

**SUBMISSION TO THE**  
**NUNAVUT WILDLIFE MANAGEMENT BOARD**  
**FOR**

**Information:**

**Decision:**

**Recommendation: X**

**Issue: Total allowable catch levels and distribution for Greenland Halibut in Subarea 0 for 2021 and 2022 fishing seasons.**



Greenland Halibut (*Reinhardtius hippoglossoides*)

**Background**

A fishery for Greenland Halibut (GHL) exists in Northwest Atlantic Fishery Organization (NAFO) Subarea (SA) 0 which is divided into a northern region, Division 0A (Baffin Bay) and a southern region, Division 0B (Davis Strait), outside of the Nunavut Settlement Area (NSA). The commercial fishing season for GHL starts on January 1<sup>st</sup> and ends December 31<sup>st</sup>. A map showing NAFO Subareas and Divisions relevant to the Greenland Halibut fishery can be found in Appendix 1.

The GHL stock in SA0 is a part of transboundary stock shared between Canada (Division 0A and 0B) and Greenland (Division 1A to F offshore). At the request of both countries, the NAFO Scientific Council (SC) provides advice on sustainable harvest levels. NAFO does not regulate this stock; Canada and Greenland are responsible for regulation in their domestic waters. There is a longstanding informal agreement between Canada and Greenland that the Total Allowable Catch (TAC) levels established on NAFO SC advice be divided 50/50 between the two countries.

The current SA0 GHL TAC of 18,185 t was set by the Minister on January 22, 2019 for the 2019 and 2020 fishing seasons and is the highest TAC in the history of the SA0 fishery. A breakdown of the TAC between Divisions is as follows:

<b>Fishing Area</b>	<b>Fleet/Interest</b>	<b>Allocation (t)</b>
NAFO Division 0A	Nunavut	9,592.5
	Total 0A TAC	9,592.5

<b>Fishing Area</b>	<b>Fleet/Interest</b>	<b>Allocation (t)</b>
NAFO Division 0B	Nunavut	4,283.25
	Nunavik	449.25
	Enterprise Allocation Holders	2,960
	Fixed Gear Competitive	900
	Total 0B TAC	8,592.5

In 2019, the TAC was fully prosecuted in both Divisions 0A and 0B.

### **Consultation**

Stakeholders were given the opportunity to express their views on the roll-over of SA0 TAC and the roll-over of allocations for 2021 and 2022 on a conference call held July 23, 2020.

Views provided by the Nunavut Fisheries Association (NFA), Northern Coalition (NC) and Ueushuk Fisheries all indicated their preference that consideration should be given to an increase in the TAC, with NFA and NC recommending a 5% increase. The rationale for the suggested increase comes from the following wording in the NAFO SC Report summary (Appendix 2):

#### ***2020 Canadian Request:***

*Canada again encourages the Scientific Council to continue exploring opportunities to develop risk-based advice, including the implications of catch differing from the TAC (e.g. +/- 5-15%) on the stock's long-term trajectory.*

*Response: A quantitative assessment of risk at various catch options is not possible for this data limited stock that is assessed using a qualitative assessment of biomass and abundance indices. Whereas differences of up to 5% are unlikely to pose a risk to the stock at this time, systematic exceedances of the TAC may not be sustainable in the medium to long term.*

The views provided by the Atlantic Groundfish Council and Atlantic Fixed-Gear Council (AGC-AFC) countered the advice for a TAC increase, noting that TAC considerations should be restricted to the roll-over advice provided by the NAFO SC. AGC-AFC's rationale included concerns that approving a TAC increase may negatively impact the fishery's newly acquired Marine Stewardship Council certification.

The full summary of stakeholder views presented on the teleconference can be found in Appendix 3.

Stakeholders have also been invited to submit their views in writing to DFO by August 15<sup>th</sup>, 2020. DFO will provide the Board with any additional stakeholder views received as an addendum to this submission.

