risk Category Name	MSC scoring guide post
1.1.1	Crustacean	Nephropidae	Homarus americanus	American lobster	Trap		2	2	2	1	1	2	2	1.71		3	3	2	2	1.88	872	1.00	1.88	1.88		2.54	83.0	Low	>80



Determination of final score for PI 1.1.1

Table CC19: Rules for use of SICA or PSA scores

SICA	PSA	Rule
>80	>80	Higher score of the two, continue RBF use
>80	60 to 80	Use PSA, only allowed to use RBF once
>80	<60	Fail
60 to 80	>80	Use PSA, only allowed to use RBF once
60 to 80	60 to 80	Use PSA, only allowed to use RBF once
60 to 80	<60	Fail
<60	>80	Use PSA, only allowed to use RBF once
<60	60 to 80	Use PSA, only allowed to use RBF once
<60	<60	Fail

SICA and PSA scores are 80 and 83.0, respectively. Therefore both scores are higher than 80. According to the Rules for use SICA and PSA scores detailed in Table CC19, the final score for PI 1.1.1 is **83**.

Appendix 1.3 Conditions and Client Action Plan

Following are the stated conditions as provided in the Draft Client Report dated August 25, 2014.

In addition to the general requirements, the Client Group (client) must also agree in a written contract with an accredited MSC certification body to meet the specific conditions as described below within the timelines that will be agreed in the 'Action Plan for Meeting the Condition for Continued Certification' that is to be approved by SAI Global.

A Client Action Plan was submitted by the RPPSG to SAI Global on September 2, 2014.

There are three conditions relating to performance indicators 2.1.1, 2.1.2, 3.2.1 that are addressed in this Action Plan.

Table A1.3: Condition 1

Performance Indicator	PI 2.1.1 Retained Species Outcome
Score	60
Rationale	<p>As a result of the last stock assessment, it is likely that the Canadian mackerel stock is currently overfished and in a situation of recruitment overfishing.</p> <p>The impact of the Gaspésie lobster fishery on the Canadian mackerel stock is indirect. Canadian mackerel used as bait is purchased by lobster fishermen to local directed fisheries, so the amount of bait used is already accounting into mackerel fisheries management system and taking into account in the Canadian mackerel stock assessment.</p> <p>There are measures or fishing practices in place that are expected to ensure that the lobster fishery does not hinder recovery and rebuilding of the mackerel stock. According to the GCB3.3 "Measures" are individuals actions or tools that may be in place either explicitly to manage impacts on the component or incidentally, being designed primarily to manage impacts on another component, indirectly contribute to management of the component under assessment.</p> <p>The reduction of the number of licences and the reduction of the number of traps per licence over the years are management measures that have contributed to reduce the impact on the Canadian mackerel and other P2 components as a decrease in the number of traps induced less bait used. The number of licences was reduced from 216 licences in 1995 to 164 and 162 licences in 2013 and 2014, respectively. The number of traps was estimated at 2.26 millions in 2011. It was 2.38 millions in 2008 (diminution of 5%) and 3.05 millions in the period 1994-2005 (diminution of 26%). In 2006, the number of trap per license was reduced from 250 to 235.</p> <p>In addition, the high price of bait species is a wide concern in all Atlantic Canada and has forced lobster harvesters to a better and optimal utilization of bait.</p> <p>However, the assessment team considered that there is no formal partial strategy of demonstrably effective management measures in place in the lobster fishery to ensure that the fishery does not hinder recovery and rebuilding of the Canadian mackerel stock, preventing the fishery from meeting 80c.</p> <p>Suite aux résultats de la dernière évaluation de stock, il est probable que le stock de maquereau Canadien est actuellement surpêché et en situation de surpêche du recrutement.</p>

	<p>L'impact de la pêche au homard de Gaspésie a un impact indirect sur le stock de maquereau du Canada. Les homardiers se fournissent en maquereau auprès des pêcheries directes et locales de maquereau, donc la quantité d'appât utilisé est considérée par le système de gestion de la pêche au maquereau et prise en compte dans l'évaluation du stock de maquereau.</p> <p>Il y a des mesures ou des pratiques de pêche en place qui devrait assurer que la pêche au homard ne nuise pas à la récupération et la reconstruction du stock de maquereau.</p> <p>La réduction du nombre de licences et la réduction du nombre de casiers par licence au cours du temps sont des mesures de gestion ayant contribué à réduire l'impact sur le maquereau canadien et les autres composantes du P2, la diminution du nombre de casiers induisant une utilisation moindre d'appât. Le nombre de licences est passé de 216 en 1995 à 164 et 162 en 2013 et 2014. Le nombre de casiers était estimé à 2.26 millions en 2011. Il était de 2.38 en 2008 (diminution de 5%) et 3.05 millions pour la période 1994-2005 (diminution de 26%). En 2006, le nombre de casiers par licence a été réduit de 250 à 235.</p> <p>De plus, le prix élevé des appâts est une préoccupation dans tout l'Atlantique canadien, cela a forcé les homardiers à une meilleure et optimale utilisation des appâts.</p> <p>Cependant, l'équipe d'évaluation considère qu'il n'y a pas de stratégie partielle formelle, faite de mesures reconnues et efficaces, mise en place dans la pêche au homard en Gaspésie pour s'assurer que la pêche ne nuise pas à la récupération et la reconstruction du stock de maquereau Canadien.</p>
Condition	<p>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 Canadian mackerel stock.</p> <p>Le client doit fournir des preuves qu'une stratégie partielle, faite de mesures reconnues et efficaces, est mise en place pour s'assurer que la pêche au homard en Gaspésie ne nuise pas à la récupération et la reconstruction du stock de maquereau Canadien.</p>
Milestones	<p><u>By Year 1:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been discussed (score remains unchanged).</p> <p><u>By Year 2:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been proposed and agreed (score remains unchanged).</p> <p><u>By Year 3:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been implemented (score remains unchanged).</p> <p><u>By Year 4:</u> The Assessment team shall be provided with documentary evidence that the implemented partial strategy will work (score reaches 80).</p> <p><u>Pour l'an 1:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu discussion sur une stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien (score inchangé).</p> <p><u>Pour l'an 2:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu entente et proposition d'une stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien (score inchangé).</p> <p><u>Pour l'an 3:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées que la stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien a bien été mise en place (score inchangé).</p>

	<p>Pour l'an 4: Il faudra fournir à l'équipe d'évaluation des preuves documentées que la stratégie partielle mise en place fonctionnera (score atteint 80).</p>
Client action plan	<p><u>Action Plan</u></p> <ol style="list-style-type: none"> 1. The client will acquire additional information needed to develop a partial strategy on this condition. 2. The client will conduct stakeholder consultations regarding the development of a partial strategy on this condition. 3. The client will provide documentary evidence of the requests and support provided including interactions with relevant consultants on this condition. 4. The client will propose and implement a partial strategy on this condition. 5. The client will provide documentary evidence of the successful application of a partial strategy on this condition. <p><u>Responsible parties</u></p> <ol style="list-style-type: none"> 1. The client helped by consulted stakeholders. 2. DFO to supply all necessary information to meet requirements. <p><u>Timeframe for Milestones</u></p> <p><u>By the first annual</u> surveillance audit, the CAB shall be provided with documentary evidence that additional information on the use of mackerel as bait has been obtained and that a partial strategy to reduce the use of Canadian mackerel as bait has been discussed with stakeholders.</p> <p><u>By the second annual</u> surveillance audit, the CAB shall be provided with documentary evidence that a partial strategy to reduce the use of Canadian mackerel as bait has been proposed and agreed.</p> <p><u>By the third annual</u> surveillance audit, the CAB shall be provided with documentary evidence that the partial strategy to reduce the use of Canadian mackerel as bait has been implemented.</p> <p><u>By the fourth annual</u> surveillance audit, the CAB shall be provided with documentary evidence that the partial strategy put in place has significantly reduced the amount of Canadian mackerel used as bait.</p> <p><u>Plan d'Action</u></p> <ol style="list-style-type: none"> 1. Le client devra obtenir l'information additionnelle nécessaire pour développer une stratégie partielle qui permettra d'atteindre les objectifs de cette condition. 2. Le client devra consulter toutes les parties prenantes afin de développer une stratégie partielle qui permettra d'atteindre les objectifs de cette condition. 3. Le client devra fournir des preuves documentées des requêtes et du soutien fourni, ainsi que les interactions avec des experts pertinents pour développer une stratégie partielle qui permettra d'atteindre les objectifs de cette condition. 4. Le client devra proposer et mettre en place une stratégie partielle qui permettra d'atteindre les objectifs de cette condition. 5. Le client devra fournir des preuves documentées du succès de la stratégie partielle pour atteindre les objectifs de cette condition. <p><u>Responsabilités</u></p> <ol style="list-style-type: none"> 1. Le client assisté par des parties prenantes consultées. 2. Le MPO qui fournira toute l'information nécessaire pour atteindre les objectifs de cette condition. <p><u>Échéances et étapes importantes</u></p>

	<p><u>Pour le premier audit</u> de surveillance, Il faudra fournir à l'équipe d'évaluation des preuves documentées que de l'information additionnelle sur l'utilisation du maquereau Canadien a été obtenue et qu'il y a eu discussion avec les parties prenantes sur une stratégie partielle visant à réduire l'utilisation du maquereau Canadien comme appât.</p> <p><u>Pour le second audit</u> de surveillance, Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu une proposition et une entente sur une stratégie partielle visant à réduire l'utilisation du maquereau Canadien comme appât.</p> <p><u>Pour le troisième audit</u> de surveillance, Il faudra fournir à l'équipe d'évaluation des preuves documentées que la stratégie partielle visant à réduire l'utilisation du maquereau Canadien comme appât a été mise en place.</p> <p><u>Pour le quatrième audit</u> de surveillance, Il faudra fournir à l'équipe d'évaluation des preuves documentées que la quantité de maquereau Canadien utilisé comme appât a été significativement réduite par la stratégie partielle mise en place.</p>
Consultation on condition	<p>Lobster industry, DFO</p> <p>Industrie du homard, le MPO</p>

