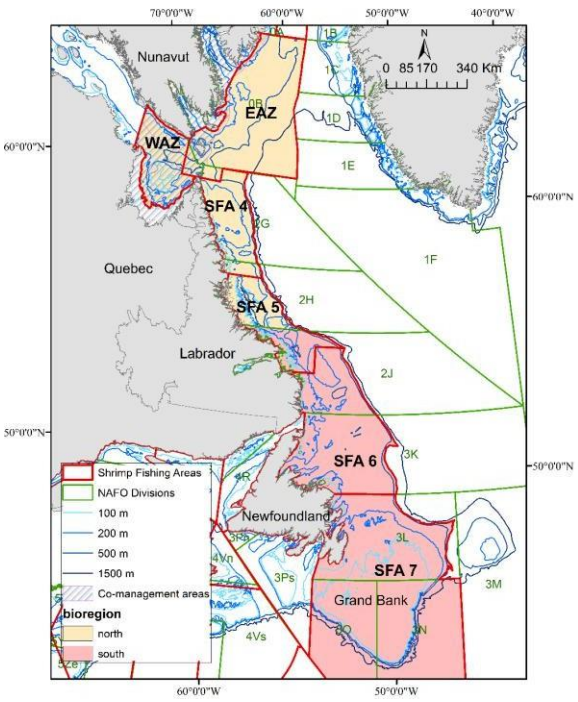
**SUBMISSION TO THE**
**NUNAVUT WILDLIFE MANAGEMENT BOARD**
**AND NUNAVIK MARINE REGION WILDLIFE BOARD**

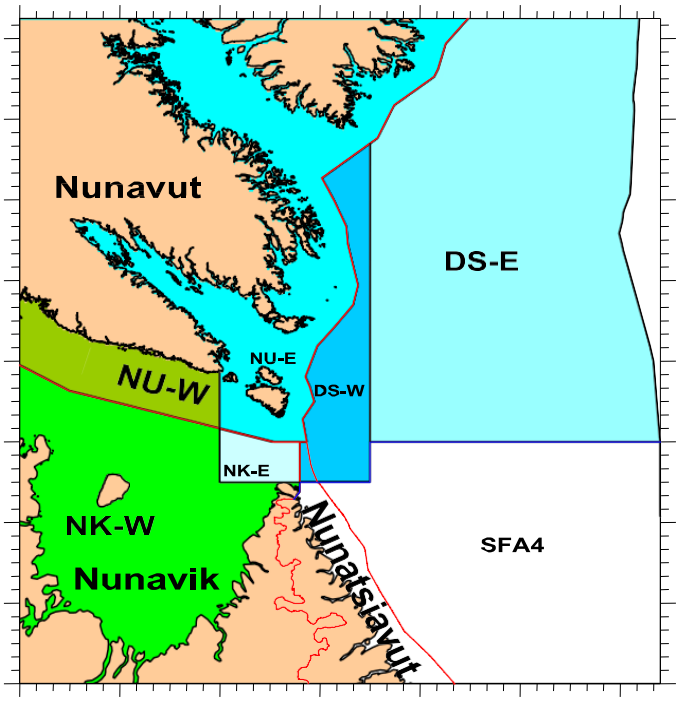
**FOR**

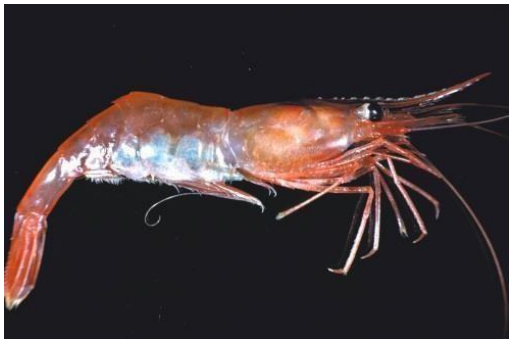
**Information:** **Decision: X** **Recommendation: X**

**Issue: Total Allowable Catch levels for Northern Shrimp (*Pandalus borealis*) for the 2026-27 fishing season in the Western and Eastern Assessment Zones**

**Map Left:** Yellow – North Stock Assessment Region; Red – South Stock Assessment Region
**Map Right:** Blue – Eastern Assessment Zone; Green – Western Assessment Zone



Northern shrimp (*Pandalus borealis*)

## Background

This briefing note presents the Nunavut Wildlife Management Board (NWMB), and the Nunavik Marine Region Wildlife Board (NMRWB), referred to hereafter as the Boards, with the information necessary to provide decisions and recommendations to the Minister of Fisheries and Oceans Canada (DFO) for the 2026-27 Northern Shrimp fisheries allocations in the Western Assessment Zone (WAZ) and the Eastern Assessment Zone (EAZ). Science results from the 2025 DFO-Northern Shrimp Research Foundation and DFO multi-species surveys are now available, with science advice from the DFO Canadian Science Advisory Secretariat (CSAS) peer review process for Northern Shrimp (*P. borealis*), provided at Appendix 1.

A meeting of the Northern Shrimp Advisory Committee (NSAC), followed by an Indigenous meeting, occurred on March 25-26, 2026. A summary of these meetings is provided at Appendix 2.

A new stock structure, stemming from the new stock assessment method, and components of a new Precautionary Approach (PA) framework (*i.e.*, Limit Reference Point (LRP) and proposed Upper Stock Reference (USR)) for *P. borealis* were adopted in December 2024. The new stock structure reflects an improved understanding of *P. borealis* distribution, dispersal, and life history traits, and the new stock assessment model better reflects the biology of *P. borealis* in recent years given the evolving dynamics of the ecosystem. As a result of this new model, the spatial scale of assessment for *P. borealis* changed from six areas (EAZ, WAZ, and Shrimp Fishing Areas (SFAs) 4 – 7) to two assessment regions (*i.e.*, North and South Stock Assessment Regions (NSAR and SSAR)) divided by the boundary between the Northwest Atlantic Fisheries Organization (NAFO) Divisions 2H and 2J (see map).

A Management Strategy Evaluation (MSE) for Northern Shrimp, developed through a DFO-industry working group, was used to test the ability of various harvest decision rules (HDRs) in achieving long-term conservation and yield objectives for the stock. The MSE analysis facilitated the selection of two HDRs, one for NSAR and one for SSAR, used to generate advice on harvest limits for each stock assessment region. These harvest limits inform TAC recommendations for 2026-27. For the NSAR, industry stakeholders endorsed a variation of the HDR used in 2025-26 (adding a 25 per cent maximum change in harvest limit from one year to the next and a phase-in of this HDR over 4 years) with a 20 per cent exploitation rate. This HDR results in a harvest level of 41,760 t for the NSAR.

HDRs with a lower exploitation rate (17%; consistent with the modelled harvest rate producing Maximum Sustainable Yield) than the ones endorsed by industry were also evaluated. These alternatives showed improvements in conservation performance, but at the expense of yields. While conservation gains were incremental, they remain meaningful given the potential biological and socio-economic consequences of the stock falling below the LRP.

Industry stakeholders opposed HDRs with lower exploitation rates citing revenue losses that the Department considers to be overestimated based on landed values (approximately $7 million for NSAR). Despite this, given these socio-economic implications, and the planned review of HDR performance in 2028, the industry-supported HDRs are used to recommend TACs at this time.