### **Science Information**

Greenland Halibut is assessed by the NAFO SC every two years in NAFO SA0+1. In early July of 2020, the NAFO SC provided the Department with the following recommendation for GHL in SA 0+1 (offshore) for the 2021 and 2022 fishing seasons:

*The Scientific Council advises that there is a low risk of Greenland Halibut in Subarea 0+1 being below  $B_{lim}$ , if the TAC for 2021 and 2022 remains at 36,370 t.*

*This year, for the first time, this catch advice is exclusive of catches taken in the inshore areas of Divisions 1B-F, for which separate advice is provided.*

*The Scientific Council also states that there is no scientific basis with which to provide separate advice for the offshore areas of Div. 0A +1AB and Div. 0B+1C-F. The Scientific Council advises that consideration be given to the distribution of effort in each area to avoid localized depletion.*

The NAFO SC report is attached at Appendix 2.

### **Recommendation**

A recommendation is not available at the time of this submission, but will be provided to the Board upon completion of stakeholder consultations in an Addendum to this note.

### **Summary of Request**

The Department is requesting from the Board:

- 1) Recommendation on setting the SA0 GHL TAC for 2021 and 2022 and the TAC distribution between Divisions 0A and 0B
- 2) Recommendation on the allocation of TAC within Divisions 0A and 0B