Table B1.3: Condition 2

Performance Indicator	PI 2.1.2 Retained Species Management
Score	60
Rationale	<p>There is some objective basis for confidence that strategies will work, based on evidence from stock assessment results for fall-spawning herring and from fisheries characteristics and management. So the fishery meets 60b and 80b for this species.</p> <p>The impact of the Gaspésie lobster fishery on the Canadian mackerel stock is indirect. Canadian mackerel uses as bait is purchased by lobster fishermen to local directed fisheries, so the amount of bait used is already accounting into mackerel fisheries management system and taking into account in the Canadian mackerel stock assessment.</p> <p>There are measures or fishing practices in place that are expected to ensure that the lobster fishery does not hinder recovery and rebuilding of the mackerel stock. According to the GCB3.3 "Measures" are individuals actions or tools that may be in place either explicitly to manage impacts on the component or incidentally, being designed primarily to manage impacts on another component, indirectly contribute to management of the component under assessment.</p> <p>The reduction of the number of licences and the reduction of the number of traps per licence over the years are management measures that have contributed to reduce the impact on the Canadian mackerel and other P2 components as a decrease in the number of traps induced less bait used. The number of licences was reduced from 216 licences in 1995 to 164 and 162 licences in 2013 and 2014, respectively. The number of traps was estimated at 2.26 millions in 2011. It was 2.38 millions in 2008 (diminution of 5%) and 3.05 millions in the period 1994-2005 (diminution of 26%). In 2006, the number of trap per license was reduced from 250 to 235.</p> <p>In addition, the high price of bait species is a wide concern in all Atlantic Canada and has forced lobster harvesters to a better and optimal utilization of bait.</p> <p>However, the assessment team considered that there is no formal partial strategy in place in the lobster fishery to ensure that the fishery does not hinder recovery and rebuilding of the Canadian mackerel stock.</p> <p><u>Il y a certaines évidences que des stratégies sont implantées avec succès quand on</u></p>

	<p>regarde les données des évaluations des stocks de hareng d'automne, de même que la gestion et les caractéristiques de ces pêcheries.</p> <p>L'impact de la pêche au homard de Gaspésie a un impact indirect sur le stock de maquereau du Canada. Les homardiens se fournissent en maquereau auprès des pêcheries directes et locales de maquereau, donc la quantité d'appât utilisé est considérée par le système de gestion de la pêche au maquereau et prise en compte dans l'évaluation du stock de maquereau.</p> <p>Il y a des mesures ou des pratiques de pêche en place qui devrait assurer que la pêche au homard ne nuise pas à la récupération et la reconstruction du stock de maquereau.</p> <p>La réduction du nombre de licences et la réduction du nombre de casiers par licence au cours du temps sont des mesures de gestion ayant contribué à réduire l'impact sur le maquereau canadien et les autres composantes du P2, la diminution du nombre de casiers induisant une utilisation moindre d'appât. Le nombre de licences est passé de 216 en 1995 à 164 et 162 en 2013 et 2014. Le nombre de casiers était estimé à 2.26 millions en 2011. Il était de 2.38 en 2008 (diminution de 5%) et 3.05 millions pour la période 1994-2005 (diminution de 26%). En 2006, le nombre de casiers par licence a été réduit de 250 à 235.</p> <p>De plus, le prix élevé des appâts est une préoccupation dans tout l'Atlantique canadien, cela a forcé les homardiens à une meilleure et optimales utilisation des appâts.</p> <p>Cependant, l'équipe d'évaluation considère qu'il n'y a pas de stratégie partielle formelle, faite de mesures reconnues et efficaces, mise en place dans la pêche au homard en Gaspésie pour s'assurer que la pêche ne nuise pas à la récupération et la reconstruction du stock de maquereau Canadien.</p>
Condition	<p>The client must provide evidence that a partial strategy is in place to ensure the Gaspésie lobster fishery does not hinder the recovery and rebuilding of the Canadian mackerel stock. Also, the client must provide some evidence that the partial strategy is being implemented successfully.</p> <p>Le client doit fournir des preuves qu'une stratégie partielle est mise en place pour s'assurer que la pêche au homard en Gaspésie ne nuise pas à la récupération et la reconstruction du stock de maquereau Canadien. De plus, le client doit fournir certaines preuves que la stratégie partielle est mise en place avec succès.</p>
Milestones	<p><u>By Year 1:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been discussed (score remains unchanged).</p> <p><u>By Year 2:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been proposed and agreed (score remains unchanged).</p> <p><u>By Year 3:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been implemented (score reaches 75).</p> <p><u>By Year 4:</u> The Assessment team shall be provided with documentary evidence that the implemented partial strategy will work (score reaches 80).</p> <p><u>Pour l'an 1:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu discussion sur une stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien (score inchangé).</p> <p><u>Pour l'an 2:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu entente et proposition d'une stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien (score inchangé).</p> <p><u>Pour l'an 3:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées que la</p>

	<p>stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien a bien été mise en place (score atteint 75).</p> <p><u>Pour l'an 4: Il faudra fournir à l'équipe d'évaluation des preuves documentées que la stratégie partielle mise en place fonctionnera (score atteint 80).</u></p>
Client action plan	<p><u>Action Plan</u></p> <ol style="list-style-type: none"> 1. The client will acquire additional information needed to develop a partial strategy on this condition. 2. The client will conduct stakeholder consultations regarding the development of a partial strategy on this condition. 3. The client will provide documentary evidence of the requests and support provided including interactions with relevant consultants on this condition. 4. The client will propose and implement a partial strategy on this condition. 5. The client will provide documentary evidence of the successful application of a partial strategy on this condition. <p><u>Responsible parties</u></p> <ol style="list-style-type: none"> 1. The client helped by consulted stakeholders. 2. DFO to supply all necessary information to meet requirements. <p><u>Timeframe for Milestones</u></p> <p><u>By the first annual</u> surveillance audit, the CAB shall be provided with documentary evidence that additional information on the use of mackerel as bait has been obtained and that a partial strategy to reduce the use of Canadian mackerel as bait has been discussed with stakeholders.</p> <p><u>By the second annual</u> surveillance audit, the CAB shall be provided with documentary evidence that a partial strategy to reduce the use of Canadian mackerel as bait has been proposed and agreed.</p> <p><u>By the third annual</u> surveillance audit, the CAB shall be provided with documentary evidence that the partial strategy to reduce the use of Canadian mackerel as bait has been implemented.</p> <p><u>By the fourth annual</u> surveillance audit, the CAB shall be provided with documentary evidence that the partial strategy put in place has significantly reduced the amount of Canadian mackerel used as bait.</p> <p><u>Plan d'Action</u></p> <ol style="list-style-type: none"> 1. Le client devra obtenir l'information additionnelle nécessaire pour développer une stratégie partielle qui permettra d'atteindre les objectifs de cette condition. 2. Le client devra consulter toutes les parties prenantes afin de développer une stratégie partielle qui permettra d'atteindre les objectifs de cette condition. 3. Le client devra fournir des preuves documentées des requêtes et du soutien fourni, ainsi que les interactions avec des experts pertinents pour développer une stratégie partielle qui permettra d'atteindre les objectifs de cette condition. 2. Le client devra proposer et mettre en place une stratégie partielle qui permettra d'atteindre les objectifs de cette condition. 3. Le client devra fournir des preuves documentées du succès de la stratégie partielle pour atteindre les objectifs de cette condition. <p><u>Responsabilités</u></p> <ol style="list-style-type: none"> 1. Le client assisté par des parties prenantes consultées. 2. Le MPO qui fournira toute l'information nécessaire pour atteindre les objectifs de cette condition.

	<p><u>Échéances et étapes importantes</u></p> <p><u>Pour le premier audit</u> de surveillance, Il faudra fournir à l'équipe d'évaluation des preuves documentées que de l'information additionnelle sur l'utilisation du maquereau Canadien a été obtenue et qu'il y a eu discussion avec les parties prenantes sur une stratégie partielle visant à réduire l'utilisation du maquereau Canadien comme appât.</p> <p><u>Pour le second audit</u> de surveillance, Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu une proposition et une entente sur une stratégie partielle visant à réduire l'utilisation du maquereau Canadien comme appât.</p> <p><u>Pour le troisième audit</u> de surveillance, Il faudra fournir à l'équipe d'évaluation des preuves documentées que la stratégie partielle visant à réduire l'utilisation du maquereau Canadien comme appât a été mise en place.</p> <p><u>Pour le quatrième audit</u> de surveillance, Il faudra fournir à l'équipe d'évaluation des preuves documentées que la quantité de maquereau Canadien utilisé comme appât a été significativement réduite par la stratégie partielle mise en place.</p>
Consultation on condition	<p>Lobster industry, DFO</p> <p>Industry du homard, le MPO</p>

Table C1.3: Condition 3

Performance Indicator	PI 3.2.1 Fishery-Specific Objectives
Score	60
Rationale	<p>For the assessed fishery there is no specific objectives documented per se to achieve the outcomes expressed by MSC's principles 1 and 2.</p> <p>However, these objectives are implicit within the fishery's management system. From meeting held in Gaspé in June with DFO regional officers and managers, it is clear that stock conservation and sustainable fishery are the key outcomes of stock management to guaranty good economic returns from the fishery.</p> <p>In addition, DFO take into account impact of the fishery to the ecosystem, in particular for overlapped stock of other species (rock crab, common crab, scallops and red plaice with lobster stock). Protection zones are in force for some species (common crab, sea cucumber, urchin and scallops). An Integrated Fisheries Management Plan (IFMP) is to be now prepared and will be completed at the end of 2014.</p> <p>While lobster conservation plans contain specific objectives that are in line with the outcomes expressed by MSC's principles 1 and 2, they are not included in the management system as targets to attain and not supported by performance indices to see the progression on a time scale.</p> <p>The assessor team considers that the management system must be based on short and long term objectives, measurable on a time frame and adjusted depending on stock and fishing fluctuations. In the absence of objectives that are explicit within the fishery management system, the fishery does not meet SG80.</p> <p>La pêche évaluée n'a pas comme tel d'objectifs spécifiques documentés afin d'atteindre les objectifs en accord avec les Principes 1 et 2 du MSC.</p> <p>Cependant, ces objectifs sont implicites au système de gestion de la pêche. Il est clair, d'après les rencontres tenues à Gaspé en juin avec les gestionnaires et la direction régionale du MPO que la conservation et une pêche durable sont les objectifs majeurs de la gestion des stocks pour garantir la viabilité économique de la pêche.</p> <p>De plus, le MPO prend en considération les impacts de la pêche sur l'écosystème, en</p>

