

SUBMISSION TO THE
NUNAVUT WILDLIFE MANAGEMENT BOARD AND NUNAVIK MARINE
REGION WILDLIFE BOARD
FOR

Information:

Decision: X

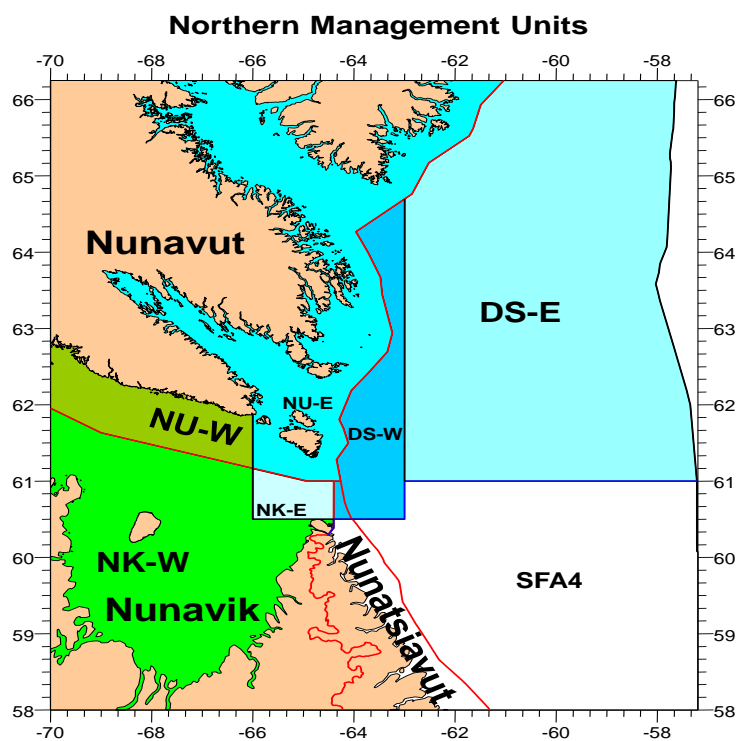
Recommendation: X

Issue: Decisions and recommendations of Arctic Cod Bycatch limits in the Northern and Striped Shrimp fishery within and adjacent to the settlement areas

Map:

Blue areas – Eastern Assessment Zone

Green areas – Western Assessment Zone



Northern shrimp (*Pandalus borealis*)



Striped shrimp (*Pandalus montagui*)



Arctic Cod (*Boreogadus saida*)

Background

Fisheries and Oceans Canada (DFO) has engaged with the Nunavut Wildlife Management Board and Nunavik Marine Region Wildlife Board (the Boards) on the subject of Arctic Cod bycatches in the Northern Shrimp fishery, beginning first in Fall of 2018. Based on the Science and catch information available for Arctic Cod (see Appendix 1), Resource Management (RM) assessed that permitting higher bycatches would not represent a significant conservation concern for this species. Conditions of Licence (COL) were amended to that effect in the 2018/19 and 2019/20 in the Western Assessment Zone (WAZ) (Appendix 2). Most recently, the Department submitted a Briefing Note on Arctic Cod bycatch management measures for Information at the Boards' December 2019 meeting (Appendix 3).

The Department committed to seeking science advice on a sustainable overall bycatch limit of Arctic Cod prior to the 2019 season. A Canadian Science Advisory Secretariat (CSAS) process was conducted in July 2019 (see Science Information).

In addition, the Department committed to undertaking consultations on a longer-term management approach for Arctic Cod bycatch with the offshore fleet, Nunavut and Nunavik industry and the Boards' staff for the WAZ, Eastern Assessment Zone (EAZ), as well as Shrimp Fishing Area (SFA) 1 (the North). Consultations were completed in January 2020 (see Consultation Summary).

The Department is now returning to the Boards for a decision and recommendation on Arctic Cod bycatch limits within and adjacent to the settlement areas, as appropriate, for implementation in the 2020/21 fishery.

