Fisheries and Oceans Canada | Pêches et Océans Canada

Integrated Fisheries Management Plan Summary
Species : Northern and Striped Shrimp (Pandalus borealis, Pandalus montagui)
Fishing area(s): Shrimp Fishing Areas 0, 1, 4, 5, 6 and Management Units Davis Strait East and West, Nunavut East and West and Nunavik East and West
As of 2017

The purpose of this Integrated Fisheries Management Plan (IFMP) summary is to provide a brief overview of the information found in the full IFMP. This document also serves to communicate the basic information on the fishery and its management to DFO staff, legislated co-management boards and other stakeholders. This IFMP provides a common understanding of the basic "rules" for the sustainable management of the fisheries resource. The full IFMP is available on request.
This IFMP summary is not a legally binding instrument which can form the basis of a legal challenge. The IFMP can be modified at any time and does not fetter the Minister's discretionary powers set out in the *Fisheries Act*. The Minister can, for reasons of conservation or for any other valid reasons, modify any provision of the IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.
Where DFO is responsible for implementing obligations under land claims agreements, the IFMP will be implemented in a manner consistent with these obligations. In the event that an IFMP is inconsistent with obligations under land claims agreements, the provisions of the land claims agreements will prevail to the extent of the inconsistency.

General Overview/Introduction, including map

The Northern shrimp fishery is commercial in nature and occurs from Nunavut to the Newfoundland shelf and out into the Northwest Atlantic Regulatory Area. It is prosecuted by ~250 inshore licence holders, and an offshore fleet (>100' sector) consisting of 17 licences (1.5 of which are held by each of Nunavut, Nunavik and Labrador Inuit interests). There are also special allocations held by community and Indigenous groups.

The fishery operates year round from April 1 to March 31, however fishing activity is dependent on ice coverage, and therefore varies by Shrimp Fishing Area (SFA). Notwithstanding closed areas, fishing occurs from the coast of Newfoundland northward into Baffin Bay.

Most of the >100' sector and inshore sector vessels use otter trawls, with a very limited number using beam trawls. To effectively minimize the bycatch of other species, the use of a Nordmore Grate is a mandatory measure.