	<p>particulier ce qui a trait au chevauchement avec le homard des stocks d'autres espèces (crabe de roches et crabe commun, pétoncles, plie rouge). Des zones de protection sont aménagées pour certaines espèces (crabe commun, concombre de mer, oursin vert et pétoncles). Un Plan de Gestion Intégré de la Pêche (PGIP) est actuellement en préparation et sera complété d'ici la fin de 2014.</p> <p>Bien que le Plan de conservation du homard contienne des objectifs spécifiques qui sont en accord avec les objectifs des Principes 1 et 2 du MSC, ils ne sont pas inclus dans le système de gestion comme des buts à atteindre et ne sont pas supportés par des indices de performance pour connaître leur progression dans le temps.</p> <p>L'équipe d'évaluation considère que le système de gestion doit reposer sur des objectifs à court et à long terme, mesurables dans le temps et ajustables selon les fluctuations des stocks et de la pêche. En l'absence d'objectifs implicitement inclus dans le système de gestion, la pêcherie n'obtient pas le score de 80.</p>
Condition	<p>The client must provide evidence that short and long-term objectives which are consistent with achieving the outcomes expressed by MSC's Principle 1 and 2 are explicit within the fishery's management system. To do so, the client must provide evidence that the IFMP under development, identifying the lobster fishery-specific objectives, has been finalized and adopted for use for the fishery.</p> <p>Le client doit fournir des preuves que des objectifs à court et long terme en accord avec les objectifs des Principes 1 et 2 du MSC sont explicitement définis à l'intérieur du système de gestion de la pêcherie.</p> <p>Pour y arriver, le client doit fournir la preuve que le Plan de Gestion Intégrée de la Pêcherie (PGIP) qui est en élaboration et qui identifie des objectifs spécifiques à la pêcherie du homard, est bel et bien terminé, adopté et utilisé par la pêcherie.</p>
Milestones	<p><u>By Year 1:</u> The Assessment team shall be provided with documentary evidence that client harvester groups and lobster fishery stakeholder/participant consultations regarding the IFMP for the Gaspésie lobster fishery, including the short and long-term objectives that are consistent with the MSC's Principle 1 and 2, have been planned and commenced (score remains unchanged).</p> <p><u>By Year 2:</u> The Assessment team shall be provided with documentary evidence that the IFMP for the Gaspésie lobster fishery, including the short and long-term objectives that are consistent with the MSC's Principle 1 and 2, has been finalized and adopted (score reaches 80).</p> <p><u>Pour l'an 1:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées que le processus de consultation auprès des pêcheurs et autres parties prenantes de l'industrie concernés par le PGIP de la pêcherie au homard en Gaspésie, incluant les objectifs à court et à long terme qui sont en accord avec les objectifs des Principes 1 et 2 du MSC, a été planifié et entamé (score inchangé).</p> <p><u>Pour l'an 2:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées que le PGIP pour la pêcherie au homard en Gaspésie, incluant les objectifs à court et à long terme qui sont en accord avec les objectifs des Principes 1 et 2 du MSC, est terminé et adopté (score atteint 80).</p>
Client action plan	<p><u>Action Plan</u></p> <ol style="list-style-type: none"> 1. The client will immediately ask the DFO what information and which support can be provided by the fishery to fulfil this condition. 2. The client will support acquiring of any additional information that may be required to meet the requirements of this condition. 3. The client will provide documentary evidence of the requests and support provided on this condition. 4. The client will support the DFO in conducting stakeholder consultations regarding the IFMP. 5. The client will support the DFO after consultation in development of timelines for the objectives specified in the IFMP.

	<p><u>Responsible parties</u></p> <ol style="list-style-type: none"> 1. The client with consultation will support all activities of DFO reviewing and finalizing the IFMP. 2. The DFO will conduct consultations with stakeholders regarding the IFMP. 3. The client will support the DFO in consultations with client stakeholders. 4. The client will support the DFO in defining appropriate performance indicators by which to measure fishery objectives. <p><u>Timeframe for Milestones</u></p> <ol style="list-style-type: none"> 1. By the first annual surveillance audit the CAB shall be presented with evidence that consultations with stakeholders regarding the IFMP have been planned and have commenced. 2. By the second surveillance audit the CAB shall be provided with documentary evidence that the IFMP has been finalized and adopted. <p><u>Plan d'action</u></p> <ol style="list-style-type: none"> 1. Le client devra immédiatement solliciter le MPO pour savoir quelle information et quel support lui seront fournis pour atteindre les objectifs de cette condition. 2. Le client devra voir à obtenir toute l'information additionnelle qui pourrait être nécessaire pour atteindre les objectifs de cette condition. 3. Le client devra fournir des preuves documentées des requêtes et du soutien fourni pour atteindre les objectifs de cette condition. 4. Le client devra collaborer avec le MPO pour réaliser les consultations sur le PGIP avec toutes les parties prenantes. 5. Le client devra collaborer avec le MPO après les consultations pour mettre en œuvre les objectifs spécifiés dans le PGIP. <p><u>Responsabilités</u></p> <ol style="list-style-type: none"> 1. Le client, supporté par des consultants pertinents, participera à toutes les activités du MPO concernant la révision et la finalisation du PGIP 2. Le MPO réalisera des consultations avec toutes les parties prenantes concernées par le PGIP 3. Le client collaborera avec le MPO pour organiser les consultations avec toutes les parties prenantes 4. Le client collaborera avec le MPO pour définir les indicateurs de performance appropriés qui permettront d'évaluer l'atteinte des objectifs de la pêche <p><u>Échéances et étapes importantes</u></p> <ol style="list-style-type: none"> 1. Pour le premier audit de surveillance, il faudra fournir à l'équipe d'évaluateur des preuves documentées que le processus de consultation auprès des pêcheurs et autres parties prenantes de l'industrie concernés par le PGIP pour la pêche au homard en Gaspésie, a été planifié et entamé. 2. Pour le second audit de surveillance, il faudra fournir à l'équipe d'évaluateur des preuves documentées que le PGIP pour la pêche au homard en Gaspésie, incluant les objectifs à court et à long terme qui sont en accord avec les objectifs des Principes 1 et 2 du MSC, est terminé et adopté.
Consultation on condition	DFO Le MPO



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Chandler, le 2 septembre 2014

M. Vincent Malouin
Directeur de secteur / Area Director
Secteur Gaspésie-Bas-St-Laurent/Gaspe-Lower St-Laurence Area
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Pêches et Océans Canada / Fisheries and Oceans Canada
Région du Québec / Quebec Region

OBJET : Demande d'appui au Ministère Pêches et Océans Canada pour la mise en œuvre du Plan d'Action du Client du Regroupement des pêcheurs professionnels du sud de la Gaspésie pour l'éco-certification du Marine Stewardship Council

Monsieur Malouin,

Nous vous avons fait parvenir le 28 août dernier le rapport préliminaire du client produit par la firme SAI Global suite à l'évaluation de la pêcherie au homard en Gaspésie (ZPH 19, 20 et 21) face aux critères du Marine Stewardship Council (MSC). Vous y constaterez que notre pêcherie obtient une note de passage supérieure à 80 pour chacun des trois grands principes du MSC. Nous obtiendrons donc cette éco-certification qui, cependant, sera conditionnelle.

En effet, vous pouvez aussi lire dans ce rapport que trois conditions sont associées à l'amélioration de certains indicateurs de performance de notre pêcherie (2.1.1, 2.1.2 et 3.2.1). Pour conserver la certification, le RPPSG devra mettre en œuvre un Plan d'Action du Client qui permettra de corriger les lacunes identifiées et d'atteindre les

objectifs de ces conditions dans un délai prescrit. Nous élaborerons bientôt les détails de ce Plan d'action du Client et vous le ferons parvenir dès que possible.

Une chose est sûr, pour mettre de l'avant son Plan d'Action du Client, le RPPSG aura besoin de l'appui de votre ministère, particulièrement pour la condition 3 qui demande que le Plan de Gestion Intégrée de la Pêcherie au homard en Gaspésie (PGIP) soit terminé, adopté et utilisé par la pêcherie.

Votre appui sera vraisemblablement nécessaire pour aussi atteindre les objectifs reliés aux deux autres conditions qui, elles, ont trait à la mise en place d'une stratégie pour s'assurer que la pêcherie au homard en Gaspésie ne nuise pas à la récupération et la reconstruction du stock de maquereau canadien qui, d'après la dernière évaluation, serait en situation critique.

Nous vous faisons parvenir cette lettre car tel que mentionné dans le rapport, nous avons besoin d'un engagement écrit de la part de votre ministère précisant que vous nous fournirez le support nécessaire pour mettre en œuvre ce Plan d'Action du Client. Une réponse rapide serait grandement apprécié, car comme vous vous en doutez, les délais de cette certification sont toujours longs d'une étape à l'autre et nous voulons nous assurer de terminer le processus avant le début de la saison de pêche 2015.

Veuillez accepter, Monsieur Malouin, l'expression de nos sentiments les plus distingués,

A handwritten signature in blue ink, appearing to read 'O'neil Cloutier', with a long horizontal stroke extending to the right.

O'neil Cloutier,
Directeur général

Letter of support from DFO



Pêches et Océans
Canada

Fisheries and Oceans
Canada

Gestion des pêches
Région du Québec
Secteur Gaspésie - Bas-Saint-Laurent

Fisheries Management
Quebec Region
Gaspé - Lower St. Lawrence Area

Classif. sécurité / Security

Le 16 septembre 2014

Votre réf./Your ref.

Notre ref./Our ref.

Monsieur O'neil Cloutier, directeur général
Regroupement des pêcheurs professionnels du Sud de la
Gaspésie
31, rue Commerciale O., bureau 201
Chandler (Québec) G0C 1K0

Objet : Demande d'appui au MPO, mise en œuvre du plan d'action en vue de la certification
MSC du homard de la Gaspésie

Monsieur,

J'accuse réception de la lettre que vous m'avez parvenue à Vincent Malouin le 2 septembre courant et je vous en remercie.

C'est avec attention que nous avons pris connaissance du rapport de la firme Global Trust et plus particulièrement des conditions reliées à l'obtention de la certification MSC.

Pour ce qui est des étapes devant mener à la finalisation et à l'adoption du PGIP, tel qu'entendu avec M. Malouin, le MPO, mènera des consultations auprès de l'industrie afin d'identifier les objectifs à court et moyen long terme pour la pêche, lesquels seront intégrés au PGIP. Selon l'information que j'ai reçue de M. Malouin, la planification des consultations a déjà fait l'objet d'une discussion avec votre organisation et ces dernières sont prévues plus tard cette année. Vous pouvez donc compter sur l'entière collaboration du MPO dans l'atteinte de cette condition.