While Northern Shrimp is now assessed as two stocks, the NSAC supports continuing to manage the fishery using the existing management areas. The TAC recommendations for the EAZ and WAZ are informed by a selected HDR for the NSAR; this same MSE-tested HDR will be used in future years until it is reviewed in 2028. To address the spatial mismatch between the management areas and the new stock assessment regions, a 4-year rolling average of the spatial distribution of fishable biomass in each management area is used to calculate TAC-level recommendations by management area for 2026-27, including for the EAZ and WAZ. Information about the MSE development and outputs are provided in Appendix 5.

Catch utilization within the NSAR has historically been uneven, with lower utilization in the EAZ and WAZ due to operational constraints (*e.g.*, vessel capacity, catch rates, environmental conditions), and close to full utilization in SFA 4 and SFA 5. To address this, starting in 2026-27, harvesters have proposed catch utilization adjustments to increase harvesting flexibility, maximize NSAR harvest, and improve economic returns. Offshore industry proposed adding 5 per cent to TACs for each management area, allowing more quota to be harvested where catch rates are better (*i.e.*, SFAs 4 and 5 North). Nunavut and Nunavik stakeholders, who do not have access to SFAs 4 and 5, proposed instead to add 800 t to special allocations in the EAZ (in Nunavut and Nunavik East; Davis Straight West), on account of the majority of the underutilized quota in the NSAR occurring inside the settlement areas.

This briefing note presents the update of the Northern Shrimp (*P. borealis*) stock indicators and TAC scenarios for 2026-27 in the context of these aforementioned frameworks, and illustrates application of the MSE-tested HDR, endorsed by NSAC industry members, and the proposed catch utilization adjustment.

## WESTERN ASSESMENT ZONE (WAZ)

### ***Fishery Profile***

The fishery for *P. borealis* in the WAZ operates April 1 – March 31. Harvesting activity commences as early as May or June, subject to ice conditions. Northern Shrimp in the WAZ is fished as a directed stock.

The WAZ is divided into two management units, Nunavut West (NU-W) and Nunavik West (NK-W) (see map). These management units are located entirely within the Nunavut Settlement Area (NSA) and Nunavik Marine Region (NMR), respectively. The NWMB and NMRWB make decisions on management measures within their respective settlement areas

and may make recommendations for adjacent management units.

*Pandalus borealis* allocations in the NU-W and NK-W management units have been allocated to Nunavut fishing interests and Nunavik fishing interests, respectively. Although no formal sharing arrangement exists, harvest level decisions in NU-W and NK-W have historically resulted in equal distribution of the overall Northern Shrimp TAC. A standing joint decision made by the NWMB and NMRWB on July 13, 2022, supports reciprocal harvesting of this stock in either management unit, regardless of settlement area boundaries.

A historical *P. borealis* quota profile for the WAZ is provided at Appendix 4.

## ***Science Advice***

*Northern Shrimp – NSAR overview*
In March 2025, a full stock assessment was conducted for Northern Shrimp, applying the new framework. This assessment estimated the status of the NSAR stock to be in the Healthy Zone of the Precautionary Approach (PA) Framework. In March 2026, a stock update was conducted to update key indices used in HDRs and update ecosystem information; modelled biomass estimates, reference points and stock status were not re-estimated, because the full assessment model is not executed during interim-year stock updates. A summary of the CSAS peer review process and science advice for Northern Shrimp in the NSAR, based on the March 2026 update of stock indicators, is provided in Appendix 1.

*NSAR biomass indices updates*
In the NSAR, the spawning stock biomass (SSB) and fishable biomass (FB) indices were updated to 2025 and both increased from 2024 (Appendix 1). In the context of the overall trajectory of this stock, these interannual changes in the indices are consistent with the stock biomass remaining near their respective time-series averages in the NSAR.

*Managing at the SFA scale*
Proportional distribution of Northern Shrimp FB in the NSAR was provided at the management area level (EAZ, WAZ, SFAs 4 and 5 North) to inform fisheries management decisions on TACs by SFA (Appendix 1). Caution is needed when interpreting single-year spatial patterns, as shrimp can be transported over considerable distances in relatively short periods, including across management area boundaries. This movement can cause fluctuations in observed biomass within and among management areas and is one of the key reasons why Northern Shrimp are no longer assessed at the SFA level.

There is no formal science advice on the impacts of the proposed catch utilization adjustments on the NSAR stock. Greater harvest pressure on the stock may increase the risk of localized depletion, particularly in areas that are already being fully harvested (SFAs 4 and 5) and/or are thought to provide shrimp spawning and nursery habitat (around Resolution Island in the EAZ).

*MSE analysis and review*

The NSAR HDR endorsed by NSAC uses a 20% exploitation rate (ER), which is above the maximum sustainable yield (MSY) for the NSAR stock and causes frequent positioning in the Cautious Zone and, eventually, increased probability of declining into the Critical Zone. DFO Science conducted additional simulations to extend the range of harvest options presented to NSAC and better align with ER levels associated with MSY, consistent with the United Nations Fish Stocks Agreement and DFO's Sustainable Fisheries Framework. The use of a lower ER for the NSAR HDR (e.g., 17%) would be consistent with MSY and would reduce the risk of the stock entering the Cautious or Critical Zones.

The NSAR stock has not historically reached biomass levels as low as the LRP value adopted under the new PA framework. Based on the relatively low biomass threshold defining the Critical Zone and the ecological importance of Northern shrimp, the probability of entering the Critical Zone should be minimized to the greatest extent possible.

## ***2026-27 Management Considerations***

To support TAC recommendations for the WAZ in 2026–27, the total NSAR harvest level of 41,760 t – derived from the MSE-tested 2-step HDR (which includes a 25% cap on year-over-year change and a four-year phase-in) at a 20% exploitation rate – is allocated across management areas using a four-year rolling average of fishable biomass proportions. Based on the WAZ share of fishable biomass (19.3% in 2022-2025; Appendix 3), this results in a base TAC of 8,060 t for the WAZ.

The recommended TAC for the WAZ represents a 125% increase from 2025-26 levels (3,584 t). The 2025–26 TACs were set using a transitional approach that combined new stock information with older assessment methods. In contrast, the 2026–27 TACs are based fully on updated survey data from a more robust model, providing a clearer and more accurate picture of stock indices and distribution. At the same time, shrimp are not evenly distributed and can shift between areas due to environmental conditions. Because TACs are allocated based on where the biomass is located, these shifts can result in increases in some areas and decreases in others. In 2025, a significant increase in fishable biomass proportion in the WAZ was observed. A 4-year rolling average helps smooth short-term fluctuations, but does not eliminate their impact.

Offshore industry requested harvest flexibility to account for underutilization in the NSAR by adding 5% catch utilization adjustment to the base TAC in each management area. However, given significant underutilization of *P. borealis* TAC in WAZ (average 28% caught from 2021-2025), this flexibility would not be useful in the WAZ. In recognition of Nunavut and Nunavik stakeholders' request to add a total of 800 t to their quotas in NU/NK E and DSW (in the EAZ), the Department recommends administratively transferring the additional 5% of WAZ quota to those areas instead, which would maintain the WAZ TAC at 8,060 t.

Scenarios are illustrated below, for consideration.

| **Scenario *(P. borealis)*** | **TAC (t)** | **% change in TAC from previous year** |
|---|---|---|
| MSE-tested HDR + 5% adjustment and administrative transfer from the WAZ to the EAZ ***(recommended)*** | 8,060 | +125 |

**Recommendation: For 2026-27, i**t is recommended that the Boards apply the MSE-tested HDR, endorsed by NSAC, to set the overall WAZ TAC (combined for NU-W and NK-W) for *P. borealis*.