**Prepared by:** Fisheries Management, Fisheries and Oceans Canada

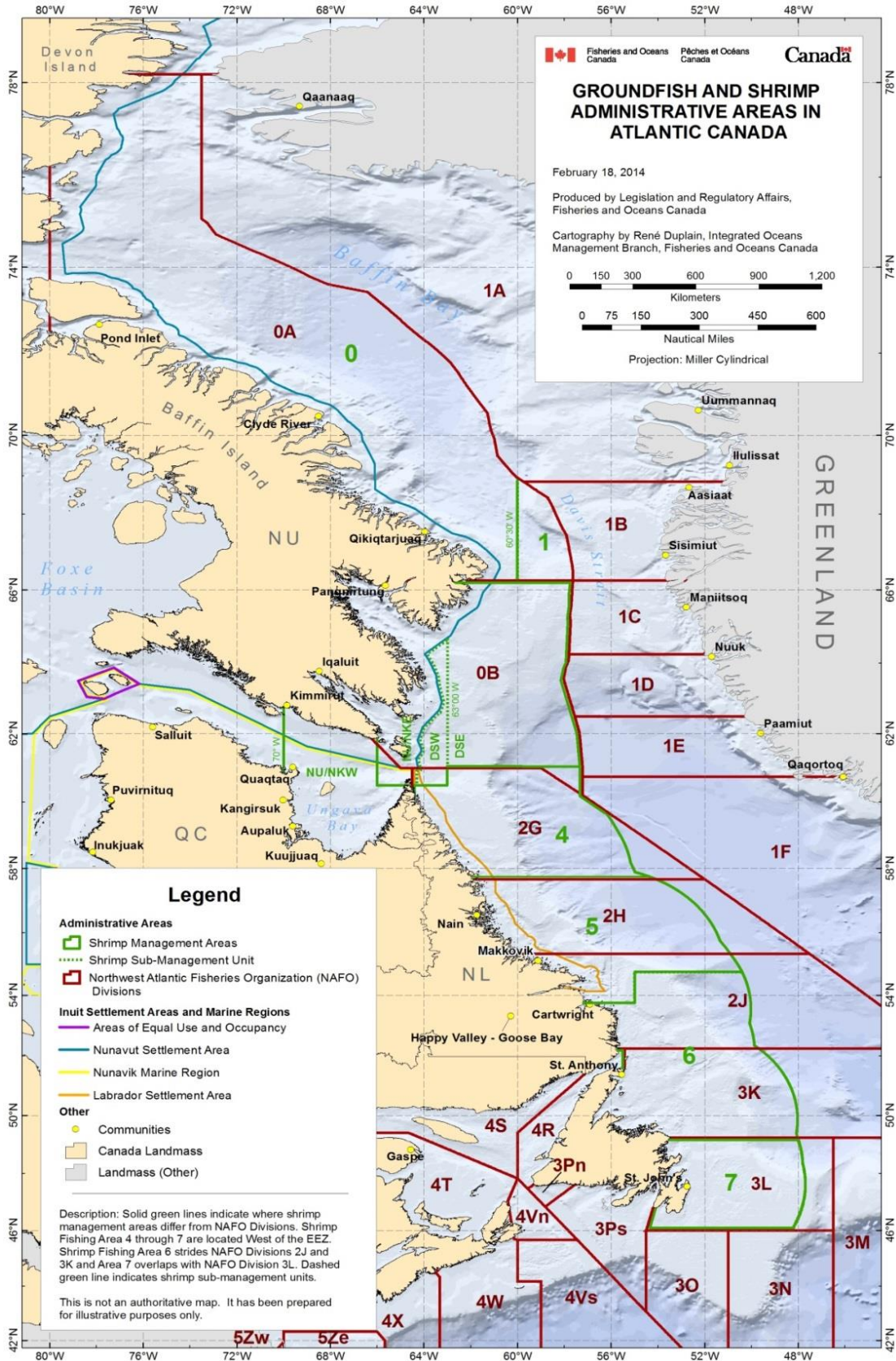
**Date:** August 07, 2020

### **Appendices**

**Appendix 1** – Map of groundfish and shrimp administrative areas in Atlantic Canada

**Appendix 2** – NAFO Scientific Council Report Summary

**Appendix 3** – Meeting Summary from July 23, 2020 EAGSAC Teleconference



**Greenland halibut in Subarea 0+1 (offshore)**

Advice June 2020 for 2021 – 2022

**Recommendation for 2021 and 2022**





Scientific Council advises that there is a low risk of Greenland halibut in Subarea 0 + 1 being below  $B_{lim}$  if the TAC for 2021 and 2022 remains at 36 370 tonnes.

This year, for the first time, this catch advice is exclusive of catches taken in the inshore areas of Divisions 1B-F, for which separate advice is provided.

There is no scientific basis with which to provide separate advice for the offshore areas of Div. 0A+1AB and Div. 0B+1C-F. The SC advises that consideration be given to the distribution of effort in each area to avoid localized depletion.

**Management objectives**

Canada and Greenland adopted a total allowable catch (TAC) of 36 370 t for 2019 and 2020. Canada requests that the stock status should be evaluated in the context of management requirements for long-term sustainability and the advice provided should be consistent with the precautionary approach.

<i>Convention objectives</i>	<i>Status</i>	<i>Comment/consideration</i>	
Apply Precautionary Approach		Stock well above $B_{lim}$	 OK
Minimise harmful impacts on living marine resources and ecosystems		Fishing closures are in effect in SA0 and Div. 1A. No specific measures.	 Intermediate