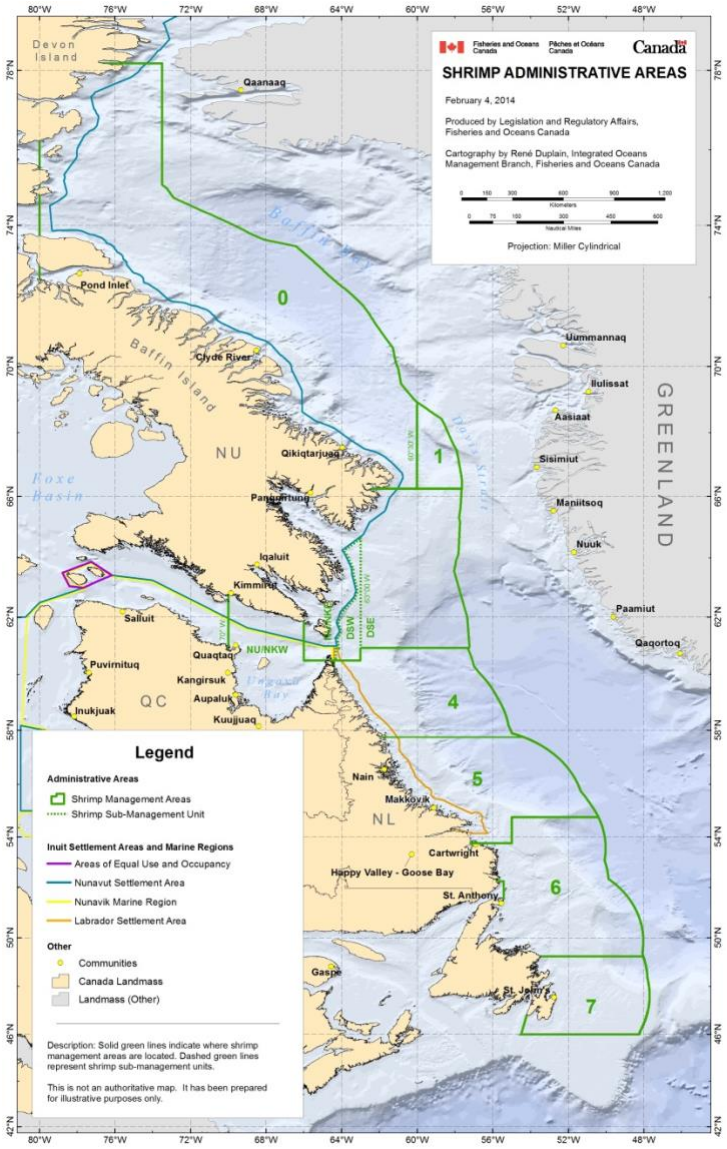
The Offshore Fleet

The >100’ shrimp sector, comprising vessels with length overall (LOA) greater than 30.48m (100ft) and weight greater than 500t, is comprised of approximately ten factory freezer trawlers. The > 100’ sector vessels operate out of ports in Newfoundland and Nova Scotia, with occasional landings in Greenland if fishing in far northern waters (SFAs 0 and 1) as ice and other environmental conditions permit. The shrimp harvested by the >100’ shrimp sector is flash frozen at sea, and then packaged for export to various global markets. There has been no increase to the number (17) of >100’ shrimp sector Northern shrimp licences issued since 1991.

The Inshore Fleet

The “inshore” sector is composed of the Newfoundland and Labrador (NL) based inshore vessels with maximum LOA < 89’11”), the NL based “midshore” fleet with LOA between 65’ and 99’), and the Quebec (QC) fleet comprised of Lower North Shore Quebec based vessels <89’ 11”.

Shrimp caught by the inshore fleet is landed frozen or fresh to be cooked, peeled and further processed as necessary by onshore licensed processing plants. The inshore fleet’s operations are based in NAFO Divisions 2J, 3KL, 4R and are established based on the enterprise’s homeport, by NAFO Division in the following manner: 2J, 3K north (north of 50°30’North), 3K south (south of 50°30’North), 3L, 4R and 4S. The majority fish in SFA 6 and from 2000 – 2014 in SFA 7 with limited effort in SFAs 4 and 5.



Stock Assessment, Science & Traditional Knowledge

Northern Shrimp are found in the Northwest Atlantic from Baffin Bay south to the Gulf of Maine. Striped Shrimp are found in the Northwest Atlantic from Davis Strait south to the Bay of Fundy. Shrimp are born and first mature as males, mate as males for one or more years and then change sex to spend the rest of their lives as mature females. They are considered harvestable once their carapace length exceeds 17 millimeters, when they are approximately 3 years of age. Shrimp are an important part of the marine food chain. Shrimp feed on a variety of zooplankton and are major prey for several species, such as Atlantic Cod, Greenland Halibut, redfish, skates, wolfish, and Harp Seals. The Department regularly conducts research on shrimp, both independent of other organizations and with other research groups. Resource status of Northern Shrimp in SFAs 5 and 6 is updated annually based on DFO fall multi-species trawl survey data. Resource status for Northern Shrimp and Striped Shrimp in SFA 4, the Eastern Assessment Zone (EAZ), and Western Assessment Zone (WAZ) is updated annually based on the Northern Shrimp Research Foundation-DFO summer shrimp trawl survey data. Trawl survey data provide information on shrimp distribution, length frequencies, and biomass. Trends in fisheries

performance are inferred from Total Allowable Catch, commercial catch, fishery catch per unit effort, and fishing patterns. Resource status of Northern Shrimp in SFAs 1 and 7 is assessed by the Northwest Atlantic Fisheries Organization Scientific Council. (SFA 7 has been closed to commercial fishing for Northern shrimp since 2015).

Indigenous and fisher Traditional Ecological Knowledge is an important component of fisheries management and is used with scientific knowledge for effective fisheries decision-making. DFO routinely consults resource users (including under formal Land Claims obligations) on a wide range of topics and incorporates their views, decisions and recommendations where applicable, and traditional knowledge in the development of scientific research and fishery management plans.

Economic, Social, Cultural Importance

The commercial harvest of Northern Shrimp has played an important role in Atlantic Canada for several decades. Fishery participants include the >100' and inshore fleets, as well as Special Allocation holders comprised of Indigenous Land Claimants, Indigenous Non Land Claimants and other groups. With 17 >100' vessel licences, and approximately 225 inshore licence holders, the fishery represents an important source of employment and revenue in Atlantic and Arctic Canada.

The Canadian Northern shrimp fishery makes an important contribution to northern development through employment and training of northern residents, including a substantial number of Inuit and Innu residing in northern Labrador, Nunavik and Nunavut. The formation of harvesting partnerships, including arrangements by >100' fleet licence holders who harvest special allocations, has been an important source of revenue in support of northern development. Some special allocation holders in Nunavut are issued a temporary licence and harvest their allocations with their own vessels. Shrimp processing plants provide substantial local employment. In addition, goods and services needed to support vessel operations and land-based processing activities are important contributors to the local economy creating jobs and generating income in service industries. Among the contributing activities are vessel and gear repair, maintenance, stevedoring, provisioning (food and fuel), observer coverage, and travel and transportation.