***Summary of Request***

**Western Assessment Zone:**

1. Decisions on harvest levels for *P. borealis* in the NU-W (within the NSA) and NK-W (within the NMR) management units, respectively, that include a 5% increase and subsequent transfer of the 5% increase to NU/NK-E and DSW for 2026-27.

2. Recommendations on the overall TAC for *P. borealis* in the WAZ.

***Summary of requested decisions and recommendations, WAZ.***

| **Area (Management Unit)** | ***P. borealis*** |
|---|---|
| **NSA (NU-W)** | Harvest level decision NWMB *(Recommendation NMRWB)* |
| **NMR (NK-W)** | Harvest level decision NMRWB *(Recommendation NWMB)* |
| ***TOTAL (WAZ)*** | *TAC recommendation (combined total of decisions) NWMB and NMRWB* |

# EASTERN ASSESMENT ZONE (EAZ)

## ***Fishery Profile***

The fishery for *P. borealis* in the EAZ operates April 1 – March 31. Harvesting activity commences as early as May or June, subject to ice conditions.

The EAZ is divided into four management units: Nunavut East (NU-E), Nunavik East (NK-E), and the offshore Davis Strait West (DS-W) and Davis Strait East (DS-E) areas (see map). These management units are located partially within and adjacent to the NSA and NMR. The NWMB and NMRWB make decisions on management measures within their respective settlement areas and may make recommendations for the adjacent Davis Strait management units. *P. borealis* is a directed species in the EAZ (all management units).

*Pandalus borealis* allocations in the NU-E management unit have been allocated to Nunavut fishing interests. Similarly, allocations in the NK-E management unit have been allocated to Nunavik fishing interests. Although no formal sharing arrangement exists, DFO observes a long- standing distribution of allocations between NU-E and NK-E management units at 80:20 per cent for *P. borealis*. A standing joint decision made by the NWMB and NMRWB on July 13, 2022, supports harvesting of these species in either management unit, regardless of settlement area boundaries.

*Pandalus borealis* allocations in the Davis Strait management units have been provided to the offshore fleet with special access (allocations) provided to Nunavut fishing interests. Nunavik fishing interests have special access (allocations) in DS-W only.

There are no pre-existing arrangements for the distribution of quota between management units in the EAZ. However, allocation of quotas between the settlement areas (NU/NK-E) and the offshore Davis Strait areas must distribute fishing effort throughout the Zone and avoid concentrated effort in a single productive area (*e.g.*, Resolution Island).

A historical quota profile for the EAZ is provided at Appendix 4.

## ***Science Advice***

Given that EAZ and WAZ are now assessed as part of the North Stock Assessment Region, Science advice for the EAZ is the same as for the WAZ, above.

## ***2026-27 Management Considerations***

To support TAC recommendations for the EAZ in 2026–27, the total NSAR harvest level of 41,760 t – derived from the MSE-tested 2-step HDR (which includes a 25% cap on year-over-year change and a four-year phase-in) at a 20% exploitation rate – is allocated across management areas using a four-year rolling average of fishable biomass proportions. This is the same approach as taken for the WAZ. Based on the EAZ share of fishable biomass (23.1% in 2022-2025; Appendix 3), this results in a base TAC of

9,636t for the EAZ.

Industry requested additional harvest flexibility to address ongoing underutilization in the NSAR by applying a 5% catch utilization adjustment to the base TAC in each management area (*i.e.*, the WAZ, EAZ, SFAs 4 and 5 North); this approach was supported by a majority of NSAC members. However, Nunavut and Nunavik entities requested an alternative approach, specific to their allocations. They proposed adding a fixed 800 t to their quotas in EAZ (in NU/NK E and DSW) instead of the 5% , linking their request directly to significant underutilization of NU and NK quotas in the WAZ, further noting their lack of access to SFA 4 and 5. Some NSAC members raised concerns with the Nunavut and Nunavik request due to a perceived lack of a clear and bounded rationale for the 800 t amount, potential shift in the allocation balance within the EAZ, and risk of exacerbating harvesting capacity constraints in some areas. The Department is also concerned that an additional 800t would significantly increase fishing pressure in NU/NK E and DSW, including around Resolution Island, which is thought to be a shrimp spawning area.

In light of these considerations, the Department recommends a consistent approach: apply a 5% increase to TAC across all management areas, including the WAZ and EAZ, and administratively transfer the WAZ portion of this increase to the EAZ for 2026-27. This would provide an additional 546 t to Nunavut and Nunavik entities in the EAZ (in NU/NK E and DSW) – offering increased flexibility while avoiding the risks associated with a larger, fixed increase of 800 t.

The 5% catch utilization adjustment to the EAZ TAC translates to 143t to Nunavut and Nunavik entities. An additional 403t would result from a one-time administrative transfer of 5% from the WAZ to the EAZ, for a combined total of 546t. The Department recommends allocating this 546 t between NU/NK E (25%) and DSW (75%). Consistent with existing sharing arrangements, it is further recommended that: the 5% EAZ adjustment be shared 80/20 between Nunavut and Nunavik; and, the 5% administrative transfer from the WAZ to the EAZ be shared 50/50. These approaches maintain current sharing arrangements within each management unit. Calculations and sharing are provided in Appendix 6. The 5% administrative transfer from the WAZ to the EAZ would apply for 2026-27 and be reassessed thereafter.

Scenarios are illustrated below, for consideration.

| **Scenario *(P. borealis)*** | **TAC (t)** | **% change in TAC from previous year** |
|---|---|---|
| 1. MSE-tested HDR | 9,636 | +0.4 |
| 2. MSE-tested HDR + 5% adjustment and administrative transfer from the WAZ to the EAZ ***(recommended)*** | 10,521 | +9.6 |
| 3. MSE-tested HDR + 800 t | 10,436 | +8.7 |

**Recommendation:** It is recommended that the Boards apply the MSE-tested HDR and include a 5% adjustment and administrative transfer from the WAZ to the EAZ to set the overall EAZ TAC (combined for Davis Strait East/West, NU-E and NK-E) for *P. borealis*.

***Summary of Request***

**Eastern Assessment Zone:**

1. Decisions on harvest levels for *P. borealis* in the NU-E (within the NSA) and NK-E (within the NMR) management units, respectively, that include a transfer from the WAZ to NU/NK-E.

2. Recommendations on the distribution of the TAC for *P. borealis* between the Davis Strait management units (DS-W and DS-E). Recommendations on *P. borealis* allocations in Davis Strait management units, including a transfer from the WAZ to DSW.

3. Recommendations on the overall TAC for *P. borealis* in the EAZ, that includes a 5% adjustment.

***Summary of requested decisions and recommendations, EAZ.***

| **Area (Management Unit)** | ***P. borealis*** |
|---|---|
| **NSA (NU-E)** | Harvest level decision NWMB<br>*(Recommendation NMRWB)* |
| **NMR (NK-E)** | Harvest level decision NMRWB<br>*(Recommendation NWMB)* |
| **DS-E** | TAC distribution and allocation recommendation NWMB & NMRWB |
| **DS-W** | TAC distribution and allocation recommendation NWMB & NMRWB |
| ***TOTAL (EAZ)*** | *TAC Recommendation NWMB & NMRWB* |

## UPPER STOCK REFERENCE POINTS

NSAC supported establishing the USR for *P. borealis* in the NSAR and SSAR at 80% of a Bmsy-proxy, consistent with DFO Science advice. The establishment of the Northern shrimp USR in the NSAR is pending endorsement from the Boards, with respect to decision/recommendation authority in the NSA and NMR portions of the NSAR.