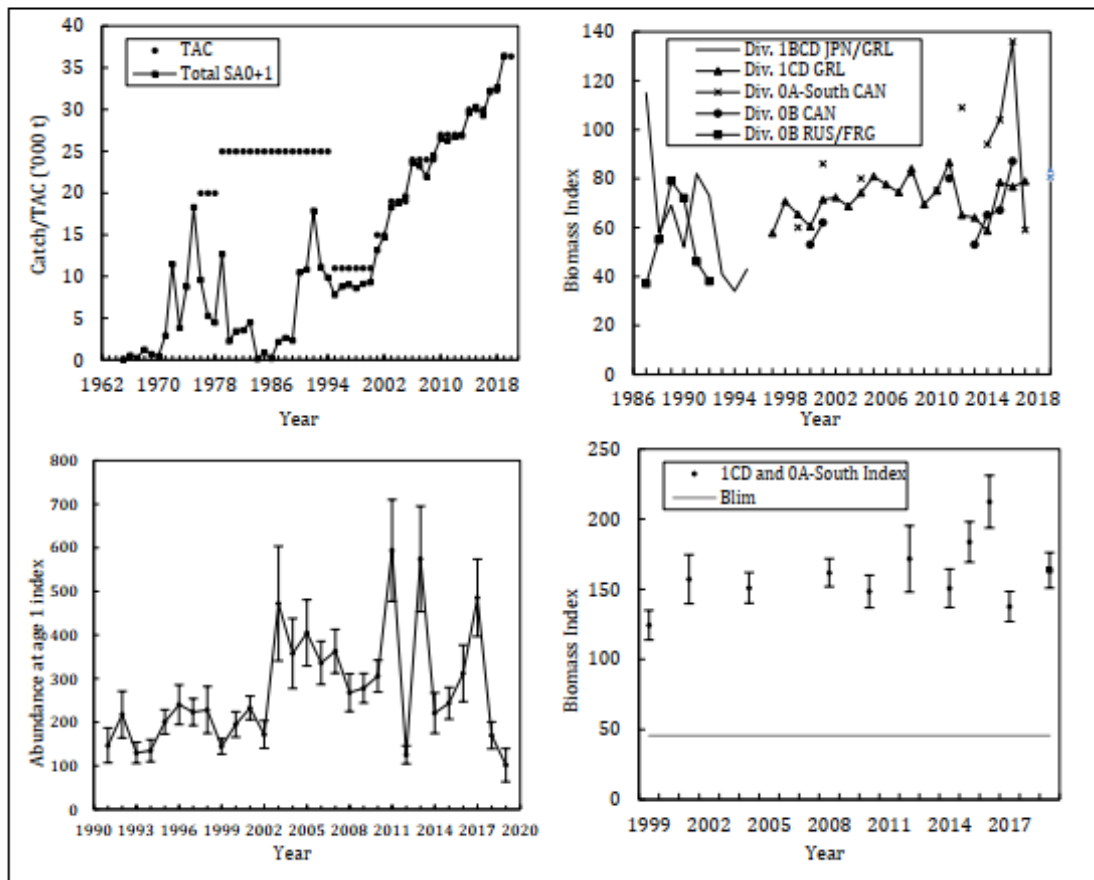
**Management unit**

The Greenland halibut stock in Subarea 0 + 1 (offshore) is part of a larger population complex distributed throughout the Northwest Atlantic. From 2020, separate assessments are made on the inshore management units.

**Stock status**

The combined 1CD and 0A-South biomass index has been above  $B_{lim}$  throughout the time series, 1999 to 2017. The combined biomass index is not available for 2018, and the 2019 value is not used to assess stock status because its comparability with the earlier time series is questionable. The index of age 1 in the last two years is considerably lower than in previous years, however, there have been high abundances in 2011, 2013 and 2017. It is unclear if the age 1 abundance index is representative of future recruitment but it is considered to contribute to the perception of overall stock status.





### Reference points

Age-based or production models were not available for estimation of precautionary reference points. In 2014 a preliminary proxy for  $B_{lim}$  was set as 30% of the mean for the combined 0A-South + 1CD survey biomass index for years 1999 to 2012.

### Assessment

The assessment is qualitative with input from research surveys (total biomass and abundance indices, an index of age 1 fish, and length frequency distributions) and fishery length frequencies.

The next assessment is expected to be in 2022.

### Human impact

Mainly fishery related mortality has been documented. Other sources (e.g. pollution, shipping, oil-industry) are undocumented.

### Biology and Environmental interactions

No specific studies were reviewed during this assessment

### Fishery

Catches were first reported in 1964. Catches increased from 1989 to 1992 due to a new trawl fishery in Div. 0B with participation by Canada, Norway, Russia and Faeroe Islands and an expansion of the Div. 1CD fishery with

participation by Japan, Norway and Faeroe Islands. Catch declined from 1992 to 1995 primarily due to a reduction of effort by non-Canadian fleets in Div. 0B. Since 1995 catches have been near the TAC and increasing in step with increases in the TAC, with catches reaching a high of 36 446 tonnes in 2019.