Enfin, par rapport aux conditions reliées à l'utilisation du maquereau comme appât, vous pouvez également compter sur le support du MPO afin de vous aider dans la mise en œuvre du plan d'action qui vous permettra d'atteindre les deux conditions afférentes.

J'espère le tout conforme et j'en profite, à mon tour, pour vous féliciter de votre implication dans la gestion du homard.

Sincères salutations,

Sylvette Loblanc

Directrice de secteur intérimaire

CC : Vincent Malouin
David Courtemanche
Cédric Arseneau
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Appendix 2. Peer Review Reports

Peer reviewer A

Overall Opinion

<i>Has the assessment team arrived at an appropriate conclusion based on the evidence presented in the assessment report?</i>	Yes	Conformity Assessment Body Response
<u>Justification:</u> I conclude the team has arrived at the appropriate conclusion but some of the scoring justifications need to be clarified and two conditions need to be strengthened.		See assessment team response in Conditions section below.

<i>Do you think the condition(s) raised are appropriately written to achieve the SG80 outcome within the specified timeframe?</i>	No	Conformity Assessment Body Response
<u>Justification:</u> Condition 1: PI 211 and Condition 2: PI 212 I suggest that the wording of the fourth year milestone should be consistent with the objective: to provide evidence that the fishery does not hinder the recovery of the mackerel stock. The current milestone of providing evidence that the use of Canadian mackerel has been significantly reduced does not go far enough without a study to determine the effect of the new lower level of consumption.		The assessment team disagrees. The only way for the fishery to provide evidence that it does not hinder the recovery of the Canadian mackerel stock is to reduce significantly the use of Canadian mackerel as bait. A study to determine the effect of the new lower level of consumption on the Canadian mackerel stock is deemed unsuitable. The impact of the Gaspésie lobster fishery on the Canadian mackerel stock is indirect. The main direct impact on the Canadian mackerel stock is the directed fishery. If no management measures or recovery plan for the directed fishery are implemented, and the mackerel stock status remains at its actual status, it could not be said that the lobster fishery does hinder the recovery of the Canadian mackerel stock. By monitoring accurately the amount of Canadian mackerel used as bait and reducing significantly the use of Canadian mackerel, the lobster fishery will reduce significantly its impact on the Canadian mackerel stock and make sure that it does not hinder the recovery of the stock.

If included:

Do you think the client action plan is sufficient to close the conditions raised?	No	Conformity Assessment Body Response
<i>Justification:</i> Condition 1: PI 211 and Condition 2: PI 212 The current action plan relates to the current conditions that should be modified. Reducing the mackerel use significantly does not provide sufficient evidence that the scoring issue will be met without a study to determine the effect.		The assessment team disagrees. See response to comment above.

For reports using the Risk-Based Framework please follow [the link](#).

For reports assessing enhanced fisheries please follow [the link](#).

General Comments on the Assessment Report (optional)

Performance Indicator Review

Please complete the table below for each Performance Indicator which are listed in the Conformity Assessment Body's Public Certification Draft Report.

Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response
<i>Example:1.1.2</i>	No	No	NA	<i>The certifier gave a score of 80 for this PI. The 80 scoring guidepost asks for a target reference point that is consistent with maintaining the stock at Bmsy or above, however the target reference point given for this fishery is Bpa, with no indication of how this is consistent with a Bmsy level.</i>	

1.1.1	Yes	Yes	NA	The RBF has been used correctly to determine the score for this PI	No response required
1.1.2	Yes	Yes	NA	The RBF has been used in PI 111, therefore the scoring is correct.	No response required
1.1.3	Yes	Yes	NA	Sufficient evidence is provided in the text to conclude the lobster stock is not depleted and therefore this PI is not scored.	No response required
1.2.1	Yes	Yes	NA	The score for each scoring issue is fully supported with appropriate evidence.	No response required
1.2.2	Yes	No	NA	It is clear that the SG80 scoring issues are met but the scoring justification lacks a comment with reference to scoring issue SG100c justifying why it is not met.	The assessment team acknowledges the reviewer for this comment and the rational was amended to justify why 100c is not met.
1.2.3	Yes	Yes	NA	The score is supported by the evidence for each scoring issue.	No response required
1.2.4	Yes	Yes	NA	The score is appropriate since the RBF was used to score PI 111.	No response required

2.1.1	No	No	No	<p>The argument supporting the “Yes” score for SG60c is unconvincing. What measures are in place that are expected to ensure the fishery does not hinder the recovery of the mackerel stock? The assessment team suggests 2 factors that have decreased the impact: reduction in fishing effort and high price of bait but are these expected to ensure the fishery does not hinder recovery? It would strengthen the argument if there was some data such as decreased mackerel sales to provide evidence of the reduction of dependence. There might also be data from the background information supporting the claim of reduction of effort but it would have to be linked to use of mackerel as bait. There is no evidence presented at all for the SG60d conclusion.</p>	<p>The assessment team disagrees. The reduction of the fishing effort (number of licences and trap allocation) has led to a decrease in the use of bait including Canadian mackerel as less fishermen and less traps per fishermen induce less bait used. The following statement was added to strengthen the rationale: “The number of licences was reduced from 216 licences in 1995 to 164 and 162 licences in 2013 and 2014, respectively. The number of traps was estimated at 2.26 millions in 2011. It was 2.38 millions in 2008 (diminution of 5%) and 3.05 millions in the period 1994-2005 (diminution of 26%). In 2006, the number of trap per license was reduced from 250 to 235.” The decrease of fishing effort is a management measure/tool.</p> <p>The assessment team does not have data on mackerel sold for bait purposes for the lobster fishery but according to DFO and the lobster industry, the increase of bait price led to a better and optimal utilization of bait.</p> <p>The assessment team also disagrees on the reviewer’s comment for 60d. The stock status of retained species is known and was well presented in the other scoring issues; it was not repeated here to avoid redundancy.</p>
2.1.2	No	No	No	<p>Price of mackerel cannot be considered a management measure unless it is regulated. There needs to be more evidence to support the SG60b conclusion concerning Canadian mackerel used for bait. The other scores are supported with evidence.</p>	<p>The assessment team disagrees. The price of the mackerel has not been considered as the primary measure but the reduction of fishing effort, please refer to the answer above.</p>

2.1.3	Yes	Yes	NA	The score is supported by evidence for each scoring issue.	No response required
2.2.1	Yes	No	NA	<p>While I agree with the scores and justification for most scoring here, it should be indicated quite clearly in SGa justification that there is no biologically based assessment for rock crab. The trend in landings compared to the long term average has been accepted as a indicator of abundance. Based on this assessment, rock crab is highly likely to be within the proxy for biologically based limits.</p> <p>The justification for SGb should simply be that crab is not outside the accepted proxy for biologically based limits, instead of repeating the text from SGa.</p> <p>SGc justification does not support the conclusion that the scoring issue is met. Is the status of rock crab poorly known? If no, then say so, then the evidence presented supports the argument.</p>	The text was changed to reflect the reviewer's comment.
2.2.2	Yes	Yes	NA	The score is supported by evidence for each scoring issue.	No response required
2.2.3	No	No	NA	<p>SGa: While I agree with the conclusions and the justifications, the SG100 requires the data to be not only accurate but verifiable. The low observer coverage would preclude concluding the latter is true.</p> <p>The conclusions regarding other scoring issues are supported by evidence.</p>	The assessment team agrees with the reviewer's comment, and added a statement on the absence of observer coverage in the rational for the scoring issue a.

2.3.1	Yes	No	NA	I would agree that the SG80 scoring issues are all met and the justification supports the scores. I'm not convinced that the higher degree of certainty of SG100 is met with any supporting evidence. This should be supported by evidence of independent observers or researchers than would support the claim by the fishers that incidents are low.	The information and data supported the very low interaction between the Gaspésie lobster fishery and ETP species and provided both in the background section and the scoring table rational are not only from fishermen but from Conservation and Protection enforcement activities and from the study carried out by a consultant for DFO (DFO 2010a). Also one of the characteristic of this fishery is that traps are set quite close to the shore (verified by the assessment team during the site visit, and Figure 12 and background section) due to bathymetry and lobster habitat distribution. There is thus low overlapping between lobster fishing ground and areas where whales occur.
2.3.2	Yes	Yes	NA	The score is supported by evidence for each scoring issue.	No response required
2.3.3	Yes	Yes	NA	Agreed, particularly the reference to verification by observers as being necessary to meet SG100.	No response required
2.4.1	Yes	Yes	NA	The score is supported by evidence for each scoring issue.	No response required
2.4.2	Yes	Yes	NA	The score is supported by evidence for each scoring issue.	No response required
2.4.3	Yes	Yes	NA	The score is supported by evidence for each scoring issue.	No response required
2.5.1	Yes	Yes	NA	The score is supported by evidence for each scoring issue.	No response required

2.5.2	Yes	No		SGa: The SG100 requires a plan. While the team references the many ecosystem policies and strategies of various federal and provincial governments, the St Lawrence Action Plan might be specifically referenced here to support the existence of a plan. The other conclusions are supported by evidence.	The assessment team agrees with the reviewer's comment and the text was modified.
2.5.3	Yes	Yes	NA	The score is supported by evidence for each scoring issue.	No response required
3.1.1	No	No	NA	<p>I would disagree with the "no" score for SG100a. The "binding procedures" are the laws that govern the fishery. This would include high level Acts such as the Fisheries Act, the Oceans Act and court decisions that govern relations in the fishery. The Marshall and Sparrow decisions govern relations with natives. There is also federal-provincial cooperation with the St Lawrence Action Plan. Check CBC4.2.1.1</p> <p>I would also disagree with "no" for SG100d since the scoring issue requires a "mechanism" to deal with the issues. The mechanism is the courts. The scoring issue does not require outcomes as suggested by the team, just effective national legal systems and procedures.</p>	<p>The assessment team disagrees.</p> <p>100a The Fisheries Act and Ocean Act are the primary laws for the fisheries management in Canada but do not govern cooperation with other parties. The assessment team could not conclude that the nature and scope of the cooperation with other parties was, in every case, subject to binding procedural arrangements. While the DFO Minister has near absolute discretionary powers to establish binding procedures in respect of cooperation with other parties, he can also unbind procedures and/or implement other mechanisms if he is so inclined.</p> <p>100d The Court cannot be considered as an integrate part of DFO management system in the legal rights respect. Also, outcomes are necessary to evaluate the effectiveness of the management system in taking into account legal rights.</p>