As one of the world's leading producers of cold-water shrimp Canada has seen landed values (LV) increase 44% in recent years (2013 to 2015), despite declines in landed quantities (LQ) due to total allowable catch (TAC) reductions. The inshore fleet's cumulative LV more than doubled to $116M in 2015, despite a 30% reduction in LQ, while the >100' fleet's LV increased 32% to $350M in 2015, despite a 10% reduction in LQ.

Canadian exports of Northern Shrimp between 2013 and 2015 mirrored the trends in landings, with export volumes falling 14% but export values rising 34% to $439M. The inshore fleet focuses on the shell-off product, which is processed on-shore. Canada's main destinations for this product are the United Kingdom, Denmark, and the United States. In contrast, the >100' fleet focuses on a frozen at sea, shell-on product, which is largely exported to China, Denmark and Iceland.

Although strong demand has fueled sufficient price increases in recent years to offset the impact to export and landed values from decreased LQs, this trend may not continue. Further LQ reductions, or price decreases, have the potential to reverse the growth trend in values.

Access and Allocations

Required text: The Minister can, for reasons of conservation or for any other any other valid reasons, modify access, allocations and sharing arrangements outlined in this IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

Access is described as "the opportunity to harvest or use fisheries resources, generally permitted by licences or leases issued by Fisheries and Oceans Canada under the authority of the Minister of Fisheries and Oceans. The Department shall take Indigenous and treaty rights to fish into account when providing these opportunities." Allocation is "the amount or share of the fisheries resource and/or effort that is distributed or assigned by the Minister of Fisheries and Oceans to those permitted to harvest the resource."

Access to the Northern shrimp fishery is considered stable for both the >100' sector, the inshore fleet and special allocations holders as of 2016. There is no new access to the Northern shrimp fishery, and consideration must be given to relevant Land Claims when making access and allocation decisions. The Northern shrimp TAC for each of the SFAs 0 to 6 is allocated to the >100' shrimp sector, special allocation holders and the inshore fleet depending on the SFA. From 1997 – 2015, the Last In, First Out (LIFO) policy was the main tool the Department used to determine access and allocations in each SFA, notwithstanding Land Claims.

Beginning in 2016, the Department, by Ministerial decision, implemented stable percent shares to allocation holders in each of the southern SFAs (4-6). SFA 4 percent shares were modified in 2017. Percent shares determine the amount of allocations to participants in SFAs 4, 5 and 6. Percent shares are not feasible in northern areas where land claims obligations require consideration of allocations arising from any changes in TAC on a case by case basis. Percent shares determine the amount of allocations to participants in SFAs 4, 5 and 6.

Table showing access to and allocations in SFAs 4 – 6 (as percent shares)

Fleet / Interest	SFA 4	SFA 5	SFA 6	SFA 7*
Offshore	76.2%	38.04%	23.1%	20.2%
Inshore	5.3%	-	69.6%	65.7%
Innu Nation	8.5%	5.19%	1.7%	-
Nunatsiavut Government	10%	9.9%	-	-
Northern Coalition	-	28.0%	-	-
NunatuKavut Community Council	-	6.22%	-	-
Inshore Affected Cod Harvesters (Cartwright to L'anse au Clair)	-	8.84%	-	-
Inshore Affected Cod Harvesters (Northern Peninsula)	-	1.04%	-	-
St Anthony Resource Basin Inc (SABRI)	-	-	4.5%	-
Fogo Island Co-Op	-	-	1.1%	-
PEI Consortium	-	-	-	9.4%
Miawpukek First Nation	-	-	-	4.7%

*Should NAFO take the decision to resume commercial fishing in SFA 7, the quota allocation key will be as described.

In the north, the offshore fleet, Nunavut and Nunavik have access to and allocations in SFA 1. Allocations in Management Units (MUs) Nunavut East, Nunavik East, and Nunavut West and Nunavik West, located in Hudson Strait, are reserved for Nunavut and Nunavik stakeholders, as these areas fall within the

Nunavut Settlement Area and Nunavik Inuit Settlement Area. Nunavut shrimp allocations are sub-allocated to individual Nunavut companies for a specified number of years. Nunavut sub-allocation recipients are issued a temporary licence. The Nunavik Inuit's allocations are transferred to Makivik Corporation to fish on their behalf. Access to the Nunavut and Nunavik MUs is limited to those enterprises that receive allocations in these areas, as amended from time to time.

