

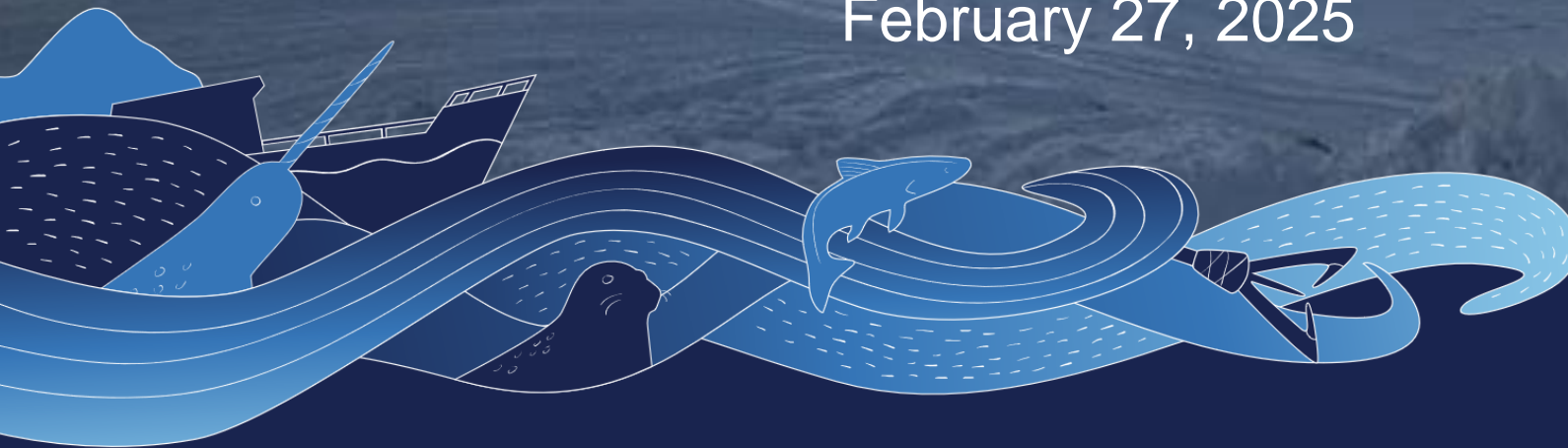


An Overview of Emerging Fisheries

Tasiujaquiaqmiut Sheewetaganapoi
Consortium Roundtable

February 27, 2025

Photo by Aimee Finley DFO FM



Overview

New & Emerging Fisheries Policy (NEFP)

- Definitions
- Policy Overview
- Emerging Fishery Process
- Application Process
- Licencing Process
- Considerations Before Applying

Science Requirements

- Exploratory Fishery Protocol
- Data Requirements
- Assessments

Questions?

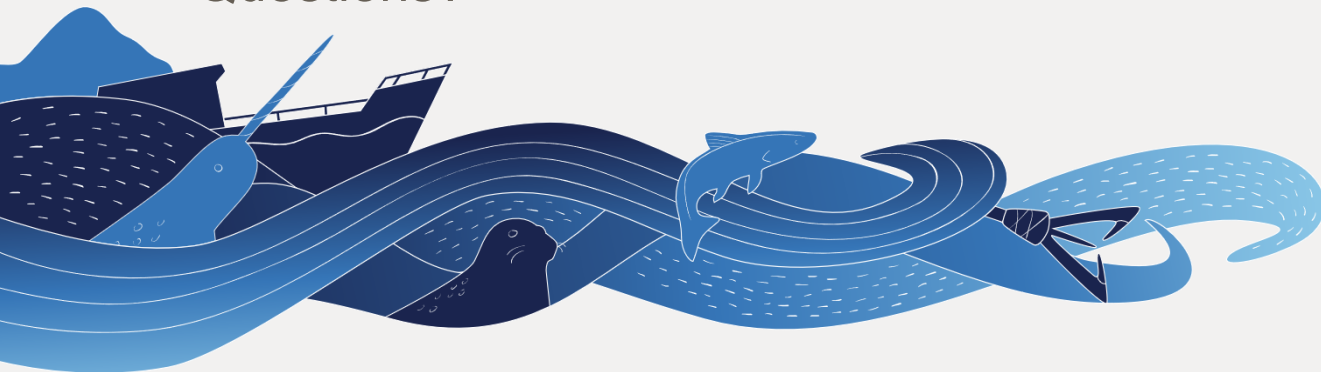




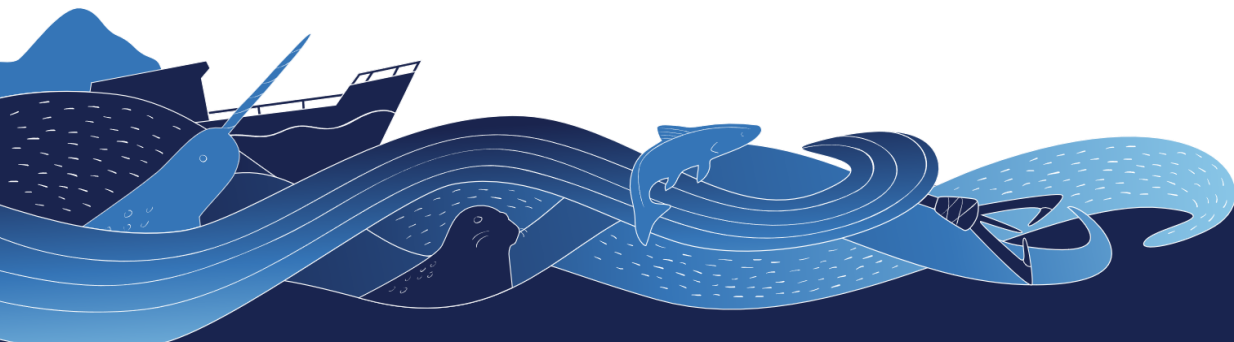
Photo by Brendan Malley, DFO

Definition

New Fisheries:

Fisheries involving **new species and/or stocks** that are not utilized or not fully utilized, and not currently covered by a management plan.