3.1.2	No	No	NA	<p>SGa: The justification addresses lobster specifically. This PI deals with higher level governance of fisheries in general and assesses general fisheries management policy. It is my understanding that the aspects of the Lobster fishery should be dealt with solely in 3.2.</p> <p>SGb: Agreed</p> <p>SGc: The reference to “all interested and affected parties” in the scoring issue includes public input into the consultation process. Are native groups a part of consultations? Are NGO’s and members of the public invited to consultations?</p>	<p>Scoring Issue a</p> <p>The assessment team disagrees. While the assessment team agrees that this PI is under the component Governance and Policy which mainly deals with the broader management level, PI 3.1.2 evaluates the consultation processes, participation and roles and responsibilities not only at the higher level governance of fisheries but also at the fishery-specific level. According to CB4.3.3 the assessment team “shall verify that consultation processes within the management system include consideration of consultation processes at both the management system level and fishery-specific management systems that occur within it.”</p> <p>Scoring Issue c</p> <p>As mentioned in the background section, First Nations are members of the lobster advisory committee. Advisory committee meetings are public (this statement was added in the rationale), members from the public, NGO and local medias can attend the meetings. Dates of advisory committee meetings are published on DFO Quebec Region website.</p>
3.1.3	Yes	No	NA	<p>SGa: I think you may have intended to say, “DFO management system is defined as ...” rather than “declined” but some would support the statement as written.</p> <p>The reference to the lobster fishery is not necessary or appropriate here since this is assessed in 3.2 and the precautionary approach particularly in 3.2.2.</p>	<p>The assessment team acknowledges the reviewer for this comment, and “declined” was replaced by “defined”.</p> <p>The assessment team agrees and the reference to the Gaspésie lobster fishery was removed.</p>

3.1.4	No	No	NA	<p>Assessment of this PI should be dealing with higher level, non-fishery specific issues. I would delete the last paragraph starting with "In fact, ..."</p> <p>I'm not sure there is sufficient evidence presented to support the SG100 being met entirely. Please provide evidence of regular consideration of incentives during consultations. Does the management system engender a sense of stewardship? (GCB4.5)</p> <p>I think it does since fishers participate in consultations and enforcement issues appear to be in decline but the evidence needs to be presented.</p>	<p>The assessment team disagrees. According to GCB4.5, This PI does not deal only with high management level, but "rationale provided for scores should include information about the existence of the specific practices in the fishery".</p> <p>The rationalization was a key ingredient in promoting more sustainable fishing as it offered the opportunity to improve the economic viability of participating fishing enterprises. The following was added to the rationale: <i>"The rationalization process contributed to engender a great sense of stewardship in fishermen themselves. To the opinion of both DFO and fishermen association representatives, fishermen are aware of the importance to maintain the lobster stock in good shape. RPPSG is directly involved in some actions to maintain the stock (joint research with DFO research team, participation in trap identification procedure)."</i> Also the Canadian management system consists of policy frameworks, regulations, fishery-specific measures, and licence conditions that promote DFO's sustainable fisheries objectives. The system's sustainability focus is supported by the industry's own contribution, including quality and best handling practices. The background section (4.5.4) lists incentives that promote/achieve sustainability on an ongoing basis.</p>
3.2.1	Yes	Yes	Yes	The score is supported by evidence.	No response required

3.2.2	Yes	No		<p>SGa: Agreed</p> <p>SGb: There is no justification comment supporting the conclusion of “no”</p> <p>SGc: Agreed</p> <p>SGd: The last paragraph relating to the lack of explicit fishery management objectives, is curious since there is no requirement in any of the SG60, SG80 or SG100 issues for “explicit objectives” However, if the word is removed, the comment could be evidence of not meeting any of the scoring issues. I suggest deleting this statement.</p> <p>I also suggest that without evidence to the contrary, the rest of the justification would support a conclusion of “yes”</p> <p>SGe: Agreed</p>	<p>Scoring issue b</p> <p>The following justification was added for supporting the No assigned to 100b. “On occasion the fishery management decision-making process has been judged by harvesters to be ineffective and slow to react due to limitations of staff and budget cuts.”</p> <p>Scoring Issue d</p> <p>The asseement team agrees. The last sentence was removed, and a Yes was assigned to 100d. As a consequence, the score changed from 90 to 95.</p>
3.2.3	Yes	Yes	NA	<p>SGa: Agreed</p> <p>SGb: Agreed</p> <p>SGc: Agreed</p> <p>SGd: Agreed</p> <p>The score is supported by evidence.</p>	No response required
3.2.4	Yes	No	NA	<p>SGa: In the third paragraph, the justification states there is no comprehensive research plan in plans up to 2009. If the PRSH has not been fully implemented, what evidence is there to satisfy SG100? Perhaps some clarification of the status of the PRSH would better support the score.</p> <p>SGb: Agreed</p>	The assessment team acknowledges the reviewer for this comment. This paragraph was deleted for more clarity. As stated in the last paragraph the PRSH was approved in June 2014 and was ffully implemented since then.
3.2.5	Yes	Yes	NA	<p>SGa: Agreed</p> <p>SGb: Agreed</p> <p>The score is supported by evidence.</p>	No response required

Any Other Comments

Comments	Conformity Assessment Body Response
The most difficult issue in this assessment is the use of Canadian mackerel for bait and the effect of the Gaspé lobster fishery on the mackerel stock. If data is available, it might be useful to show the use of Canadian mackerel as bait for all Canadian fishers (longline included) and then determine the percentage of use by Gaspé fishers in the unit of certification. This would present evidence of the impact of the fishers in the UoC on the mackerel stock.	The assessment team considers that the most important in Canadian mackerel issue is the implementation by the Gaspésie lobster of a strategy to reduce the use of Canadian mackerel as bait and to document the decrease of its use. Obtain information/data on the use Canadian mackerel as bait from all Atlantic Canadian fisheries could be difficult, but a good start would be information from the other Canadian lobster fisheries.

For reports using the Risk-Based Framework.

Performance Indicator	Does the report clearly explain how the process used to determine risk using the RBF led to the stated outcome? Yes/No	Are the RBF risk scores well-referenced? Yes/No	Justification: Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response:
1.1.1	yes	yes	<i>No additional comment</i>	
2.1.1				
2.2.1				

2.4.1				
2.5.1				

Peer reviewer B

Overall Opinion

<i>Has the assessment team arrived at an appropriate conclusion based on the evidence presented in the assessment report?</i>	Yes	Conformity Assessment Body Response
<u>Justification:</u> The assessment report contains a very comprehensive picture of the current knowledge of lobster biology, management measures and activities of the lobster trap fishery in LFA 19 – 21. The conclusions of the assessment team are strongly supported by the evidence presented in the report, which shows a healthy and well managed stock fished in a sustainable manner with appropriate consideration given to the impact of the fishery on non-target retained species, particularly those used as bait. I support their provisional conclusion that the fishery is eligible to be certified according to the MSC Principles and Criteria for Sustainable Fishing.		No response required
<i>Do you think the condition(s) raised are appropriately written to achieve the SG80 outcome within the specified timeframe?</i>	Yes	Conformity Assessment Body Response
<u>Justification:</u> The conditions raised relate to the use as bait of mackerel from a stock which appears to be in a poor state, and from the need to develop fishery specific short- and long-term objectives. The development of a plan to reduce the use of Canadian mackerel and to document such a reduction is an important step in demonstrating that the lobster trap fishery is not helping to prevent the recovery of the Canadian mackerel stock, and is written in an appropriate manner. The schedule presented for this is achievable, relevant and timely. The proposal for development of fishery-specific management objectives is also written in an appropriate manner. I understand work is underway which will feed into this area, and believe the specified timeframe here is also correct.		No response required

If included:

Do you think the client action plan is sufficient to close the conditions raised?	Yes	Conformity Assessment Body Response
Justification: The actions to be taken and the parties responsible for them are clearly spelled out in the action plan. The actions are set out in a stepwise manner making clear the improvements and actions needed to meet the timeframe specified. If these are implemented as described I have no doubt that they will close the conditions raised.		No response required

General Comments on the Assessment Report (optional)

In general the job done by the assessment team is of excellent quality and they should be commended for their work. The use of literature is wide-ranging and appropriately sourced, and the level of information provided in the background section of the report is directly in line with the findings of the assessment. I fully support the conclusion they reached with respect to this fishery.

Performance Indicator Review

Please complete the table below for each Performance Indicator which are listed in the Conformity Assessment Body's Public Certification Draft Report.

Performance Indicator	Has all the relevant information available been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	Conformity Assessment Body Response

1.1.1	Yes	Yes	NA	The justification for using the RBF approach is clearly explained and appropriate in this case. The score of 83 derived from the SICA and PSA is also well explained. The background information presented on the productivity of the stock is adequately described in the text of the assessment report and cites here multiple instances of primary peer-reviewed literature on biological parameters of lobster in the Gulf of St Lawrence, and descriptions of the fishery from multiple sources (e.g. DFO, fishers, C&P).	No response required
1.1.2	Yes	Yes	NA	Default value of 80 used as RBF used for PI 1.1.1.	No response required
1.1.3	Yes	Yes	NA	As stated in the response, this lobster stock is not depleted presently, therefore this PI is moot.	No response required
1.2.1	Yes	Yes	NA	<p>a) The stock management objectives of doubling egg production have been met by the harvest strategy in the three LFA under consideration here. Although the B_{msy} proxy were introduced recently, indications are the stock is above these reference levels and the strategy responsive to changes in state.</p> <p>b) As mentioned in previous responses, in a case where there is no analytical assessment and where MSY values were recently derived it is difficult to demonstrate the robust and precautionary nature of the harvest strategy, however the observed reductions in effort and exploitation rate and the increase in egg production provide evidence that it is achieving its objectives.</p> <p>c) Adequate regulations are documented as being in place to monitor performance of the harvest strategy.</p> <p>d) A responsive system for reviewing and modifying the harvest strategy, taking into account the views of fishers, is described.</p>	No response required
1.2.2	Yes	Yes	NA	a) Harvest control rules consistent with the overall strategy have been implemented. Exploitation rate has been reduced, and the HCR contains measures which may reduce it further should the stock limit reference points be crossed.	No response required