Governance Process

Management of the Northern shrimp fishery is done in consultation with stakeholders primarily through the Northern Shrimp Advisory Committee (NSAC), which generally convenes annually. NSAC strives to reach consensus among stakeholders when making recommendations to the Minister. Stakeholder perspectives, science results and other considerations are presented to the Minister for decision.

To date, there are three land claims agreements in place that must be taken into consideration in the management of the Northern Shrimp fishery: The Nunavut Land Claims Agreement (NLCA), Labrador Inuit Land Claims Agreement and the Nunavik Inuit Land Claims Agreement (NILCA). These Agreements provide for the establishment of resource or wildlife co- management structures whose roles and responsibilities vary from advisory to decision making with respect to adjacent fisheries. The Minister of Fisheries and Oceans retains responsibility for resource conservation and management.

Shared Stewardship Arrangements

Working Groups

There are mechanisms not based on policy or a regulatory framework that allow the Department to advance conservation aspects of the Northern shrimp fishery, including working groups of NSAC to address ongoing or one time occurrences in the fishery, such as the Marine Stewardship Council Working Group.

Northern Shrimp Research Foundation

DFO has partnered with the Northern Shrimp Research Foundation (NSRF) to conduct a Northern shrimp survey in SFA 4 and the EAZ since 2005. Beginning in 2014 the NSRF and DFO have worked collaboratively to do the science survey in the WAZ. This survey is the only independent source of information of shrimp stocks in these areas.

Closed Areas

Additionally, there are a number of closed areas in the range of the Northern shrimp fishery, established for several conservation purposes, including the protection of corals and vulnerable marine ecosystems. Inshore crab area closures have been established as a result of concerns about the impact of bottom trawling on Snow crab. A Network of Marine Protected Area (MPAs) and other effective area-based conservation measures (i.e. Fisheries Act closures) is currently being developed within the range of the Northern shrimp fishery.

Management of the Fishery

Management Measure	Description
Location	Divided into Shrimp Fishing Areas and Management Units Includes closed areas SFA 7 and Division 3M is closed to commercial fishing

Total Allowable Catch / Quota	Specific to each SFA Access and allocations in each SFA determined by the Minister
Licences	Required when fishing
Species, area and catch limitations	Directed and bycatch TACs / quotas established for each SFA (where applicable) TAC and quotas are specified by tonnes round weight (completely unprocessed state) Conversion factors are specified, where applicable Fishery is closed if TAC has been harvested (by SFA) Quota Reconciliation is in place Season bridging by the >100' sector is permitted
Fishing Season	April 1 – March 31 for all SFAs except for SFA 1 and 7 (January 1 - December 31)
Fishing Gear	Otter trawl, 40 mm mesh size, which must be fitted with a properly installed Nordmore grate with a maximum bar spacing of: • 22mm for SFAs 0, 1 and 6; and • 28mm for management units Nunavut East, Nunavik East, Nunavut East, Nunavut West, Davis Strait East, Davis Strait West, and SFAs 4, and 5
Discards and Bycatch	• Nordmore grate is mandatory • Move away provisions to avoid bycatch • Groundfish, northern and spotted wolfish and leatherback turtle bycatch must be returned to the place from which it was taken, and if alive, in a manner that causes the least harm • Reporting of bycatch and discards is required as a condition of licence
Reporting requirements	• Use of Vessel Monitoring System unit required • Use of at sea observer coverage, dockside monitoring • Use of logbooks required, detailing up to date records of fishing activity • Reporting of all catches, discards, bycatch • All species at risk interactions, including locations, quantity, weight and condition • Daily hails for the offshore fleet

Compliance Plan

C&P is the enforcement arm of the Department and has the responsibility for promoting and maintaining compliance with legislation enacted for the purpose of protecting our three oceans, coasts, waterways, fisheries and habitats and ensuring that they remain healthy for future generations.

The C&P program is delivered regionally through a balanced regulatory management and enforcement approach including:

- Promotion of compliance through education and shared stewardship;
- Monitoring, Control and Surveillance (MCS) activities; and,
- Management of major cases /special investigations in relation to complex compliance issues.

Allocation of time towards a specific fishery is based in large part on an assessment of risk to the resource. In the Northern shrimp fishery, C&P promotes compliance by the following means:

- Patrols and Inspections
- Dockside Monitoring
- Aerial Surveillance
- Vessel Monitoring
- At-sea Observer Program

Fisheries and Oceans Canada Contact

For additional information on this IFMP Summary or to request an electronic version of the full IFMP, please contact _____TO BE DETERMINED_____.