New emerging fisheries are guided by the New Emerging Fisheries Policy (NEFP) for commercial development of fisheries.



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The New Emerging Fisheries Policy



The NEFP was developed in 1996 and updated in 2008.



The policy guides the commercial development of fisheries for new or underutilized species.



Scientific understanding, Indigenous Knowledge, and sustainability are key guiding principles.



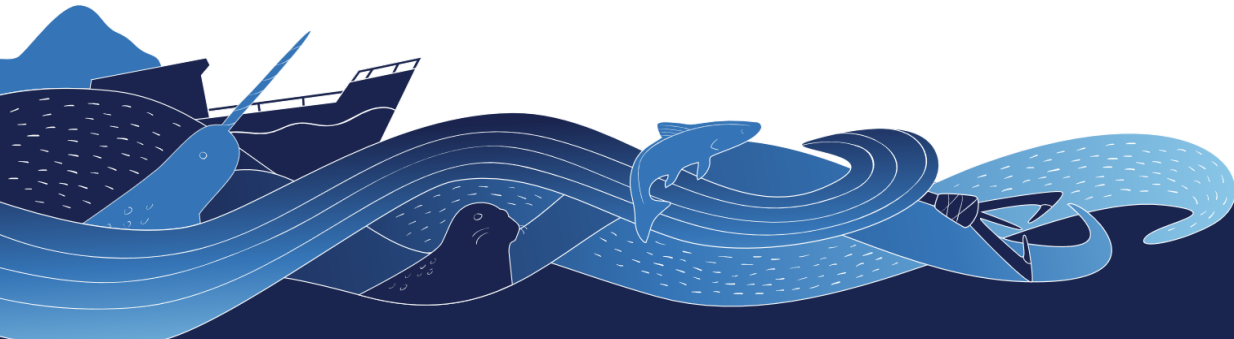
The policy is precautionary. The objective is to diversify fisheries & increase economic returns while ensuring conservation of the stock. Conservation will not be compromised.



Potential impacts on other species, fisheries, and habitats will be considered by DFO as part of assessments.

Key Information

- Applicants must intend to develop a future commercial fishery.
- The policy does not apply to:
 - Requests from Indigenous groups for food, social and ceremonial (FSC) purposes, or
 - Requests for experimental licences for scientific, experimental, educational, or display purposes. It is only for commercial fishery development.
- Applicants/participants in the new fishery are responsible for demonstrating it is both sustainable and commercially viable.
- There is no guarantee of a future commercial fishery.
- Safety at sea is essential to all fisheries. Participants must meet Transport Canada and DFO requirements.



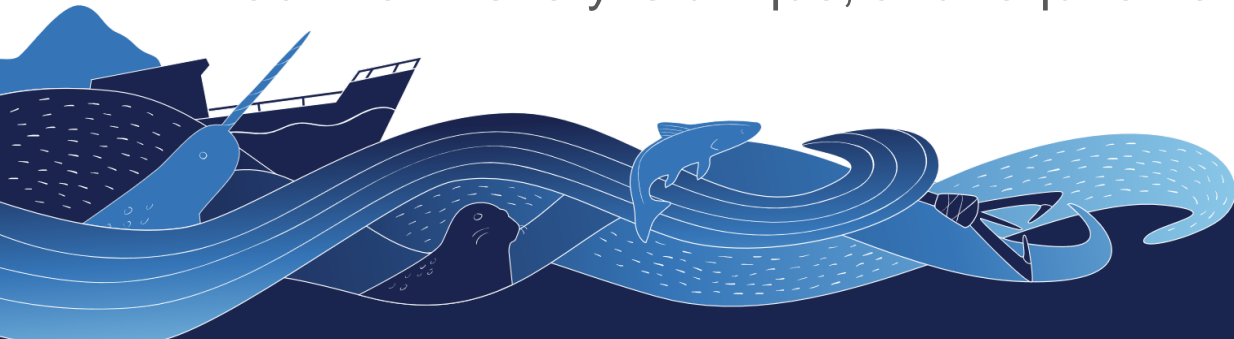
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What is the Emerging Fishery Process?

- Emerging fisheries are undertaken over multiple years to determine if a proposed fishery is both sustainable and commercially viable.
- New fisheries typically go through three developmental stages:
 1. Stage I - Feasibility
 2. Stage II - Exploratory
 3. Stage III - Commercial
- Data collection is essential and is the responsibility of the project proponent and all participants.
- Any allocation permitted during Stage I must not exceed the amount required to conduct the feasibility study.
- Each new fishery is unique, and requirements may vary.



Emerging Fisheries Development

FISHERIES AND OCEANS CANADA'S NEW EMERGING FISHERIES POLICY INVOLVES 3 STAGES IN ORDER TO ASSESS THE BIOLOGICAL SUSTAINABILITY OF A POTENTIAL FISHERY.



STAGE I (Feasibility):

Objectives may determine:

- If harvestable quantities of the species/stock exist
- What gear type is most suitable
- If there are multiple species and habitat impacts
- If markets exist
- The best approach for proceeding further

If Indigenous Knowledge is available, Stage 1 may not be required.