				<p>b) Some sources of implicit uncertainty are taken into account in the harvest control rule (e.g. landings as a proxy for biomass, temperature, spatial distribution) while others (e.g. catchability, efficiency) are not.</p> <p>c) Multiple examples are given of evidence presented suggesting that the tools in place are effective in producing exploitation levels consistent with the objectives of the harvest control rules.</p> <p>Overall, the SG80 awarded against this indicator is consistent with the evidence presented.</p>	
1.2.3	Yes	Yes	NA	<p>a) Although there are multiple indicators available, the lack of a population model and interpretation of indirect indicators prevent the award of SG100.</p> <p>b) All information required to implement the harvest control rule is regularly monitored. The lobster stock assessment is based on analysis of catch/CPUE trends, fishing pressure and some fishery-independent data. The effectiveness of the harvest control rule can be measured through trends in catch rates, exploitation rates, individual size, abundance of berried females, recruitment indices, abundance of large animals. It is not possible to affirm that information is gathered at a high frequency or with a high degree of certainty.</p> <p>The required criteria for SG80 are met across both sections.</p>	No response required
1.2.4	Yes	Yes	NA	Default value of 80 used as RBF used for PI 1.1.1.	No response required
2.1.1	No	No	Yes	<p>In addition to lobsters, fishers are allowed to retain male rock crab. Landings are very low, and presumably this species is usually discarded. Discard survival of crustaceans from lobster traps is typically high, therefore this is of minimal concern. The assessment team considered the species used as bait in this fishery here. These are mackerel sourced from the putative Canadian (NAFO SA 3+4) and US (NAFO SA 5+6) components, and Southern Gulf of St Lawrence autumn spawning herring. The degree of connectedness between these two mackerel stocks is unclear however the assessment team proceed</p>	As written in the background section, the 2010 TRAC mackerel assessment assessed the Northwest Atlantic mackerel as a single unit, and could not determine overfished and overfishing

				<p>on the basis that these are separate populations and treats them individually (indeed, the collapse of the stock in Canadian waters supports this hypothesis of two stocks).The Canadian component is clearly in some trouble; this stock lacks reference points and an agreed assessment, survey indices are very low and steps need to be taken to reduce fishing pressure on it. The four-year plan proposed here seems a good means to ensure that the use of mackerel as bait in the lobster trap fishery does not hinder recovery and rebuilding of the mackerel stock.It is acknowledged that a small proportion of the mackerel used is sourced from the US. The information provided on the US Mackerel component states that “As a result of the last stock assessment, fishing mortality remains very low (below $F=0.06$) since 1992, and the Atlantic mackerel spawning stock biomass (SSB) is 2.3 million mt for a SSB_{MSY} of 644,000 mt. Therefore, the stock is not overfished, and overfishing is not occurring”. These figures come from the 2005 assessment. However, as I read it, the 2010 Transboundary Resources Assessment Committee (TRAC) report distances itself from these values, stating “...[G]iven the significant retrospective pattern in the 2005 USA assessment, these reference points are now considered to be inappropriate”. Projections in the most recent assessment produced an SSB_{msy} proxy ($SSB_{40\%}$) of 194,000 mt (10th-90th percentiles of 143,500 - 296,600 mt). The estimated SSB, unadjusted for the retrospective pattern, in 2008 was 96,968 mt (71,710 - 141,196 mt), which would present a high risk of the stock being below its B_{msy} value. The TRAC report notes the strong retrospective tendency in the VPA and cautions against the adoption of these reference points. Nevertheless, the conclusions of the report are that the state of the stock is uncertain. Under the circumstances, I would find it hard to say that the stock was “highly likely to be within biologically based limits”, and feel this section may need to be reconsidered.</p>	<p>status, and considered the status of the Northwest Atlantic mackerel to be unknown. The assessment faced with uncertainty in stock struture and in particular whether the US and the Canadian contingents should be classified as two distinct stocks or one unit stock. This is the reason why the assessment team used the separate most recent stock assessments carried out by NOAA and DFO to evaluate the status of both the Canadian and the US mackerel contingents rather than the TRAC assessment report. The 2010 TRAC assessment report clearly does not recommend the use of the estimate $SSB_{40\%}$ of 194,00 mt. Therefore the estimate SBB of 96,968 mt in 2008 cannot be used, and the result of the TRAC assessment was that the stock status is unknown.</p>
2.1.2	No	No	Yes	<p>The comments on the justification for PI 2.1.1 regarding the US Mackerel stock are also valid here.</p>	<p>Please refer to the above response.</p>

2.1.3	Yes	Yes	Yes	<p>a) There are no perceived discrepancies between reported and actual catches of retained species. Despite the stock status of the bait stocks, accurate and verifiable information on the quantities used is available, in line with the requirements of the 100a score.</p> <p>b) Despite the lack of a formal assessment for Canadian mackerel, given the large amount of fishery dependent and independent data available, the award of 80b is justifiable in this case.</p> <p>c) The information available is adequate to support a strategy to manage retained species, but not sufficient to evaluate with a high degree of certainty whether such a strategy is achieving its objective for the Canadian mackerel, justifying the award of 80c.</p> <p>d) Monitoring of retained species is sufficiently detailed to assess mortality in all the species considered.</p>	No response required
2.2.1	Yes	Yes	Yes	<p>Bycatch appears minimal and the only significant species is rock crab. Indications are that this species is stable under current levels of mortality, although the assessment is based on trends in landings and mean size, rather than an analytical model, therefore a score of SG80 is justified.</p>	No response required
2.2.2	Yes	Yes	Yes	<p>Given that the main bycatch is rock crab:</p> <p>a) The technical measures, minimum landing sizes and effort reduction implemented in recent years comprise a bycatch reduction strategy, justifying the 100a score.</p> <p>b) There are indications that the rock crab stock is in a healthy condition, but without testing a score of 80 is appropriate.</p> <p>c) Again, there are indications but it is difficult to demonstrate that the strategy is effective, justifying the award of a score of 80.</p> <p>d) Finally, evidence is presented showing the overall strategy of bycatch reduction is effective, meeting the requirements for a score of 100.</p>	No response required

				Overall, the score of 90 against this indicator is appropriate.	
2.2.3	Yes	Yes	NA	<p>a) although analysis of data on bycatches of the main bycatch species has been carried out, and data on other species may be available from the e-logbook system, this has not been analysed, therefore a score of 80 is most appropriate.</p> <p>b) the lack of analytical assessments precludes the estimation of outcomes with respect to biological reference points with a high degree of certainty for those species taken as bycatch in this fishery</p> <p>c) again, information is available to assess the risk posed by the fishery, and the effectiveness of the strategy to manage bycatch, for some but not all species</p> <p>d) with further analysis it may be possible to assess bycatch mortalities for all species, but at present such monitoring is only available for the main species.</p>	No response required
2.3.1	Yes (but see comment regarding its presentation)	Yes	NA	<p>There is a high degree of certainty that the effects of the fishery are within limits of national and international requirements for protection of ETP species; there are no significant detrimental direct effects of the fishery on ETP species and that fishery does not pose a risk of serious or irreversible harm nor hinder the recovery of ETP species.</p> <p>My only suggestion for improving clarity would be regarding the cetacean bycatch section. I was not able to find the DFO, 2010a paper cited here, but infer from other papers which refer to it that these were probably Minke whales. I think it would be helpful, if possible, if this could be made more explicit here. Furthermore, the text currently reads “Between 2004 and 2009, 8 incidental catches of whales occurred in the Gaspésie lobster fishery, and none has been reported since.” – it would be useful to know if this decrease was due to a change in some fishing practices or regulations, or a statistical artefact (or for example, if whale populations in the area since 2009 have been so low that interactions are no longer a problem).</p>	The DFO 2010a report was available only at the time of the Iles-de-la-Madeleine lobster trap fishery full assessment (2013). As it’s a DFO report and it’s not confidential, the assessment team thinks DFO will provide this report if requested. The assessment team added clarification on the species incidentally caught in lobster traps, there were Minke whales as suggested by the reviewer, and this species which is listed not

					<p>listed under the SARA and considered not at risk under the COSEWIC.</p> <p>The reason of the decrease in incidental catch has not been investigated. But one of the potential explanations could be the reduction of the fishing effort over the years. The number of traps was estimated at 2.26 millions in 2011. It was 2.38 millions in 2008 (diminution of 5%) and 3.05 millions in the period 1994-2005 (diminution of 26%). In 2006, the number of trap per license was reduced from 250 to 235.</p>
2.3.2	Yes	Yes	NA	<p>The requirements of the Species At Risk Act (SARA) represents a comprehensive strategy for managing fishery interactions with ETP species fulfilling the requirements for 100a. There is documented evidence of the implementation and success of this strategy, fulfilling 100c and 100d, however there is no quantitative analysis relating to the success of implementation of SARA in this fishery, resulting in 80b, and justifying the overall score of 95</p>	No response required
2.3.3	Yes	Yes	NA	<p>Relevant information is collected via the SARA logbook scheme to support the management of fishery impacts on ETP species, including information for the development of the management strategy, to assess the effectiveness of the management strategy; and to determine the outcome status of ETP species, however the lack of independent verification of these logbooks through an observer scheme results in an overall score of 80 against this indicator</p>	No response required

2.4.1	Yes	Yes	NA	It is highly is unlikely that the fishery would reduce habitat structure and functioning to the point of serious and/or irreversible harm, but without specific evidence of this, a score of SG80 is appropriate.	No response required
2.4.2	Yes	Yes	NA	DFO has implemented a very successful habitat strategy which has been reviewed since its inception, and which is in line with the aims of UNGA Resolution 61/105. A number of actions have been implemented in the lobster trap fishery which aim to reduce its impact on habitat types, and consequently a score of 100a is warranted. Again, it is highly likely that this strategy reduces harmful effects on habitats, however without specific testing this cannot be guaranteed, and therefore a score of 80 is appropriate for section B. Overall, there is evidence that the strategy is being successfully implemented and is achieving its objectives. In conclusion, the score awarded to this indicator (95) is entirely appropriate.	No response required
2.4.3				Evidence is presented of the good level of knowledge of distribution of habitat types and their level of protection (100a). While there is sufficient data to predict the nature of impacts of the fishery in time and space, there is no evidence of direct testing of this (80b) and no description of changes in habitat distribution over time available (80c), therefore a score of SG90 for this indicator is justified.	No response required
2.5.1	Yes	Yes	NA	There is ample evidence presented that the fishery is unlikely to disrupt ecosystem structure and functioning to the point of serious and/or irreversible harm.	No response required
2.5.2	Yes	Yes	NA	There is a full and comprehensive framework in place to document and address ecosystem impacts associated with fishing activities in Canadian waters. Multiple documented steps have been taken in mitigating ecosystem impacts in the Gaspésie lobster fishery.	No response required
2.5.3	Yes	Yes	NA	Knowledge of the fishery impacts on the ecosystem are broadly understood, or can be inferred from other studies, but work such as analysis of logbook bycatch data or studies of gear impact remain to be carried out, and independent verification of data through observers is not available, justifying the score of 80.	No response required