Consultation Summary

In January 2020, the Department held two conference calls seeking input on the development of a COL to address Arctic Cod bycatch in the North. A list of participants is available at Appendix 4.

The Department proposed to limit Arctic Cod bycatch to the greater of 5% by weight of catch of shrimp or 200kg, based on an average of the previous six tows for all three areas. The proposed condition would be consistent with amendments implemented in the WAZ for the past two seasons (see Appendix 2).

Industry jointly and unanimously proposed to limit Arctic Cod bycatch to the greater of 10% by weight of catch of shrimp or 200kg in all areas, based on an average of the previous six tows (Appendix 5). A limit of 10% by weight of catch of shrimp is consistent with the current Arctic Cod bycatch provision in SFA 1 (Appendix 2).

Science Information

Pertinent science information on Arctic Cod was provided to the Boards in the Briefing Note for Information at their December meeting, and is available at Appendix 1. Publications from the July 2019 CSAS peer review process including Proceedings, a Research Document (Summary at Appendix 6) and a Science Advisory Report (Summary at Appendix 7), are now available.

Considering the relatively small total mortality (less than 0.1% of the stock annually as proposed above based on predators' requirements) of Arctic Cod stemming from the Eastern Canadian Arctic shrimp fishery, it can be assumed that the impact of shrimp trawling on the Arctic Cod population is minimal.

Options

- 1) Establish an Arctic Cod bycatch limit of the greater of 5% by weight of catch of shrimp or 200kg, averaged over the previous six tows, in all areas.
- 2) Establish an Arctic Cod bycatch limit of the greater of 10% by weight of catch of shrimp or 200kg, averaged over the previous six tows, in all areas.

The Boards could decide and/or recommend, as appropriate, on bycatch limits that differ in each area, and /or that differ in amounts offered above.

Summary of Request

Considering the above, the Department is seeking from the Boards, for implementation beginning in the 2020/21 fishery:

- 1) A decision on Arctic Cod bycatch limits within the settlement areas (WAZ, and NU/NK-E) and a recommendation on Arctic Cod bycatch limits in areas adjacent to the settlement areas.

Prepared by: Fisheries Resource Management, Fisheries and Oceans Canada

Date: February 7, 2020

Appendices

Appendix 1 – Historical bycatches in the Northern Shrimp Fishery, Arctic Cod

Appendix 2 - Condition of Licence Amendments for Northern Shrimp (2017-2019)

Appendix 3 – Briefing Note (For Information): Implementation of Arctic Cod Bycatch Management Measures in the 2019/20 Northern and Striped Shrimp fishery in the Western Assessment Zone

Appendix 4 – Consultation Participants List (*January 2020*)

Appendix 5 – Joint Industry Response on Arctic Cod Bycatch Management Measures and Establishing Revised Conditions of License (COL)

Appendix 6 - Summary: Assessment of potential impacts of bycatch mortality on the Arctic Cod (*Boreogadus saida*) populations from the Northern (*Pandalus borealis*) and Striped (*Pandalus montagui*) Shrimp fisheries in Shrimp Fishing Areas 1, 2, and 3 (Research Document 2019/073)

Appendix 7 - Summary: Review of Arctic Cod (*Boreogadus saida*) Bycatch in Canadian Arctic Shrimp Fisheries (Science Advisory Report 2020/007)

Appendix 8 – Research Document 2019/073: Assessment of potential impacts of bycatch mortality on the Arctic Cod (*Boreogadus saida*) populations from the Northern (*Pandalus borealis*) and Striped (*Pandalus montagui*) Shrimp fisheries in Shrimp Fishing Areas 1, 2, and 3

Appendix 9 – Science Advisory Report 2020/007: Review of Arctic Cod (*Boreogadus saida*) Bycatch in Canadian Arctic Shrimp Fisheries