STAGE II (Exploratory):

Harvesters collect biological samples and record the following harvesting information using logbooks:

- Yearly catch-per-unit-effort data
- Total harvest
- Bycatch species and marine mammal interactions

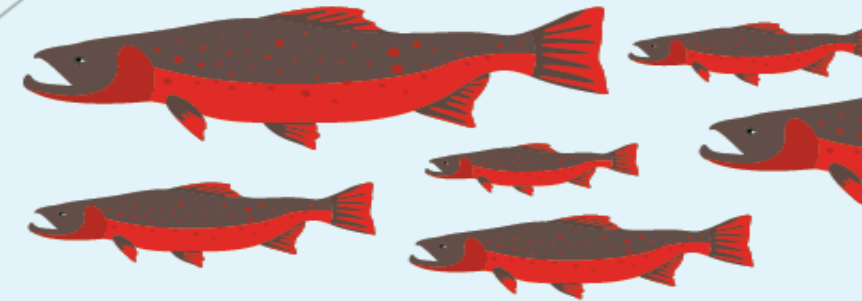
Logbooks are sent to DFO at the end of each fishing season. DFO conducts a stock assessment after data collection is completed. Data collection timeframes (number of years) will vary by species.

DFO Science provides advice based on the analysis of data and recommends sustainable harvest levels.



STAGE III (Commercial):

This stage is achieved once it has been determined that the species/stock can sustain a commercial fishing operation and appropriate approvals and regulatory amendments have been made.



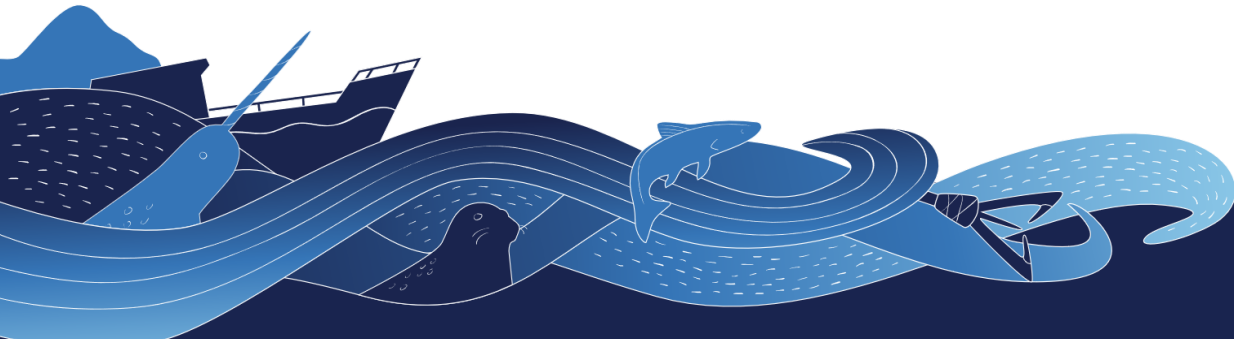
CONTACTS FOR STAGE I AND II LICENCES

XCNA-NT-NUpermit@dfo-mpo.gc.ca

DFO.ARCFMInfo-InfoGPARC.MPO@dfo-mpo.gc.ca

What Species are Eligible?

- Applications are evaluated on a case-by-case basis to determine the merit of establishing an emerging fishery.
- Generally, eligible species includes those not already harvested and/or covered by a management plan.
- Applicants should note that most viable fisheries are already commercialized. These are not eligible for new access under the [New Emerging Fisheries Policy](#).
 - However, in some cases you may apply to harvest a managed species in a new waterbody that is not covered by a management plan (i.e., Arctic char in new lakes in the Arctic region).



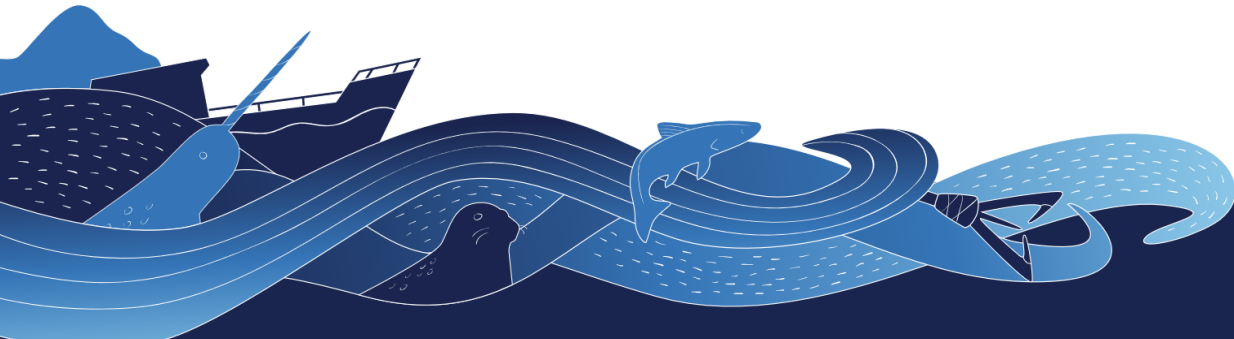
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What Species are Not Eligible?

- Due to their importance in the food web, forage species are covered separately in the [Policy on New Fisheries for Forage Species](#).
- Harvesting of Marine plants/Seaweeds within the coastal waters of Canada, would be licensed under s.45 of the *Fisheries Act*.
- Aquatic Invasive species.
- Species listed under the *Species at Risk Act*.

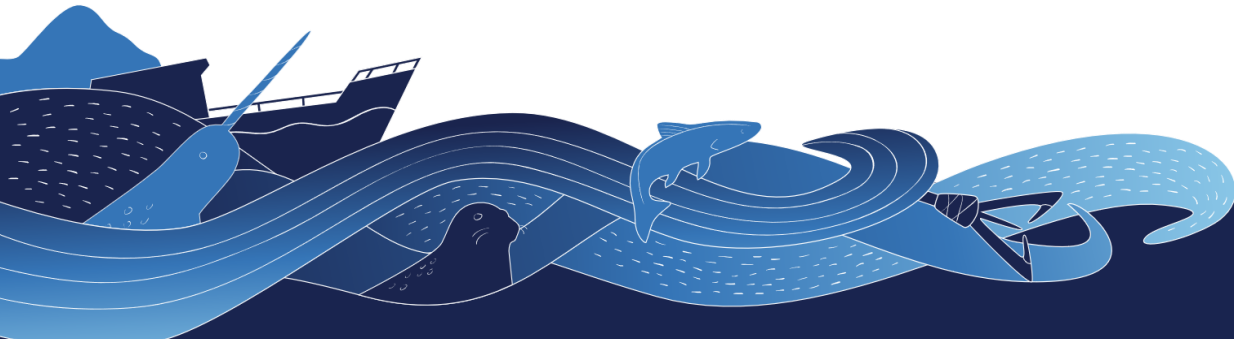


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Overview of the Application Process



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How to Apply?