3.1.1	Yes	Yes	NA	<p>The mandate, legal system and recognition of aboriginal fisheries are all documented as meeting most of the requirements of this indicator, although there are some shortfalls in binding measures regarding inter-party cooperation and the requirement for rights to be established in law before formal recognition, justifying a score of 80.</p> <p>A small comment on wording of paragraph ii of the response to 3.1.1.b – I think something like “as well as other marine activities” would be more appropriate than “the ocean itself”.</p>	The assessment team agrees with the reviewer’s comment and the wording of the cited paragraph was modified.
3.1.2	Yes	Yes	NA	The management regime described here seems to have identified all the relevant stakeholders, evidence is presented of well defined processes for feedback and the two-way flow of information being in place. A score of 100 against this indicator is entirely appropriate.	No response required
3.1.3	Yes	Yes	NA	Long-term objectives to guide decision-making, consistent with and the precautionary approach are defined. It is possible to take a precautionary approach without a precise methodology to estimate stock abundance, as has been done in this case.	No response required
3.1.4	Yes	Yes	NA	The management system demonstrably incentivises actions in line with MSC Principles 1 and 2, and considers these in its review.	No response required
3.2.1	Yes	Yes	Yes	The management system for the fishery as presented lacks short- and long-term objectives, and therefore does not meet the SG80 requirements. The remedial action proposed rests on the implementation of the Integrated Fisheries Management Plan (IFMP). A suite of actions and responsibilities have been defined, and I have confidence that if implemented these would raise the condition of the fishery performance to the required level.	No response required
3.2.2	Yes	Yes	NA	There are established decision-making processes that result in measures and strategies to achieve management objectives. The lack of explicit fishery-specific objectives in the management system against which performance can be judged prevents the awarding of the highest score for this PI.	No response required
3.2.3	Yes	Yes	NA	A very comprehensive set of compliance and enforcement measures are	No response required

				detailed under section A. Sanctions associated with infringements are presented under section B, and although these are thought to be effective in deterring misconduct, documentary proof that they do so is lacking. Sections C and D describe the reasons for the high level confidence that fishers comply with the regulatory system, and the lack of systematic non-compliance. An overall score of 95 for this indicator is clearly warranted.	
3.2.4	Yes	Yes	NA	A wide-ranging research plan has been developed for this and other lobster stocks in the Quebec region, and while this represents an excellent step, its recent publication and partial dissemination means that a score of 90 is appropriate here.	No response required
3.2.5	Yes	Yes	NA	Details are presented of various mechanisms in place for the evaluation of all parts of the management system. These will be strengthened through the adoption of the IFMP in 2015. The lack of regular external review of the fishery-specific management system means that a combined score of 90 is indicated in this case.	No response required

Any Other Comments

Comments	Conformity Assessment Body Response

For reports using the Risk-Based Framework:

Performance Indicator	Does the report clearly explain how the	Are the RBF risk scores well-referenced?	Justification: Please support your answers by referring to	Conformity Assessment Body Response:
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	process used to determine risk using the RBF led to the stated outcome? Yes/No	Yes/No	specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary.	
1.1.1	Yes	Yes	Information on the background to the scores used in the risk based framework is presented to an appropriate level of detail in appendix 2.1. The selection of the most vulnerable component appears well thought out and defensible. Table CC19 makes it clear how the two scores for the SICA and PSA are used to calculate the final score for this PI.	No response required
2.1.1				
2.2.1				
2.4.1				
2.5.1				

Appendix 3. Stakeholder submissions

No staholder's comments have been submitted to SAI Global.

MSC's comments and Assessment team's responses

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Date 19/12/2014

SUBJECT: MSC Review and Report on Compliance with the scheme requirements

Dear Geraldine Criquet

Please find below the results of our partial review of compliance with scheme requirements.

CAB	SAI Global (SAI)
Lead Auditor	Geraldine Criquet
Fishery Name	Gaspésie lobster Trap fishery
Document Reviewed	Public Comment Draft Report

Ref	Type	Page	Requirement	Reference	Details	PI
9180	Major	205, 207	CR-27.11.1.4 v.1.3	The CAB shall set one or more auditable and verifiable conditions for continuing certification if the fishery achieves a score of less than 80 but more than 60 for any individual PI. (...) 27.11.1.4 The CAB shall draft conditions to specify milestones that spell out: a. The measurable improvements and outcomes (using quantitative metrics) expected each year. b. The specific timeframes over which the milestones and the whole condition must be met. c. The outcome and score that shall be achieved at any interim milestones.	The milestones for Conditions 1 and 2 are prescriptive. As written, the milestones require that catches of mackerel are reduced rather than requiring an effective partial strategy is in place. For Condition 2, interim scores have also not been stated as per 27.11.1.4.c. (These may not be required for Condition 1 since there is only one scoring issue at the SG80 level.)	

Assessment team's response

The milestones of Conditions 1 and 2 were re-written to comply with the CR 27.11.1.4, as follow.

Condition 1

Milestones	<p><u>By Year 1:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been discussed.</p> <p><u>By Year 2:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been proposed and agreed.</p> <p><u>By Year 3:</u> T The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been implemented.</p> <p><u>By Year 4:</u> The Assessment team shall be provided with documentary evidence that the implemented partial strategy will work.</p> <p><u>Pour l'an 1:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu discussion sur une stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien.</p> <p><u>Pour l'an 2:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu entente et proposition d'une stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien.</p> <p><u>Pour l'an 3:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées que la stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien a bien été mise en place.</p> <p><u>Pour l'an 4:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées que la stratégie partielle mise en place fonctionnera.</p>
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Condition 2

Milestones	<p><u>By Year 1:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been discussed (score remains unchanged).</p> <p><u>By Year 2:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been proposed and agreed (score remains unchanged).</p> <p><u>By Year 3:</u> The Assessment team shall be provided with documentary evidence that a partial strategy to ensure the fishery does not hinder the recovery and rebuilding of the Canadian mackerel has been implemented (score reaches 75).</p> <p><u>By Year 4:</u> The Assessment team shall be provided with documentary evidence that the implemented partial strategy will work (score reaches 80).</p> <p><u>Pour l'an 1:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu discussion sur une stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien.</p> <p><u>Pour l'an 2:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées qu'il y a eu entente et proposition d'une stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien.</p> <p><u>Pour l'an 3:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées que la stratégie partielle afin que la pêche au homard d'entrave pas le rétablissement et la reconstitution du stock de maquereau Canadien a bien été mise en place.</p> <p><u>Pour l'an 4:</u> Il faudra fournir à l'équipe d'évaluation des preuves documentées que la stratégie partielle mise en place fonctionnera.</p>
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9181	Major	132-138, 176-181, 184-185	CR-27.10.6.1 v.1.3	Rationale shall be presented to support the team's conclusion	<p>2.1.1: For scoring issues c and d at the SG60 level, the report does not provide sufficient evidence that the fishery does not pose a risk and does not hinder recovery of Canadian mackerel. The rationale speaks to reduced effort for lobster and increased cost of mackerel as bait, but it does not provide any detail on the real mackerel bait amounts, the change in amounts, etc. Further, what specific measures are in place (SI d)? It is noted that both reviewers also questioned these rationales and scores.</p> <p>2.1.2: For scoring issue b at the SG80 level, the rationale does not provide a plausible connection between the reduction in lobster effort (i.e., fewer licenses) and the reduction in mackerel use as bait and the relative impact of this fishery on mackerel stock. Are there real numbers to show this reduction in mackerel use and the actual impacts on the stock? Further, the increase in mackerel price is not a management measure. It is noted that both reviewers also questioned these rationales and scores.</p> <p>3.1.1: The report does not justify scoring issue b at the SG100 level for legal disputes to be 'tested and proven to be effective.' There are generic examples provided (e.g. discussions and consensus preventing degeneration into legal disputes), but specific examples should be provided (such as the rationale provided for scoring issue d).</p> <p>3.1.2: For scoring issue b, the report does not provide the timeframe for the regularity of information and workshops. Are they specifically timed or ad-hoc?</p> <p>3.1.4: The report does not provide suitable information on the 'incentives reviews' that occur as part of the regular review of management policy. Do these reviews always consider the same information that is provided or is it adaptable? How often do these reviews take place? Section 4.5.4 of the report</p>	3.1.1, 3.1.4, 3.1.2, 3.2.1, 2.1.1, 2.1.2
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					contains specifics regarding the timing of certain implementations, but it is not clear by what means/regularity such changes take place. 3.2.1: The report provides examples of other invertebrate species within the ecosystem. However, if known, additional information should be provided for the main retained bait species for this fishery identified in PI 2.1.1.

Assessment team's response

2.1.1 and 2.1.2

The rational was modified:

The impact of the Gaspésie lobster fishery on the Canadian mackerel stock is indirect. Canadian mackerel uses as bait is purchased by lobster fishermen to local directed fisheries, so the amount of bait used is already accounting into mackerel fisheries management system and taking into account in in the Canadian mackerel stock assessment.

Although data on the real amount of mackerel uses as bait from the since 2012 mandatory e-log are not available yet, a survey carried out by MERIVOV during the 2012 fishing season (69 days for LFAs 20 and 21, and 71 days for LFA 19) estimated the daily amount of bait used between 194 lb and 298 lb, except for the last week where it was 147 lb. According the fishermen, approximately 60% of the bait used is mackerel.

According to the GCB3.3 "Measures" are individuals actions or tools that may be in place either explicitly to manage impacts on the component or incidentally, being designed primarily to manage impacts on another component, indirectly contribute to management of the component under assessment.

The reduction of the number of licences and the number of traps per licence are management measures that have contributed to reduce the impact on the Canadian mackerel and other P2 components as a decrease in the number of traps induced less bait used.

Regarding the comment on 2.1.2, the score of the PI is 60 so none of the scoring issues of SG80 is met.

The assessment team agrees that the increase in mackerel price is not a management measure but a factor that led to a better and optimal utilization of bait.