***Summary of Request***

1. Recommendation on USR for *P. borealis* in the NSAR.

**Prepared by:** Liliya Baranova, Senior Fisheries Resource Management, Fisheries and Oceans Canada

**Date:** April 22, 2026

# APPENDIX 1 Science Advice

Fisheries and Oceans Canada | Pêches et Océans Canada
Ecosystems and Oceans Science | Sciences des écosystèmes et des océans

This document is approved and in pre-publication with CSAS. Please note that this document has not yet been published on the DFO CSAS website.

Newfoundland and Labrador Region
Canadian Science Advisory Secretariat

Arctic Region
Approved Pre-Publication Science Response 2026/nnn

# STOCK UPDATE FOR NORTHERN SHRIMP (*PANDALUS BOREALIS*) IN THE NORTH AND SOUTH STOCK ASSESSMENT REGIONS FOR THE 2026-27 FISHING SEASON

## CONTEXT

Fisheries and Oceans Canada's (DFO's) Fisheries Resource Management sector has requested an update of the Northern Shrimp (*Pandalus borealis*) stock in the North and South Stock Assessment Regions (NSAR and SSAR) as the basis for Science advice for the 2026 – 27 fishing season. The most recent stock assessment (March 2025) estimated that Northern Shrimp in both assessment regions would be in the Healthy Zone of the Precautionary Approach (PA) Framework, if the proposed Upper Stock Reference (USR) points were adopted by DFO Fisheries Resource Management. The status of Northern Shrimp in the NSAR and SSAR will be reassessed at the next full assessment.

This Fisheries Science Response is from the multi-regional (Newfoundland and Labrador and Arctic Regions) peer review meeting of March 10 - 11, 2026, on the Stock Update for Northern Shrimp (*Pandalus borealis*) in the North and South Stock Assessment Regions for the 2026-27 fishing season.

## SCIENCE ADVICE

### Status

- Stock status for the North Stock Assessment Region (NSAR) and the South Stock Assessment Region (SSAR) are not determined during interim-year updates.

### Trends

- **NSAR:** The Spawning Stock Biomass (SSB) and Fishable Biomass (FB) indices were updated to 2025 and both increased from 2024. In the context of the overall trajectory of the stock, these interannual changes in the indices are consistent with the stock biomass remaining near their respective time-series averages.
- **SSAR:** The SSB and FB indices were updated to 2025 and both increased from 2024. In the context of the overall trajectory of the stock, these interannual changes in the indices are consistent with the stock biomass remaining near their respective time-series low levels.

### Ecosystem and Climate Change Considerations

- In the southern portion of the NSAR and in the SSAR, the warm phase in ocean climate that started around 2020 continued in 2025.

- The biomass of key predatory fishes (Greenland Halibut, Atlantic Cod, and redfish) have increased in both assessment regions in the 2020s and remains high in 2025.
- The ecosystem biomass in the SSAR is at the highest level since the ecosystem collapse in the late 1980s and early 1990s, but remains below pre-collapse levels. These increases are driven by groundfish, with the community having returned to a groundfish-dominated structure.
- Based on information from Atlantic Cod and Greenland Halibut diets, the current shrimp biomass in the Division 2J3KL portion of the SSAR is estimated to be at or below the level of the pre-ecosystem collapse period.

### Stock Advice

- **NSAR:** The preliminary exploitation rate index (ERI) was 13.3% in 2025/26. If the entire 2025/26 aggregated total allowable catch (TAC) for the management areas of this region is taken, the ERI will be 17.8%.
- **SSAR:** The preliminary ERI was 8.3% in 2025/26. If the entire 2025/26 aggregated TAC for the management areas of this region is taken, the ERI will be 15.8%.

## BASIS FOR ASSESSMENT

### Assessment Details

**Year** Assessment Approach was Approved

2024 (Johnson et al. In prep.[1])

**Assessment** Type

Interim-Year Update

**Most** Recent Assessment Date

1. Last Full Assessment: March 2025
2. Last Interim-Year Update: N/A (first time these stocks are updated using a new population structure)

**Stock** Assessment Approach

1. Broad category: Single stock assessment model
2. Specific category: Statistical catch-at-length

This assessment follows the framework of Johnson et al. (In prep.[1]), which uses the Bayesian size structured Spatially Integrated Statistical Catch-at-Length/Size (SISCALS) model to determine stock status. See Procedure for Interim year updates section below for details on the update process. For interim updates, SISCALS is not run; instead, survey data from the DFO fall multispecies survey and the Northern Shrimp Research Foundation (NSRF)–DFO summer trawl survey were used to generate fishable biomass (FB) and spawning stock Biomass (SSB) survey indices for the North and South stock assessment regions (NSAR and SSAR). Fishery

[1] Johnson, S.D.N., Cox, S.P., Baker, K.D., Le Corre, N., Coffey, W., and Enright, D. In prep. A framework stock assessment for Canada's Northern Shrimp (*Pandalus borealis*) fishery off Newfoundland, Labrador, and Baffin Island. DFO Can. Sci. Advis. Sec. Res. Doc.

trends were evaluated using total allowable catch (TAC), commercial catch-to-date, and exploitation rate indices. All biomass indices reported in this update are derived from spatiotemporal models using survey data, which differs from SISCALS due to survey catchability and selectivity.

### Ecosystem and Climate Change Assessment Approach

The physical environment was characterized by examining trends in ocean climate using oceanographic indicators, and the Newfoundland and Labrador Climate Index (NLCI). Food web components examined included lower trophic levels characterized using primary production and zooplankton indicators and status and trends of the fish community. The characterization of ecological and environmental interactions included fish diets, estimations of food consumption, modelling of shrimp biomass as a function of predators' diets, and the evaluation of changes in shrimp per capita production over time.

## Stock Structure Assumption

Stock overview information: Baker et al. 2025; Johnson et al. (In prep.)[1].

A new understanding of Northern Shrimp stock structure in Atlantic and Arctic Canada, based upon their distribution, larval dispersal, gene flow, and life history traits, was adopted in December 2024. Therefore, in 2025 the spatial scale of assessment for Northern Shrimp changed from six assessment areas (i.e., Eastern Assessment Zone [EAZ], Western Assessment Zone [WAZ], and Shrimp Fishing Areas [SFAs] 4, 5 ,6, and 7 [NAFO Divisions 3LNO]) to two stock assessment regions (i.e., NSAR and SSAR) (Figure 1). NSAR combines the WAZ, EAZ, SFA 4, and the portion of SFA 5 north of the border between Northwest Atlantic Fisheries Organization (NAFO) Divisions 2H and 2J. SSAR combines SFAs 6 and 7, and the portion of SFA 5 south of the border between NAFO Divisions 2H and 2J.

## Reference Points

Northern Shrimp reference points in the Precautionary Approach (PA) Framework were developed using a stock assessment model (SISCALS), and reflect estimated natural mortality and size at sex-transition from the most recent eight years (i.e., approximately one Northern Shrimp generation) (DFO 2025). Note that the stock status is not updated in interim-years.