- Reach out to the DFO contact in your region to request an application:

DFO.ARCFMInfo-InfoGPARC.MPO@dfo-mpo.gc.ca

- Applications are accepted year-round.
- Applicants can add supplementary information as attachments to their application.
- Applicants should allow a minimum of six months prior to the planned start of fishing activities for the review process.



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Emerging Fisheries Stage I and II

INTERIM Licence Application

EMERGING FISHERIES LICENCE APPLICATION STAGE I and II

In light of an increasing interest in accessing new fisheries, the Emerging Fisheries Policy was developed in 1996 to clearly lay out the requirements that must be met and the procedures to follow before a new fishery can be initiated. The objective of this policy is to diversify fisheries and increase economic returns while ensuring conservation of the stocks and the sustainable use of fisheries resources. The policy includes provision for the establishment of a scientific base with which stock responses to new fishing pressures can be assessed.

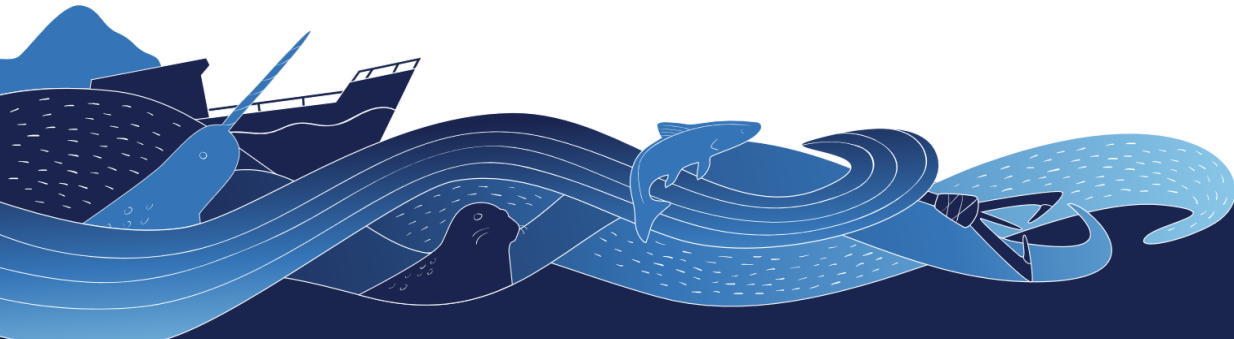
This policy applies to all new fisheries undertaken in marine or fresh water areas where the Department of Fisheries and Oceans manages the fishery, except for requests from Aboriginal groups for food, social and ceremonial purposes. For complete information on the policy, refer to the following website: <http://www.dfo-mpo.gc.ca/fm-gp/policies-politiques/efp-pnp-eng.htm>

Important Information for Applicants:

DFO has a policy of promoting increased Aboriginal participation in the management of fisheries, especially through co-management agreements, as well as providing economic development opportunities in existing and new fisheries. Accordingly, applications by Aboriginal communities will be given special consideration by DFO.

Aside from the special consideration given to Aboriginal participation, Feasibility (Stage I) licence holders will be given priority over new applicants for Exploratory licences (Stage II) and Stage II licence holders will be given priority for regular commercial licences (Stage III - Commercial Fishing) over new applicants.

IF YOU NEED CLARIFICATION ON ANY PART OF THE APPLICATION FORM OR ARE UNSURE WHICH STAGE YOUR APPLICATION SHOULD FALL INTO, PLEASE CONTACT THE LICENSING OFFICE.



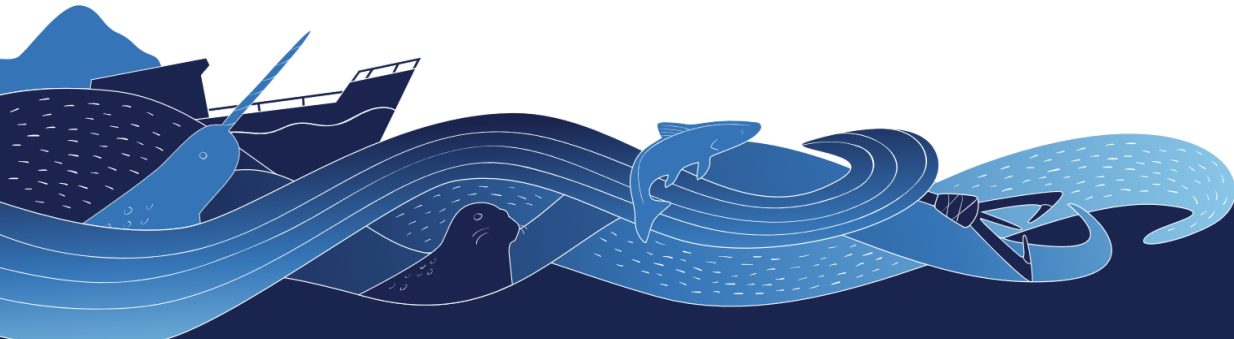
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What Information is Required to Apply?