3.1.1

The rational was modified:

The policy on which a disputed decision has been made cannot be appealed. However, in some cases such as when a fisherman is dissatisfied with a licensing policy decision, fisherman can seek to have the decision re-assessed by an independent Appeal Board which may recommend a different course of action to the Minister.

In case of unsolved disputes, legal action could be brought to the federal or provincial legal court; they constitute independent and transparent organisms and guaranty fairness in decision. However, few legal disputes were brought to the Canadian legal courts. That was the case in the past with native population claims about marine resources. In this case DFO adapts the objectives and rules to court decision and generates a large negotiation with natives groups involved to integrate them to the fishery.

Face with court decisions on aboriginal fishing rights in 1990 (Sparrow judgment) and Marshall judgment in 1999, the Fishery and Oceans negotiated with First Nations and put in place in 1992 an Aboriginal fishery Strategy (AFS) to include aboriginal groups in several fisheries.

DFO's Aboriginal Fisheries Strategy (AFS):

1. Provide the framework for the management of fishing by aboriginal groups,
2. Provide the Aboriginal groups with an opportunity to participate in the management of fisheries, thereby improving conservation, management and enhancement of the resource
3. Contributes to the economic self-sufficiency of Aboriginal communities,
4. Provide a foundation for the development of self-government agreements and treaties,
5. Provide the opportunity to improve the fisheries management skills and capacity of Aboriginal groups.

The AFS results in the negotiation of mutually acceptable and time-limited fisheries agreements and also management measures agreement between DFO and Aboriginal groups.

3.1.2

Timeframe was added in the rational:

The consultation process and the advisory committee meetings are the occasion to all members to present relevant information, especially local knowledge from fishermen. The Lobster Advisory Committee meets annually. When major problems of management arise or when management modification proposal that has to be analyzed in great details, workshops are held on the subject, to find a common point of view and find a solution. These workshops are organized about each 2 years.

3.1.4

The rational was modified:

Incentives reviews are regularly done throughout the management policy and procedures review. Management policy and procedures for the lobster fishery are reviewed regularly, at the end of each fishing season. This review, which is adaptable, is done internally at DFO and externally through the advisory committee meetings.

Clarifications:

The section 4.5.9 of the report details the mechanism of internal and external review of the management system.

The major changes in the Gaspésie lobster fishery are presented in the Table 6 (p 43) which shows the regularity of the changes.

Table 22. Major changes in the Gaspésie lobster fishery.

Year	MLS	Other conservation measures
1992	76 mm	Voluntary V-notching
1994	76 mm	Release of V-notched females is mandatory
1995	76 mm	216 licenses (LFAs 20-21)
1997	78 mm	
2002	81 mm	Vertical opening of escape vent increased from 43 mm to 46 mm.
2004	82 mm (LFA 20) 83 mm (LFA 19)	
2006		Number of traps/licence reduced from 250 to 235 Season shortened by 2 days.
2007		9 licenses retrieved.
2008		Maximum catch size of 155 mm CL (LFA 20). 8 licenses retrieved.
2009		Maximum catch size of 150 mm CL (LFA 20)
2010		11 licenses retrieved.
2011		8 licences retrieved Maximum of 12 fathoms between traps; minimum of 6 traps per line.
2012		Standard trap; maximum catch size of 145 mm CL (LFA 20)
2013		10 licences retrieved

3.2.1

The rational was modified:

In addition, DFO take into account impact of the fishery to the ecosystem, in particular for overlapped stock of other species (rock crab, common crab, scallops and red plaice with lobster stock). Protection zones are in force for some species (common crab, sea cucumber, urchin and scallops. Regarding the main retained species bait, although there are no specific management measures or partial strategy to ensure that the fishery does not hinder the recovery and rebuilding of the Canadian mackerel stock, the reduction of the number of licences and the number of traps per licence are management measures that have contributed to reduce the impact on the Canadian mackerel and other P2 components as a decrease in the number of traps induced less bait used.

9182	Guidance	109, 144	*N/A v.n/a	(blank)	Table 20 states that the RBF was used to score PI 2.2.1, but the actual scoring table on 142-143 states otherwise. Please correct Table 20 if this is a typo. The rationale at for SI a in PI 2.2.2 states "retained", but it is assumed that is should reference "bycatch".	2.2.1, 2.2.2
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Assessment team's response:

The typo in Table 20 and in the rational for PI 2.2.2. scoring table has been corrected.

9184	Guidance	106-107	CR-27.12.2.1a v.1.3	27.12.2 If the CAB determines the systems are sufficient, fish and fish products from the fishery may enter into further certified chains of custody and be eligible to carry the MSC ecolabel. The CAB shall determine: 27.12.2.1 The scope of the fishery certificate, including the parties and categories of parties eligible to use the certificate and the point(s) at which chain of custody is needed. a. Chain of custody certification shall always be required following a change of ownership of the product to any party not covered by the fishery certificate.	The report does not state clearly where CoC begins (at landing or first sale).	
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Assessment team's response:

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.

9185	Minor	107	CR-27.12.1.6 v.1.3	27.12.1 The CAB shall determine if the systems of tracking and tracing in the fishery are sufficient to make sure all fish and fish products identified and sold as certified by the fishery originate from the certified fishery. The CAB shall consider the following points and their associated risk for the integrity of certified products: 27.12.1.6 The number and/or location of points of landing.	Aside from stating the LFAs in which under assessment product is landed, the report does not state the number and/or location of points of landing. The Client Sharing Letter does state that vessels are required to land their catch at specified facilities within the UoC and the purchase slips track landing ports.	
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Assessment team's response:

Location of landings is within the geographic region of Gaspésie. Permits holders within this region “covered 100% by the UoC” and all current permit holders can only land within this jurisdiction. Purchase slips identify the place of landing and also the catcher vessel.

9186	Minor	107	CR-27.12.2.1 v.1.3	<p>27.12.2 If the CAB determines the systems are sufficient, fish and fish products from the fishery may enter into further certified chains of custody and be eligible to carry the MSC ecolabel. The CAB shall determine:</p> <p>27.12.2.1 The scope of the fishery certificate, including the parties and categories of parties eligible to use the certificate and the point (s) at which chain of custody is needed. a. Chain of custody certification shall always be required following a change of ownership of the product to any party not covered by the fishery certificate. b. Chain of custody certification may be required at an earlier stage than change of ownership if the team determines that the systems within the fishery are not sufficient to make sure all fish and fish products identified as such by the fishery originate from the certified fishery. c. If the point where chain of custody certification is required is covered by the fishery certificate, the team shall determine the parties or category of parties covered by the fishery certificate that require chain of custody certification.</p>	<p>The report does not list the parties or categories of parties eligible to use the certificate, beyond the fishing vessels.</p> <p>The following sentences describes the premise of CoC incorrectly:</p> <p>"MSC rules require that buyers who take title of product are required to hold CoC certification under MSC rules unless they are included in the certificate and handle and sell live product."</p> <p>"All buyers who are not members of of the fishery certificate will be required to be included in a chain of custody scope but individual buyers may not necessarily require their own separate certificate depending on the extent of their activity."</p> <p>All buyers of product that are not included in a fishery certificate must hold CoC if they wish to sell that lobster as MSC certified, regardless of the product form or physical handling. If parties other than the vessels (e.g. off-loaders) are to be included in the fishery certificate, the report must describe how traceability is maintained throughout.</p>	
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Assessment team's response:

Text identified as defining CoC incorrectly has been removed from the report, and replaced as follow:

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).

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.

9188	Minor	106-107	CR-27.12.1.1 v.1.3	27.12.1 The CAB shall determine if the systems of tracking and tracing in the fishery are sufficient to make sure all fish and fish products identified and sold as certified by the fishery originate from the certified fishery. The CAB shall consider the following points and their associated risk for the integrity of certified products: 27.12.1.1 The systems in use.	The report is not clear whether all lobster caught in this UoC will bear a blue tie and tag, or whether lobster not in the UoC is also eligible to bear this Gaspe origin tag.	
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This report is provided for action by the CAB and ASI in order to improve consistency with the MSC scheme requirements; MSC does not review all work products submitted by Conformity Assessment Bodies and this review should not be considered a checking service. If any clarification is required, please contact Jodi Bostrom on +44 (0)20 7246 8934 for more information.

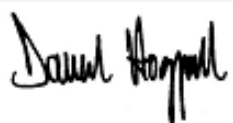
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Best regards,
Fisheries Oversight Director
Dan Hoggarth
Marine Stewardship Council



cc: Accreditation Services International

Assessment team's response:

The system in use for tracing product to the LFA and hence identifiable UoC is the government regulatory system which is based on at sea logbooks and registered buyer purchase slips. First of all, all vessel captains must fill out a logbook for each fishing trip identifying captures and LFA, and return to the local DFO office on a weekly basis. All buyers of lobsters must be registered with the Province of Quebec and all purchases of lobsters must be documented

on a purchase slip by the registered buyer containing details of purchasers within a week. Information includes the name of the permit holder, the name of the fishing vessel, place of landing, the quantity and size (large or small) of product per permit holder. Purchase slips are submitted to the local Provincial office. With reference to the blue origin tags, as this is a product of origin logo, it is not necessarily MSC linked. However, as the UoC currently includes all LFA's that are within the Gaspésie UoC definition there is 100% overlap.

Appendix 4. Surveillance Frequency

Table A4: Fishery Surveillance Plan

The determination of the surveillance level is based on Table C3 and C4. The score was calculated by adding scores from sections 1-4 in table C3.

1.Default Assessment tree used?	
Yes	0
No	2
2. Number of conditions	
Zero conditions	0
Between 1-5 conditions	1
More than 5	2
3. Principle Level Scores	
≥85	0
<85	2
4. Conditions on outcome PIs?	
Yes	2
No	0

The surveillance score of **5** was used to identify the surveillance level appropriate to the Gaspésie lobster traps fishery.

Table C4: Surveillance Level Years after certification or recertification					
Surveillance score (from Table C3)	Surveillance level	Year 1	Year 2	Year 3	Year 4
2 or more	Normal Surveillance	On-site surveillance audit	On-site surveillance audit	On-site surveillance audit	On-site surveillance audit & recertification site visit

Appendix 5. Client Agreement **(REQUIRED FOR PCR)**

Appendix 5.1 Objections Process **(REQUIRED FOR THE PCR IN ASSESSMENTS WHERE AN OBJECTION WAS RAISED AND ACCEPTED BY AN INDEPENDENT ADJUDICATOR)**