## Data

- NSRF-DFO collaborative annual trawl survey (2005 – 25)
- DFO-Newfoundland and Labrador (NL) fall multispecies trawl survey data (1995 – 2025)
- At-sea-observer data from commercial vessels (1979 – 2025)
- Commercial catch data from NL logbook databases (1998 – 2025)
- Commercial catch data from Canadian Atlantic Quota Report (CAQR) and Atlantic Quota Monitoring System (AQMS) (1977 – 2025). In 2003, the management year shifted from a calendar year to a fiscal year (April 1 – March 31)
- DFO-NL Ecosystem Research Program Indicators (1960 – 2025)
- Atlantic Zone Monitoring Program Indicators (1950 – 2025)
- NASA Moderate Resolution Imaging Spectroradiometer Aqua Ocean Color observation (2003 – 25)

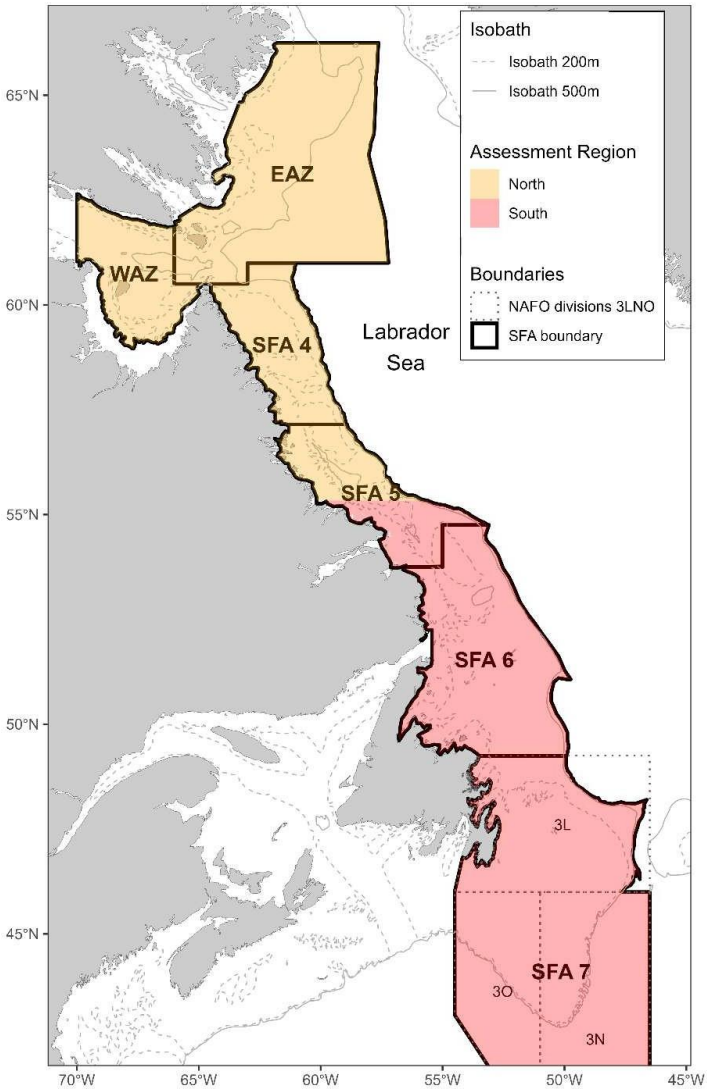



*Figure 1. Map showing the six previously used shrimp fishing areas (EAZ, WAZ, SFAs 4–7) and the two stock assessment regions used in the assessment framework (North in yellow, and South in red).*

Data changes:

This update applies the same data changes that were incorporated in the March 2025 assessment (DFO 2025).

Commercial catch data for 2025/26 are considered preliminary as the season is not closed until March 31, 2026; these data for 2024/25 are also preliminary pending possible revisions from outstanding catch logs. Data were pulled on February 5, 2026, for Newfoundland and Labrador and Arctic Regions. Catch data for 2023/24 and 2024/25 were revised to reflect updates from harvest activities that had not yet been reported at the time of the last assessment or update (Table 1).

The most recent three years (2023/24 to 2025/26) of at-sea observer program data and NL logbook data have been updated to reflect the most up-to-date information.

# ASSESSMENT

## Historical and Recent Stock Trajectory and Trends – North Stock Assessment Region

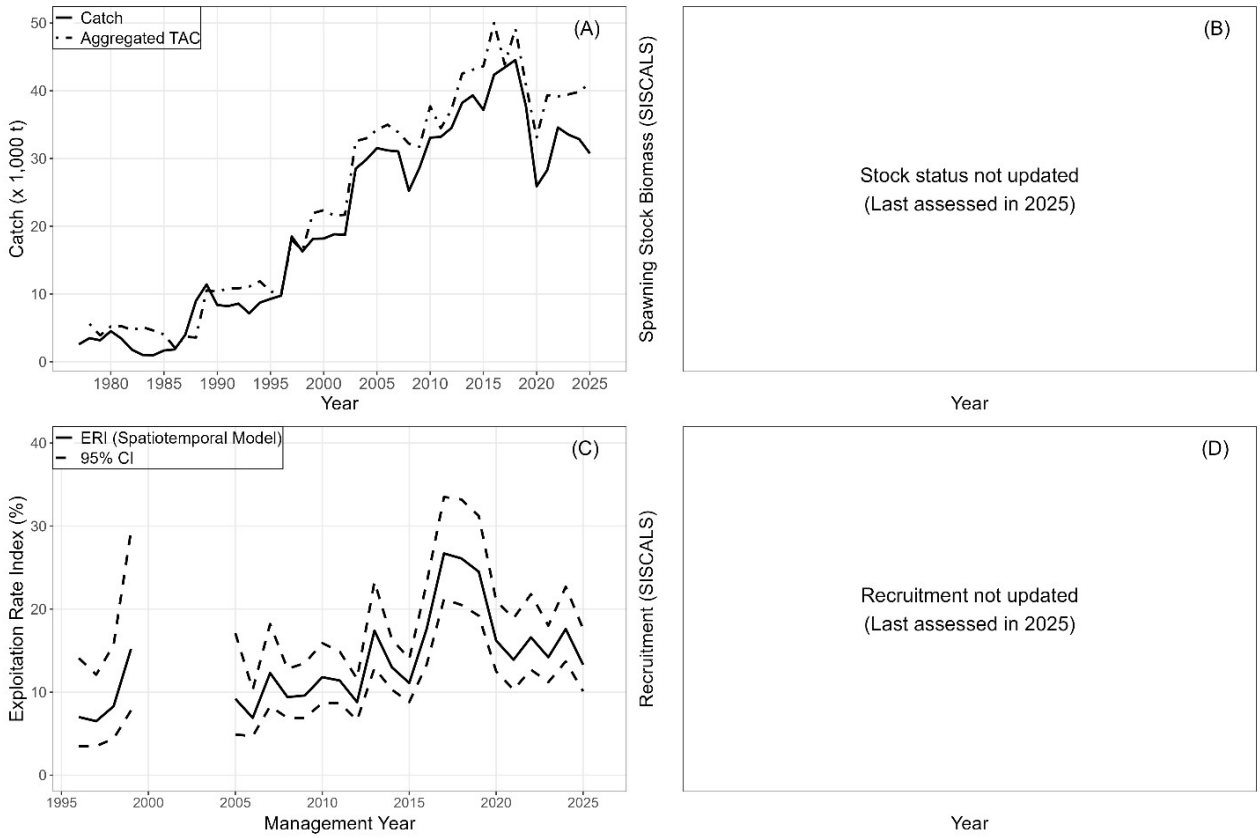



*Figure 2. Northern Shrimp in the NSAR. (A) Catch (x 1,000 t) and aggregated Total Allowable Catch (x 1,000 t) (from the management areas in the NSAR) by year (data for 2024/25 – 2025/26 are preliminary), (B) SSB from SISCALS and stock status are not updated in an interim-year update, (C) Exploitation rate index (%) per management year based on catch and FB survey index from the same year, (D) Recruitment is not updated in an interim-year update. The most recent full stock assessment was conducted in 2025; see the corresponding Science Advisory Report.*

### Fishery

Catch in the NSAR ranged between 984 t and 44,542 t from 1977 to 2025/26 (Figure 2a). The preliminary aggregated catch in 2025/26, as of February 5, 2026, was 30,765 t (75% of the aggregated total allowable catch [TAC] of 41,128 t) (Table 1).