- The species/stock you propose to harvest and a summary of what is known about it
- The fishing location (i.e., GPS coordinates, waterbody name)
- The harvesting method (i.e., gear type, vessel specifications and amount)
- Potential impacts to other species and/or the ecosystem from the proposed fishing activity
- Fishing plan/business case and funding sources (e.g., product use, buyer(s), potential markets)
- Letter of support from the local Hunters and Trappers Organization/Association, Renewable Resources Council

* For stage I licences, any allocation must be limited to what is required to meet the objectives of the feasibility study.



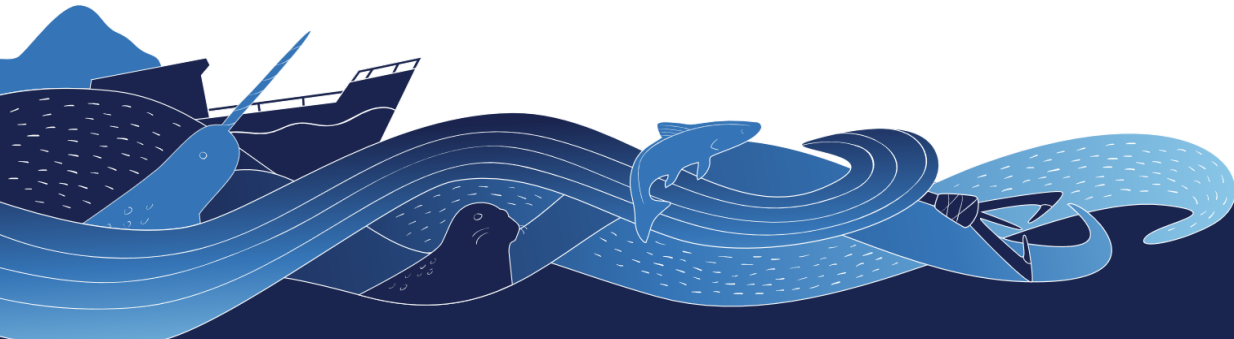
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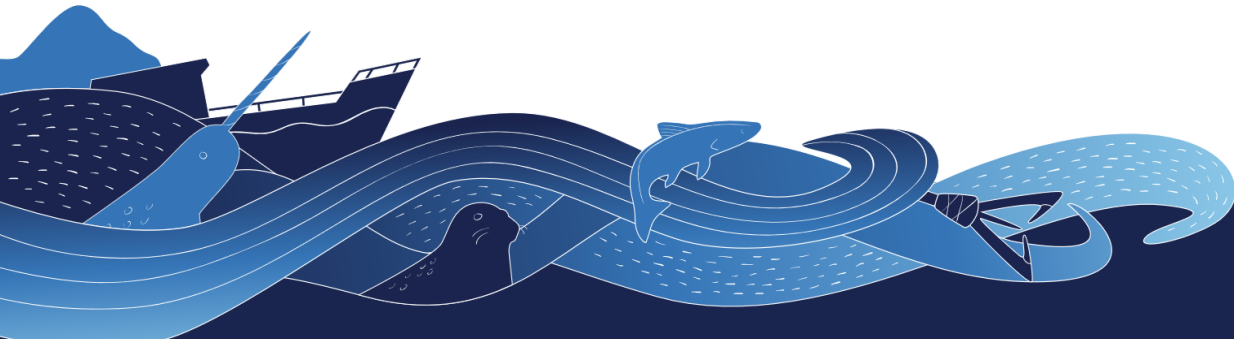
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Application Review Process

- Your application will undergo a review process by DFO to ensure that all requirements are met.
- Incomplete or insufficient applications will either be returned with a request for further information or screened out.
- Proposals that may be of interest to harvesters in more than one region will be reviewed by relevant DFO regions and may require more processing time.
- Some proposals may require additional consultations; e.g., Non-Government Organizations, and/or with Hunter and Trapper Organizations.
- A decision will then be made by DFO to approve or not approve the proposal. If approved, DFO will work with the proponent on next steps.



Overview of the Licencing Process



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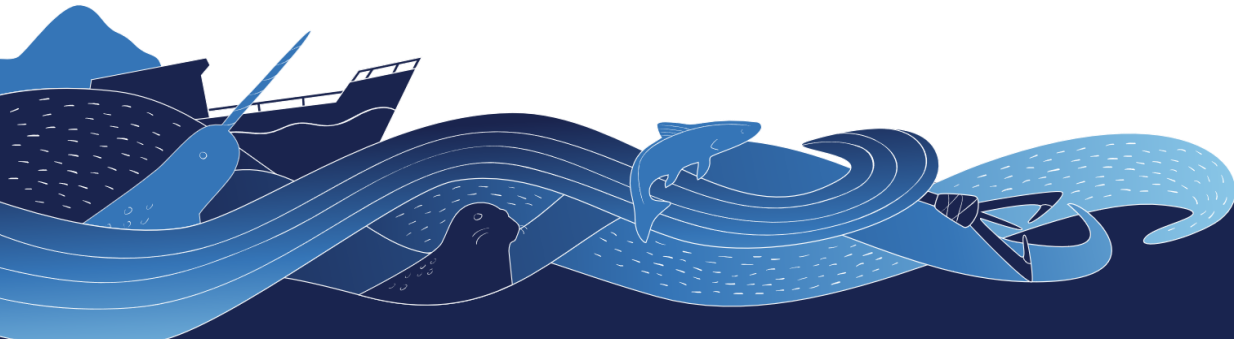
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Licencing Process

Once a decision is made to initiate a new fishery and successful applicants are notified, DFO will establish licence conditions, which often include:

- Permitted fishing location(s)
- Season dates
- Gear restrictions
- Quantity of fish that can be retained (if any)
- Gear-up deadline
- Bycatch limits
- Monitoring and reporting requirements
- Participation requirement