#### Recent catch and TACs ('000 tonnes)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>TAC</b>	27	27	27	30	30	30	32.3	32.3	36.4	36.4
<b>SA 0</b>	13.2	13.3	13.4	14.9	15.4	14.1	15.9	16.4	18.4	
<b>SA 1</b>	13.1	13.5	13.5	14.7	14.9	15.2	16.2	16.2	18.0	
<b>Total STACFIS<sup>1</sup></b>	26.3	26.8	26.9	29.6	30.3	29.3	32.1	32.6	36.4	

<sup>1</sup>Based on STATLANT, with information from Canada and Greenland authorities used to exclude Divs. 1A-F and 0B inshore catch.

#### Effects of the fishery on the ecosystem

No specific information available. General impacts of bottom trawl gear on the ecosystem should be considered.

#### Basis for Advice

A quantitative assessment of risk at various catch options is not possible for this stock; therefore, it is not possible to quantitatively evaluate the sustainability of the TAC. There was no biomass index available for 2018 and there is uncertainty in the comparability of the 2019 estimate, therefore, the ICES Harvest Control Rule 3.2 for data limited stocks was not applied. TAC advice in 2020 is based on a qualitative review of available data.

#### Special comments

The research vessel that had been used to conduct 0A-South and 1CD surveys from 1997 to 2017 was retired and there was no survey in 2018. A survey was conducted in 2019 with a commercial vessel, however, data reviewed suggest the change in vessel had an effect on the catchability at depths > 700 m, where Greenland halibut are known to be abundant. In addition the earlier timing of the 0A-South survey in 2019 likely resulted in an unknown portion of the stock being beyond the survey area. As a result the comparability between 2019 and previous surveys is questionable and the results were not recommended for use in the 2020 assessment.

Although the survey used to provide the age 1 abundance index also experienced vessel changes in 2018 and 2019, the results are considered to be comparable with those from earlier years.

#### Sources of information

SCR 20/06, 07, 12, 15, 18, 19, 32, 34, 37; SCS Doc. 20/10, 12, 13)

#### 2020 Canadian Request:

*Canada again encourages the Scientific Council to continue exploring opportunities to develop risk-based advice, including the implications of catch differing from the TAC (e.g. +/- 5-15%) on the stock's long-term trajectory.*

**Response:** A quantitative assessment of risk at various catch options is not possible for this data limited stock that is assessed using a qualitative assessment of biomass and abundance indices. Whereas differences of up to 5% are unlikely to pose a risk to the stock at this time, systematic exceedances of the TAC may not be sustainable in the medium to long term.

#### 2020 Denmark (Greenland) Request for advice:

*The Scientific Council is requested to consider the possibility for providing a separate advice for 1 B-1 F inshore.*

**Response:** Scientific Council reviewed data on Greenland halibut tagging research, parasitology and historical catches by month for fjord areas within Divisions 1B-F. Offshore movement appears to be limited and linked primarily to areas in the Denmark Strait. In addition, these inshore fjord fisheries have undergone cycles in catch levels on the scale of 1 to 2 decades, suggesting local depletion of offshore recruitment in sink, or

primarily sink stocks. Scientific Council concluded that advice could be provided for these inshore stock components, separate from the larger Subarea 0 and 1 offshore stock component. Advice for divisions 1B-1F inshore is given in section VII.2.a.

**Eastern Arctic Groundfish Stakeholders Advisory Committee (EAGSAC) Teleconference  
to seek Stakeholder views on the Subarea 0 TAC and Allocations for 2021 and 2022**

**Meeting Summary**

July 23, 2020

Teleconference: 1-877-413-4792 or 613-960-7516 (Ottawa area) Conference ID: 778 3688

Time: 12:00 – 1:30 pm EDT (1:30 – 3:00 pm NL).