### Biomass

The SSB survey index in 2025 (150,000 t, Figure 3b) increased from 2024 (142,900 t), and remains above the time-series average. The FB survey index in 2025 (231,000 t, Figure 3b) increased from 2024 (186,300 t), but remains below the time-series average. In the context of

the overall trajectory of the stock, these interannual changes in the indices are consistent with the stock biomass remaining near their respective time-series averages.

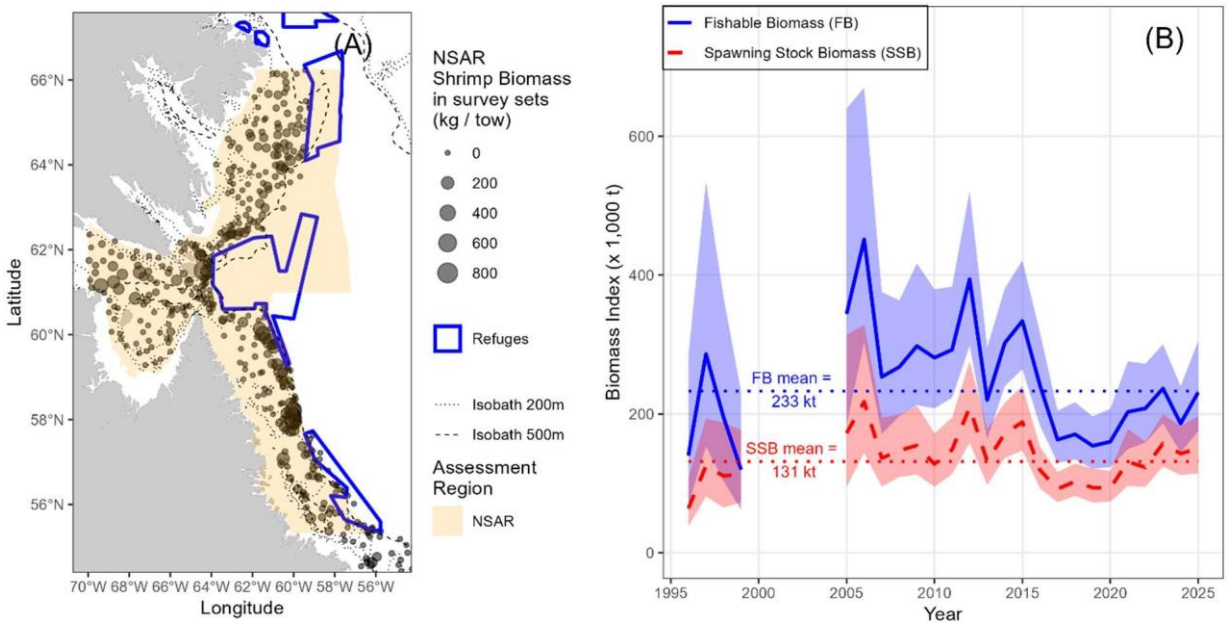



*Figure 3. Additional indicators for Northern Shrimp in the NSAR. (A) Map of the survey catch of Northern Shrimp in 2025 (kg / tow), (B) FB (carapace length ≥ 17 mm – blue continuous line) and SSB ( females of all sizes – red dashed line) survey indices (x 1,000 t). Horizontal dotted lines indicate long-term geometric mean and shaded areas indicate 95% confidence intervals around indices.*

### **Biological** Indicators

In 2025, the length at 50% transition to females returned to values consistent with previous years, following an unusually sharp decline in 2024 that fell below the prior time-series minimum. Median female and male carapace length in 2025 also returned to values consistent with previous years after reaching some of the lowest values observed in the time-series in 2024.

### **Exploitation**

The exploitation rate index (ERI) ranged between 6.5% and 26.7% from 1996 to 2025/26 (Figure 2c). The preliminary ERI for 2025/26 was 13.3% with 75% of the aggregated TAC taken. Should the entire 2025/26 aggregated TAC of 41,128 t be taken, the ERI would be 17.8%.

### **Current** Outlook

The stock status is not updated in interim-years.