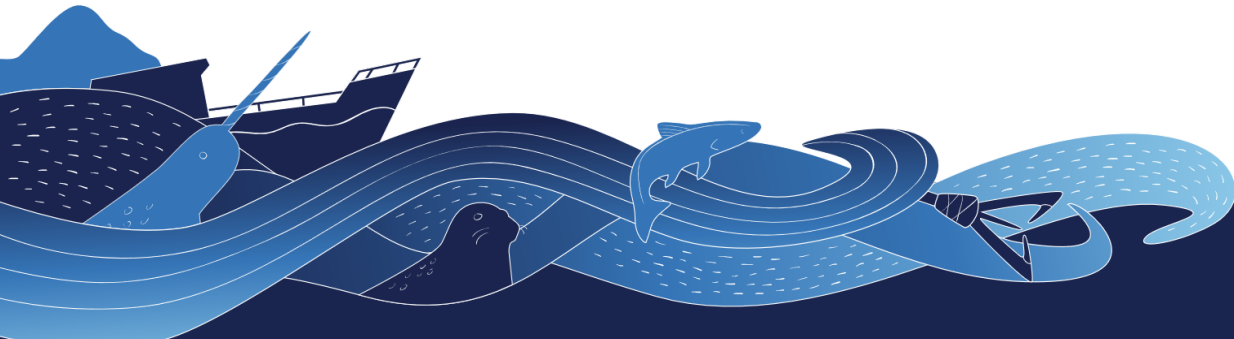


Licences Issued in Each Stage

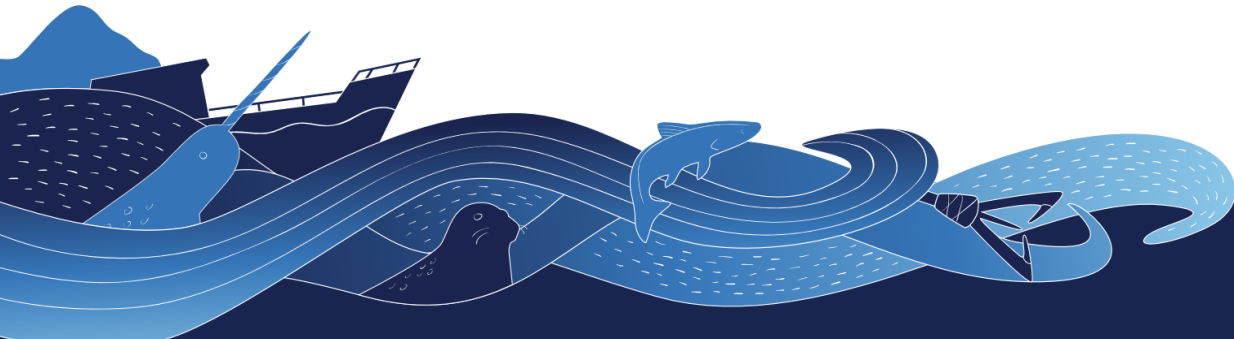
Stage I (feasibility): Licence issued under Section 52 of the *Fishery (General) Regulations* (FGR). *Stage I licence holders who have fulfilled requirements will be given priority for exploratory licences (Stage II).*

Stage II (exploratory): Licence issued under Section 7 of the *Fisheries Act*. *Stage II exploratory licence holders who have fulfilled requirements will be given priority for commercial licences.*

Stage III (commercial) : Commercial licence issued under Section 7 of the *Fisheries Act*.



Understanding the Responsibilities & Risks of Emerging Fisheries



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Considerations Before Applying

DFO would like to ensure that all applicants are fully aware of the risks, costs, and challenges of establishing new fisheries.

1. Few applications lead to new commercial fisheries.
2. The emerging fishery process from Stage I to Stage III can take several years – it requires a long-term time and financial commitment.
3. To advance to a commercial stage, there must be careful and consistent data collection over time to demonstrate the fishery is sustainable.
4. In some cases, industry is expected to develop and maintain scientific data collection after the new fishery transitions to commercial.



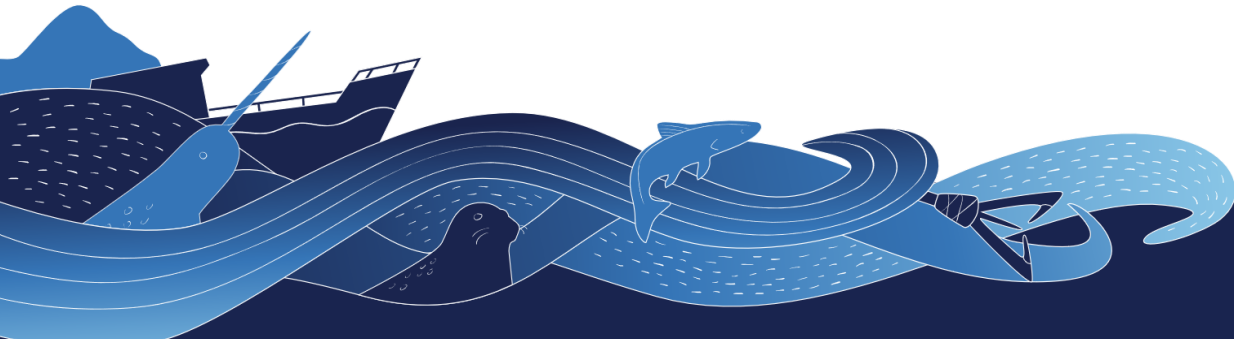
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Applicant Responsibilities

- Develop and submit application that meets all requirements.
- Payment of all applicable licensing fees
- Payment for operational costs (*e.g., gear-up, fuel, crew, vessel repairs, and at-sea observer coverage*)
- Annual participation in the emerging fishery (*Non-participation may result in loss of experimental/exploratory licence*).
- Follow all licence conditions and approved survey protocols.
- Collect and submit scientific data to DFO (*i.e. logbooks, harvest totals, at-sea observer reports*).
- Find a processor; demonstrate economic viability.



