### SUBMISSION TO THE

## NUNAVUT WILDLIFE MANAGEMENT BOARD AND NUNAVIK MARINE REGION WILDLIFE BOARD

#### **FOR**

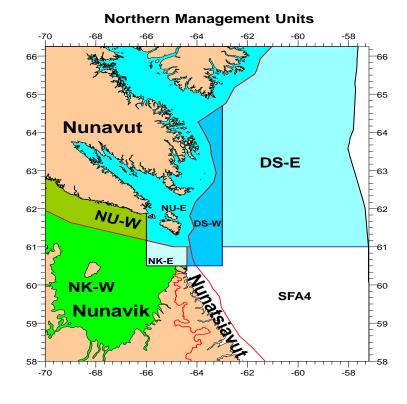
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**Recommendation:** 

Issue: Total Allowable Catch levels for Northern (*Pandalus borealis*) and Striped (*Pandalus montagui*) Shrimp for the 2020/21 season in the Western and Eastern Assessment Zones

#### Map:

Blue areas – Eastern Assessment Zone Green areas – Western Assessment Zone





Northern shrimp (Pandalus borealis)



Striped shrimp (Pandalus montagui)

# <u>Background</u>

Two shrimp species (*Pandalus montagui* and *Pandalus borealis*) occur in the Northern shrimp fishery that takes place in the Davis Strait and eastern Hudson Strait, which includes parts of the Nunavut Settlement Area (NSA) and the Nunavik Marine Region (NMR). Total Allowable Catch (TAC) for each species is set for two distinct science assessment zones, Western Assessment Zone (WAZ) and Eastern Assessment Zone (EAZ) (see Map). TAC is then distributed into management units as per defined sharing arrangements.

For each species of shrimp, decisions and recommendations on TAC and harvest levels in the WAZ and EAZ, are required annually from both the Nunavut Wildlife Management Board (NWMB) and the Nunavik Marine Region Wildlife Board (the Boards). However, the timing of the consultative and co-management processes and the availability of approved science information to inform the Boards' decision making presents a challenge every year.

Fisheries and Oceans Canada's (DFO) Science sector conducts full stock assessments on a two-year cycle with updates in interim years. Timing of the shrimp science survey, coupled with the time necessary to analyze the data does not allow for earlier release of approved information. This year's update using 2019 survey data is scheduled for release in February 2020. In a letter from the Boards in 2015, it was resolved that any "precipitous change in biomass" (defined as any increase or decrease, greater than 25%) for either species in the WAZ or EAZ would necessitate further decisions and recommendations from the Boards (see Appendix 1). In these instances, DFO provides an addendum to the Boards to reconsider decisions and recommendations upon availability of new science information.

A precipitous change in biomass has been observed for at least one of the four shrimp stocks consistently in each of the past seven years. For example, in the WAZ, precipitous changes in fishable biomass have occurred every year for Montagui, and more than half of the time for Borealis since 2014. In the EAZ, the Montagui fishable biomass has seen changes in fishable biomass between -16.3% and + 380% since at least the 2012 survey.

In anticipation of a precipitous change for at least one stock in the 2019 survey and to simplify the decision-making process, Board staff recommended that DFO submit the 2020 Briefing Note on TAC levels for Northern and Striped shrimp in the EAZ and WAZ once approved science information becomes available.

Applicable to NWMB only: In the event Nunavut's allocation for either species increases or decreases equal to or greater than 15%, NWMB Allocation Policy for Commercial Marine Fisheries is triggered. This could affect the sub-allocation decisions of the NWMB already approved by the Minister for 2020/21.

# Summary of Request

This Briefing Note will be accompanied by an addendum prior to the March Board meetings that will include approved science results as well as a consultation summary from the Northern Shrimp Advisory Committee meeting (March 5<sup>th</sup>, 2020) as soon as they become available.

As such, this Briefing Note is intended as a placeholder for:

1) Decisions on TAC for both species in the WAZ

2) Recommendations on TAC for both species in the EAZ, and decisions on harvest levels within NU/NK East

3) Sharing decisions, which can be implied through TAC and harvest level decisions and recommendations:

- a. Decisions on sharing arrangements for Nunavut and Nunavik in the WAZ
- b. Decisions on sharing arrangements within the NU/NK East management units
- c. Recommendations on the distribution of TAC in the EAZ between the NU/NK East and offshore Davis Strait management units

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Date: February 7, 2020

### **Appendices**

**APPENDIX 1** – Nunavut Wildlife Management Boards and Nunavik Marine Region Wildlife Board decisions and recommendations concerning Northern and Striped shrimp total allowable catches and quota in the Eastern and Western Assessment Zones (*March* 27, 2015)