## Historical and Recent Stock Trajectory and Trends – South Stock Assessment Region

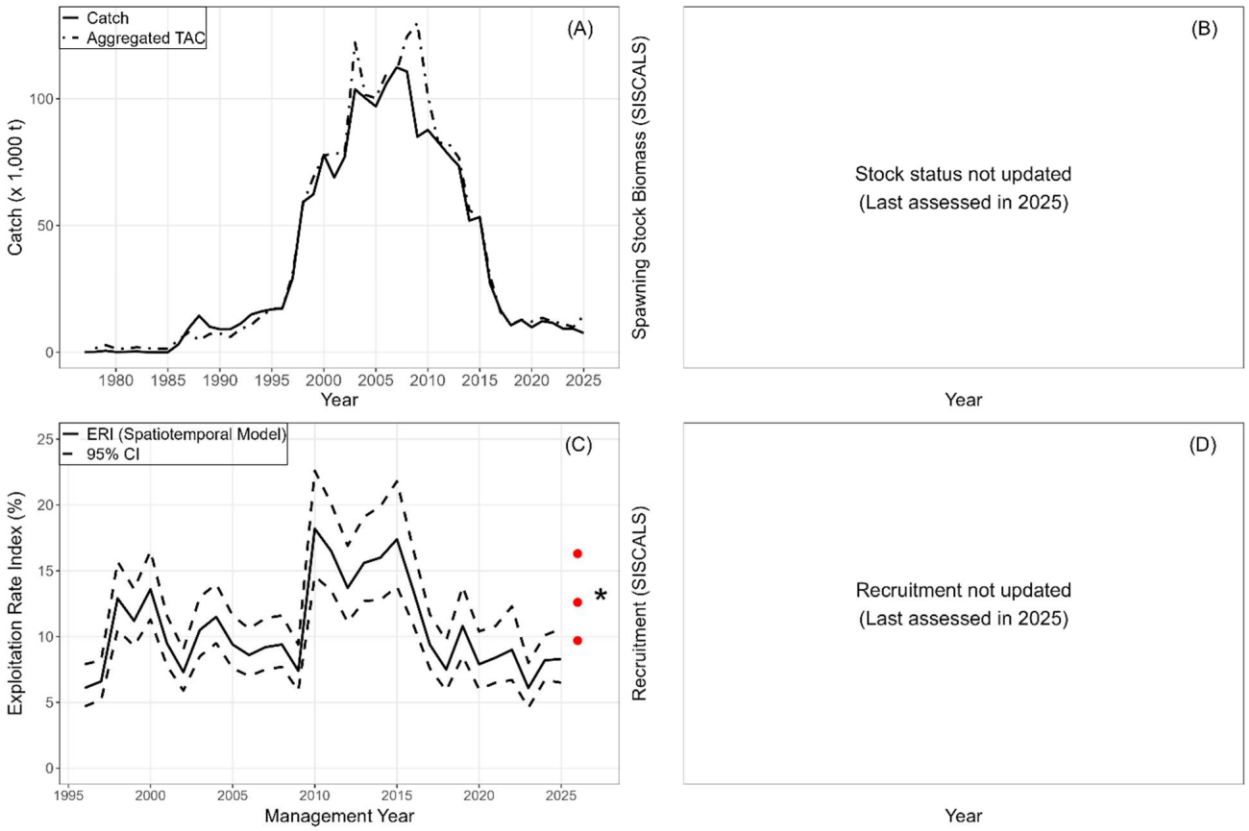



*Figure 4. Northern Shrimp in the SSAR. (A) Catch (x 1,000 t) and aggregated Total Allowable Catch (x 1,000 t) (from the management areas in the SSAR) by year (data for 2024/25 – 2025/26 are preliminary), (B) SSB from SISCALS and stock status are not updated in an interim-year update, (C) Exploitation rate index (%) based on catch from a given management year (calendar year, or April 1–March 31 from 2003 onward) and FB survey index from the previous year (asterisk denotes 2026/27 projected ERI and red dots denote 95% confidence intervals considering the same aggregated TAC as in 2025/26), (D) Recruitment is not updated in an interim-year update. The most recent full stock assessment was conducted in 2025; see the corresponding Science Advisory Report.*

### Fishery

Catch in the SSAR ranged between 15 t and 112,363 t from 1977 to 2025/26 (Figure 4a). The preliminary aggregated catch in 2025/26, as of February 5, 2026, was 7,563 t (53% of the aggregated TAC of 14,387 t) (Table 1).

### Biomass

The SSB survey index in 2025 (73,400 t, Figure 5b) increased from 2024 (55,500 t), but remains below the time-series average and is around the lowest level in the survey time-series. The FB survey index in 2025 (114,500 t, Figure 5b) increased from 2024 (90,900 t), but remains below the time-series average and is around the lowest level in the survey time-series. In the context of the overall trajectory of the stock, these interannual changes in the indices are consistent with the stock biomass remaining near their respective time-series low levels.

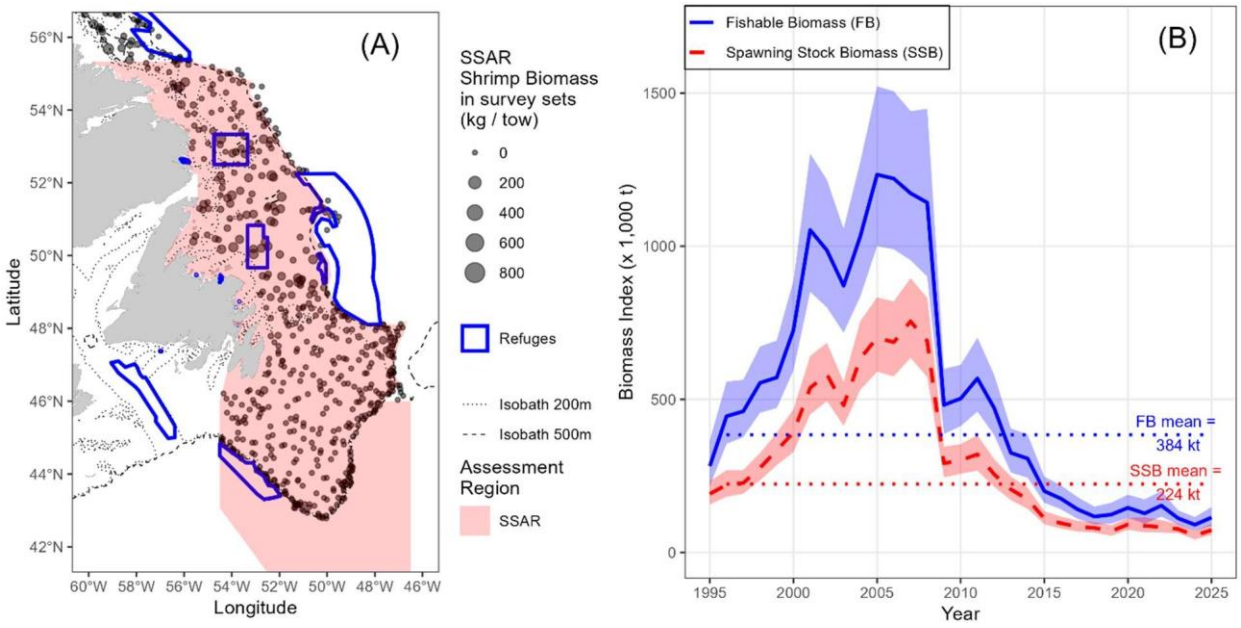



*Figure 5. Additional indicators for Northern Shrimp in the SSAR. (A) Map of the survey catch of Northern Shrimp in 2025 (kg / tow), (B) FB (carapace length ≥ 17 mm – blue continuous line) and SSB (females of all sizes – red dashed line) survey indices (x 1,000 t). Horizontal dotted lines indicate geometric mean and shaded areas indicate 95% confidence intervals around indices.*

### **Biological** Indicators

In 2025, the length at 50% transition to female was similar to 2024. Median female and male carapace length in 2025 was similar to 2024.

### **Exploitation**

The ERI ranged between 6.1% and 18.2% from 1996 to 2025/26 (Figure 4c). The preliminary ERI for 2025/26 was 8.3% with 53% of the aggregated TAC taken. Should the entire 2025/26 aggregated TAC of 14,387 t be taken, the ERI would be 15.8%.

### **Current** Outlook

The stock status is not updated in interim-years.

## History of TAC and Catch

With the change from six assessment areas (SFAs) to two stock assessment regions, SFA-specific TACs were summed for each stock assessment region into aggregated TACs for the purpose of understanding catch history (Le Corre et al. In press). The SFA 5 TAC was divided between the NSAR and SSAR each year based on the proportion of catch in each stock assessment region (i.e., SFA 5 North or South) within that year. The only exception was the final reported year (2025/26), which was incomplete because some logbooks had not yet been received and the fishing season does not close until March 31st; in that case, the previous year's catch proportions were used to divide the SFA 5 catch and TACs.

The preliminary aggregated TAC within the NSAR increased from 39,848 t in 2024/25 to 41,128 t in 2025/26 (Table 1). The preliminary aggregated TAC within the SSAR increased from 9,931 t in 2024/25 to 14,387 t in 2025/26.