Scientific Requirements: Exploratory Arctic Char Protocol

 Fisheries and Oceans Canada / Pêches et Océans Canada

Science / Sciences

Central and Arctic Region

Canadian Science Advisory Secretariat
Science Advisory Report 2010/022

EXPLORATORY FISHERY PROTOCOL - NUNAVUT AND NORTHWEST TERRITORIES ANADROMOUS ARCTIC CHARR

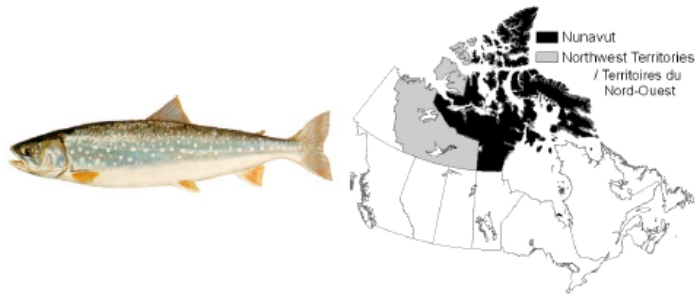


Illustration by DFO

Figure 1. Map of Canada highlighting Nunavut and the Northwest Territories.

Context :

Fisheries and Oceans Canada (DFO) has been actively developing new commercial fisheries in the North since the early 1970s. To explore the potential for commercial fisheries on Arctic Charr, *Salvelinus alpinus*, in the Northwest Territories (NT; now NT and Nunavut, NU) provisional quotas were test fished starting in 1973 (Kristofferson and McGowan 1981, McGowan 1985). Kristofferson and McGowan (1981) described data collection requirements and sampling sheets for test fisheries. McGowan et al. (1993) further described the rationale for the exploratory fishery protocol and the five years of sampling needed to evaluate a stock's potential for a commercial fishery.

Fisheries and Aquaculture Management, Central and Arctic Region, has requested science advice on whether revisions are needed to the five year sampling protocol for exploratory fisheries in light of DFO's New Emerging Fisheries Policy. The existing protocol was developed for freshwater/anadromous finfish species. Given the new policy and the potential for new fisheries to target a variety of species the exploratory sampling protocol also needs to be re-assessed to ensure it is appropriate for other species.

A peer review meeting was held to review and revise DFO's exploratory fishery protocol for anadromous Arctic Charr in Nunavut and the Northwest Territories to provide a sampling protocol for licence holders that will allow assessment of the biological sustainability of a commercial fishery.

 Fisheries and Oceans Canada / Pêches et Océans Canada
Science / Sciences

C S A S

Canadian Science Advisory Secretariat

Research Document 2010/077

S C C S

Secrétariat canadien de consultation scientifique

Document de recherche 2010/077

Information in support of an
Exploratory Fishery Protocol - Nunavut
and Northwest Territories Anadromous
Arctic Charr

Information appuyant le protocole pour
la pêche exploratoire à l'omble chevalier
anadrome du Nunavut et des Territoires
du Nord-Ouest

Melanie VanGerwen-Toyne and Ross Tallman

Fisheries and Oceans Canada / Pêches et Océans Canada
Freshwater Institute / Institut des eaux douces
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Canada

This series documents the scientific basis for the evaluation of aquatic resources and ecosystems in Canada. As such, it addresses the issues of the day in the time frames required and the documents it contains are not intended as definitive statements on the subjects addressed but rather as progress reports on ongoing investigations.

Research documents are produced in the official language in which they are provided to the Secretariat.

This document is available on the Internet at: <http://www.dfo-mpo.gc.ca/csas/>

La présente série documente les fondements scientifiques des évaluations des ressources et des écosystèmes aquatiques du Canada. Elle traite des problèmes courants selon les échéanciers dictés. Les documents qu'elle contient ne doivent pas être considérés comme des énoncés définitifs sur les sujets traités, mais plutôt comme des rapports d'étape sur les études en cours.

Les documents de recherche sont publiés dans la langue officielle utilisée dans le manuscrit envoyé au Secrétariat.

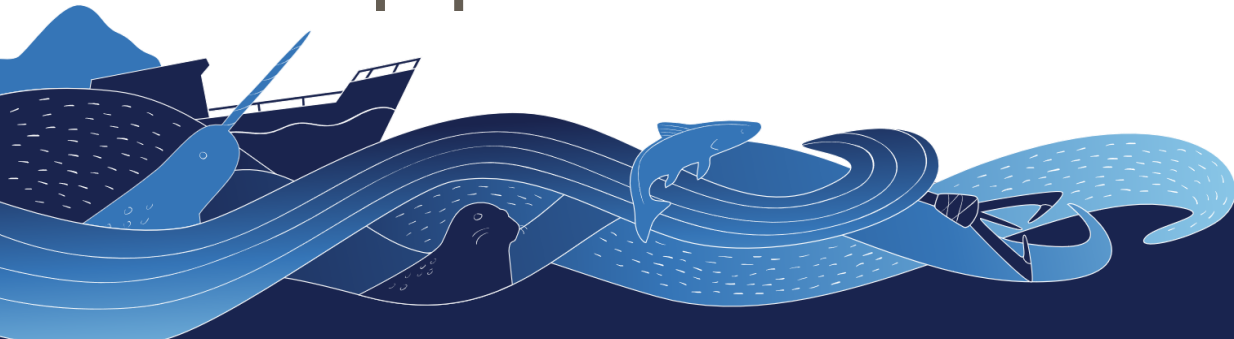
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Exploratory Fishery Protocol