Chair Christi Friesen, Senior Regional Fisheries Management Officer, Arctic Region, Fisheries and Oceans Canada (DFO)

Participants

- Atlantic Groundfish Council and Atlantic Fixed-Gear Council - Kris Vascotto, representing:
  - EcoSound Fisheries
  - Ueushuk Fisheries \*\*note that Ueushuk provided their own views on this call
  - Harbour Grace Shrimp Co. Ltd
  - Ocean Choice International
  - Mersey Seafoods Ltd
  - Clearwater Seafoods Ltd
  - Nordic Ltd.
- Government of Newfoundland and Labrador, Department of Fisheries and Land Resources - Nancy Pond
- Makivik Corporation - Tony Wright
- Northern Coalition - Alastair O'Reilly, representing:
  - Makivik Corporation
  - Qikiqtaaluk Corporation
  - Labrador Fishermen's Union Shrimp Company Ltd.
  - Torngat Fish Producers Co-operative Society Ltd.
  - Nunatsiavut Group of Companies
- Nunavut Fisheries Association – Brian Burke, representing:
  - Arctic Fishery Alliance - Harry Earle, Jaypetee Akeeagok
  - Baffin Fisheries Corporation - Chris Flanagan, David Alexander
  - Cumberland Sound Fisheries Ltd./Pangnirtung Fisheries Ltd. - Sakiasie Sowdloopik
  - Qikiqtaaluk Corporation - Jerry Ward
- Ray Croft
- Ueushuk Fisheries Ltd. Partnership - Derek Dalley

Observers

- Arctic Fishery Alliance -Dave Bollivar
- Baffin Fisheries Coalition - Rick Lamb, Jerry Ell
- Nunavut Wildlife Management Board - Jason Akearok, Amber Giles, Carie Hoover, Denis Ndeloh
- Government of Nunavut – Delia Young and Mark Kilabuk
- Megan Murphy for Rex Simmonds
- Nunatsiavut Government - Todd Broomfield
- Oceans North - Chris Debicki
- Qikiqtaaluk Wildlife Board – Mike Ferguson
- Transport Canada - Cory Toews

- Fisheries and Oceans Canada – Christi Friesen, Angela Young, Sheri Friesen, Kevin Bill, Tyler Jivan, Leigh Edgar, Anika Bychok, Jeremiah Young, Matt Martens, David Klein, Margaret Treble, Chantelle Sawatzsky.

**Purpose of call:**

Seek stakeholder views on the recent NAFO Scientific Council advice for Greenland Halibut in Subarea 0+1 (offshore) and the setting of the total allowable catch (or TAC) for Subarea 0 Greenland Halibut for 2021 and 2022.

**Overview of NAFO Scientific Council advice:**

- The Northwest Atlantic Fisheries Organization (NAFO) Scientific Council (SC) has provided the Department with its 2021 and 2022 Total Allowable Catch (TAC) recommendations for Greenland Halibut in Subarea 0+1 (offshore). Of note:

*“Scientific Council advises that there is a low risk of Greenland halibut in Subarea 0 + 1 being below Blim if the TAC for 2021 and 2022 remains at 36,370 tonnes.*

*This year, for the first time, this catch advice is exclusive of catches taken in the inshore areas of Divisions 1B-F, for which separate advice is provided.*

*There is no scientific basis with which to provide separate advice for the offshore areas of Div. 0A+1AB and Div. 0B+1C-F. The SC advises that consideration be given to the distribution of effort in each area to avoid localized depletion.”*