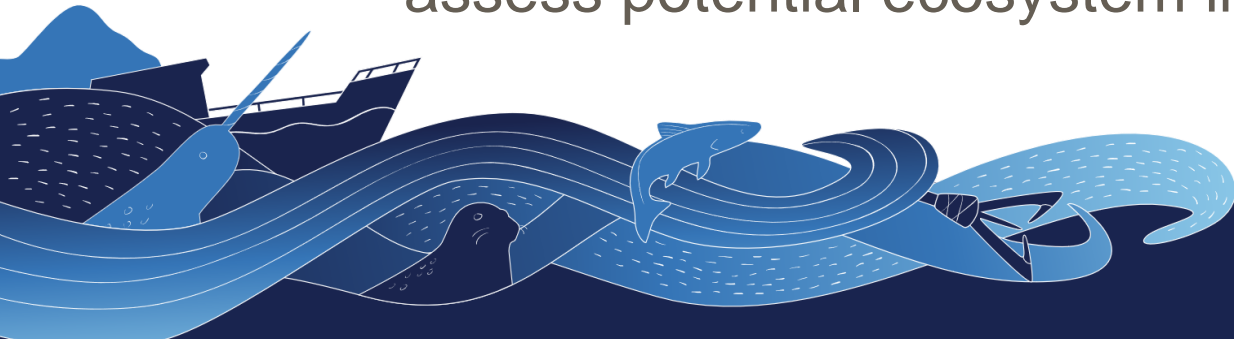
- Because stock size is not known, a conservative provisional quota is recommended for five years.
- Quotas typically range from 500-2500 kgs/year.
- Fishers are asked to fish to the full quota for each of the five years.
- It is important to properly assess any changes that may have occurred in the biological characteristics of the stock over the course of the fishery.
- **Without available stock size info, this process becomes a test to see whether the level of harvest has any measurable impact on the population.**



Scientific Requirements

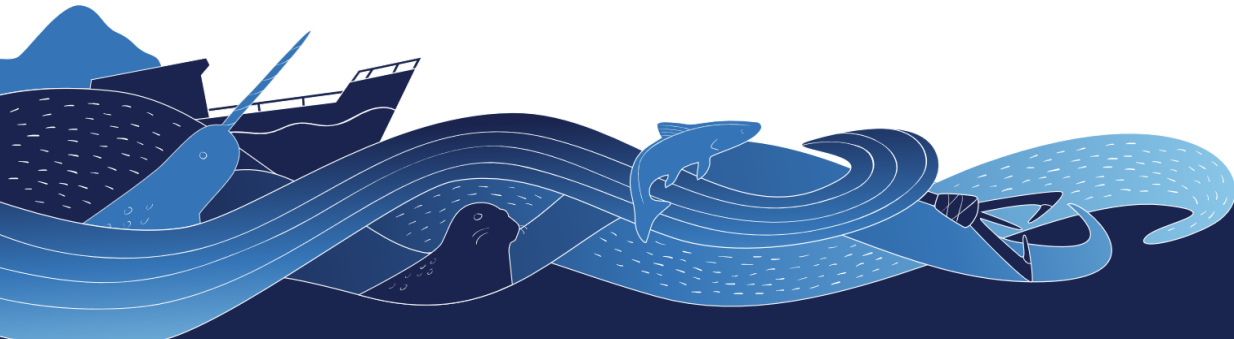
Data Collection

- Fishers are required to provide 200 samples and biological data (length, weight, sex, and otoliths) from each waterbody for every year they are fishing.
 - Samples should be taken in a stratified manner (i.e., every third fish) each year.
- Fishers are also asked to provide catch-per-unit effort data (CPUE = # of Arctic char harvested over a given period).
- Bycatch species should be identified, counted, and released to assess potential ecosystem impacts.



Stock Assessment

- Stock assessments can occur after 5 years of quality data collection.
- Often the data are insufficient.
 - Less than 200 samples
 - Missing CPUE data (logbook)
- Historically, we have relied on trend analyses (age structure, growth rates, mortality, length, and age at maturity).
- Data-limited models have been explored in more recent assessments.



Important Points

1

Emerging Fisheries are intended to test commercial potential and viability.

2

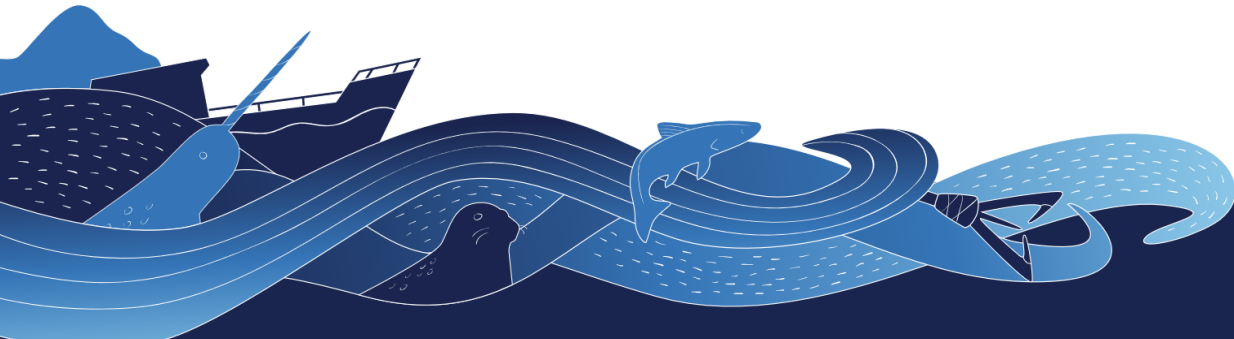
Emerging fisheries take place over multiple years and require considerable time and financial commitments.

3

Assessments can be conducted once the minimum required data is collected, and this process may take multiple years to complete.

Questions?

Contact: DFO.ARCFMInfo-InfoGPARC.MPO@dfo-mpo.gc.ca



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