**Summary of Participant Views:**

- Nunavut Fisheries Alliance (NFA) Brian Burke  
NFA presents the following for consideration. Based on the NAFO’s SCs response to Canada’s annual inquiry on the potential impact of changes in TAC level [i.e. “...differences of up to 5% are unlikely to pose a risk to the stock at this time...”], consideration should be given to a 5% increase in the TAC. NFA noted that even this small increase would provide significant positive economic benefits to Nunavut fishing enterprises and communities. NFA also expressed its concern that there has been a three year gap in useable results from the annual multi-species survey, due to two missed surveys and one survey providing data that was incompatible with the existing time series. There are questions and concerns about the future surveys and compatibility with the time series in terms of what this will mean for TAC advice in the future beyond 2022. As such, this makes taking advantage of the current opportunity for a small increase even more important.
- Qikiqtaaluk Corporation Jerry Ward  
Agrees with the views provided by the NFA.
- Arctic Fisheries Alliance Harry Earle, Jaypetee Akeeagok  
Agrees with the views provided by the NFA.
- Cumberland Sound/Pangnirtung Fisheries Sakiasie Sowdloopik  
Agrees with the views provided by the NFA.
- Baffin Fisheries Coalition Chris Flanagan, David Alexander  
Agrees with the views provided by the NFA.

- Northern Coalition (NC) Alastair O’Rielly  
NC is concerned with the absence of a framework around which TAC decisions can be made. NC questions when definitive scientific advice will be available in the coming years and is concerned that harvesters are likely to be bound to the existing science advice for the next 3-4 years. In absence of the aforementioned framework and in the absence of new survey data to inform the either NAFO SC or CSAS, harvesters may be foregoing economic opportunities by not taking advantage of a potential TAC increase. As such the NC is supportive of taking advantage of the latitude that exists within the parameters of NAFO SC advice.  
  
NC’s interpretation of the NAFO SC's advice is that a 5% increase is very conservative in light of the low risk to the stock, the removal of the inshore Greenland fishery (with its historic catch overruns) from the analysis and strong commercial fishing results. NAFO SC advice that there is no scientific basis to differentiate the advice for NAFO Divisions OA and OB and that consideration be given to the distribution of effort in each area to avoid localized depletion suggests that the recommended increase of 5% should be applied to area OB.
- Makivik Corporation Tony Wright  
Agrees with the views provided by the NC.
- Atlantic Groundfish Council (AGC) and Atlantic Fixed-Gear Council (AFC) Kris Vascotto  
AGC-AFC’s view is that for the 2021 and 2022 TAC decision, considerations should be restricted to the limited advice provided by the NAFO SC. As Greenland Halibut (GHL) in NAFO Subarea 0 has recently received certification under the Marine Stewardship Council (MSC), there is a need to be cognizant of MSC requirements when setting the TAC. Although AGC-AFC membership is concerned about the lost opportunity for a TAC increase in the short term, GHL are a long-lived species and as such, it’s likely that harvesters would not lose out on opportunities in the long term. Specifically, unharvested GHL should still be available for harvest when we are again in a position to consider TAC increases. Further, in coming years, requests to the NAFO SC for TAC advice should be presented with a broader scope to avoid leaving industry with limited advice and therefore limited options.
- Ueushuk Fisheries Derrick Dalley  
Ueushuk notes that it is disappointing there is a lack of data to inform Scientific Council advice, catch rates are good and the GHL stock remains healthy. The turbot fishery is of economic importance to many northern Labrador communities, and based on economic consideration, opportunities for an increase in TAC would be welcome.
- Ray Croft  
Agrees with the views provided by the NFA.
- Government of Newfoundland and Labrador Nancy Pond  
Will be considering the view of stakeholders and will be providing their views in writing to DFO.

**Observer Views:**

- Nunavut Wildlife Management Board requests that a record of this meeting be included in DFO’s submission to the Board.

**Next Steps:**

- Meeting summary will be circulated to EAGSAC once finalized
- Stakeholders are invited to submit views in writing to [Christi.Friesen@dfo-mpo.gc.ca](mailto:Christi.Friesen@dfo-mpo.gc.ca) by August 15, 2020.
- DFO will submit a briefing note to the NWMB for their September 7, 2020 board meeting requesting recommendations on the 2021 and 2022 Subarea 0 TAC and allocations for GHL. This meeting summary will be included in this briefing.