*Table 1. Nominal reported catches and aggregated TACs (t) for Northern Shrimp in the NSAR and SSAR over the last 10 years. Catches are based on AQMS data as of February 5, 2026 for the Arctic and Newfoundland and Labrador regions. *Catches for 2024/25 and 2025/26 are considered preliminary. ** TAC and Catch in Shrimp Fishing Area 5 were based on the values from SFA 5, split between the NSAR and SSAR according to the yearly proportion of catch in each stock assessment region, using observer data (Large Vessel: 2016/17 – 2025/26) and logbook data (Small Vessel: 2016/17 – 2025/26).*

| Year | NSAR** | | SSAR** | |
|---|---|---|---|---|
| | *Catch (t)* | *Aggregated TAC (t)* | *Catch (t)* | *Aggregated TAC (t)* |
| 2016/2017 | 42,363 | 50,000 | 27,019 | 29,994 |
| 2017/2018 | 43,430 | 43,884 | 16,582 | 15,809 |
| 2018/2019 | 44,542 | 49,137 | 10,619 | 10,868 |
| 2019/2020 | 37,686 | 40,873 | 12,744 | 12,806 |
| 2020/2021 | 25,909 | 33,118 | 9,836 | 12,096 |
| 2021/2022 | 28,306 | 39,341 | 12,253 | 13,573 |
| 2022/2023 | 34,578 | 39,172 | 11,581 | 12,092 |
| 2023/2024 | 33,518 | 39,469 | 9,314 | 11,218 |
| 2024/2025* | 32,859 | 39,848 | 9,213 | 9,931 |
| 2025/2026* | 30,765 | 41,128 | 7,563 | 14,387 |

## Ecosystem and Climate Change Considerations

Ecosystem considerations were summarized for the NL Bioregion (NAFO Divisions 2GHJ3KLNOPs), which includes the southern portion of the NSAR (NAFO Divisions 2GH), and the entirety of the SSAR (NAFO Divisions 2J3KLNO). Generally, there is less ecosystem information available for the NSAR, especially for the portion north of the NL Bioregion.

The ocean climate in the NL Bioregion has shown decadal-scale cold and warm phases. The warm phase that started around 2020 continued in 2025. Recent phytoplankton blooms have been early. Total zooplankton biomass has been improving since the lows in the early mid- 2010s.

Newfoundland and Labrador ecosystems collapsed in the late 1980s and early 1990s and was associated with extreme cold ocean conditions and ecosystem overfishing. Declines in biomass of groundfish were not compensated by increases in shellfish, with total biomass remaining below pre-collapse levels. Some rebuilding was observed between the mid-2000s and early 2010s, after which declines occurred. While these ecosystems continue experiencing overall lower productivity conditions relative to the pre-collapse period related to bottom-up processes (e.g., food limitation), improvements in total biomass have been observed since 2020 after the lows in the mid-2010s. These increases are driven by groundfish and not shellfish.

Shrimp remains an important forage species, especially in the northern areas, but its dominance in fish diets has decreased in the NL Bioregion. Key predatory fishes (Greenland Halibut, Atlantic Cod, and redfish) have increased in both assessment regions in the 2020's. Although the cod levels observed in the NSAR remain low in comparison with the SSAR, and with other predators in the NSAR, its levels have increased and reached a time-series high in 2025.

Both fishing and fish predation have been potential drivers of the stock in Div. 2H, while fish predation has been the stronger potential stock driver in Div. 2J3KL. The fish predation mortality index on shrimp remains at a higher level in 2J3KL, and has increased to this level in Div. 2H in

recent years. This is consistent with the ecosystem in Div. 2H shifting to a finfish-dominated community structure.

Ocean climate controls productivity at the ecosystem level in the NL Bioregion, and where the ecosystem configuration associated with a warm ocean climate does not favor Northern Shrimp. The biomass of Shrimp in Div. 2J3KL has declined to levels similar or lower to the ones estimated for the 1980s before the ecosystem collapse.

## PROCEDURE FOR INTERIM-YEAR UPDATES

During interim-year updates, assessment model (SISCALS) outputs and overall stock status are not updated. Stock status for the North Stock Assessment Region (NSAR) and the South Stock Assessment Region (SSAR) are only updated when the stock assessment model is run; it is not possible to determine stock status during interim-year stock updates. However, FB and SSB survey indices, estimated using spatiotemporal models, are updated for use in the harvest decision rules that are being tested via MSE. In addition, other biological indicators, ecosystem indices, fishery catch and TAC information, and exploitation rate indices are also updated.

## OTHER MANAGEMENT QUESTIONS

Northern Shrimp continues to be managed at the SFA scale, with management recommendations informed by SSB and FB survey indices estimated at the stock assessment region level and applied within harvest decision rules to derive a stock assessment region harvest level (Johnson et al., In prep.[2]). The stock assessment region harvest level is then divided among management areas (i.e., the SFAs) using calculations informed by the spatial distribution of the FB survey index within each stock assessment region. More specifically, the FB spatiotemporal models were used to predict FB survey estimates at the scale of each management area across the time-series, expressed as proportions of the overall biomass within each stock assessment region (more details in Johnson et al., In prep.[1]).

Caution is needed when interpreting single-year spatial patterns (Table 2 and Table 3). Shrimp can be transported great distances in a relatively short period of time in and out of management areas. This can cause fluctuations in biomass observed within and among management areas. It is one of the reasons that performing assessments at the SFA level is no longer how Northern Shrimp are assessed. Relative distribution among SFAs needs to be seen as a tool for informing spatial allocations of harvest level at the management area scale.

[2]Johnson, S.D.N., Cox, S.P., Baker, K.D., Le Corre, N., Fulton, S., Coffey, W., and Walkusz, W. In prep. Evaluating candidate harvest decision rules for Canada's Northern Shrimp (*Pandalus borealis*) fishery off Newfoundland, Labrador, and Baffin Island.. DFO Can. Sci. Advis. Sec. Res. Doc.

*Table 2. Annual SSB and FB indices for NSAR (×1,000 t), and the annual relative biomass (%) representing the distribution of FB among management areas based on FB index spatial pattern.*

| Year | Biomass Indices | | Relative biomass (%) based on FB distribution | | | |
|---|---|---|---|---|---|---|
| | SSB index (x 1,000 t) | FB index (x 1,000 t) | EAZ | WAZ | SFA 4 | SFA 5N |
| 2016 | 119.3 | 241.2 | 33.6 | 10.4 | 34.4 | 21.6 |
| 2017 | 92.0 | 162.9 | 25.5 | 7.6 | 41.1 | 25.8 |
| 2018 | 102.7 | 170.7 | 25.8 | 11.2 | 30.1 | 32.9 |
| 2019 | 93.8 | 154.1 | 35.7 | 21.0 | 26.8 | 16.5 |
| 2020 | 93.2 | 160.0 | 32.1 | 18.7 | 28.9 | 20.3 |
| 2021 | 131.2 | 203.0 | 21.0 | 12.6 | 45.7 | 20.6 |
| 2022 | 123.1 | 208.0 | 17.6 | 19.5 | 38.0 | 24.9 |
| 2023 | 157.5 | 236.7 | 26.4 | 16.1 | 32.5 | 24.9 |
| 2024 | 142.9 | 186.3 | 29.0 | 12.8 | 33.2 | 25.0 |
| 2025 | 150.0 | 231.0 | 19.3 | 28.8 | 37.6 | 14.3 |

*Table 3. Annual SSB and FB indices for SSAR (×1,000 t), and the annual relative biomass (%) representing the distribution of FB among management areas based on FB index spatial pattern.*

| Year | Biomass Indices | | Relative biomass (%) based on FB distribution | | | | |
|---|---|---|---|---|---|---|---|
| | SSB index (x 1,000 t) | FB index (x 1,000 t) | SFA 5S | SFA 6 | NAFO3L | NAFO3N | NAFO3O |
| 2016 | 95.7 | 175.9 | 18.3 | 70.1 | 11.6 | 0 | 0 |
| 2017 | 84.4 | 140.8 | 24.8 | 70.1 | 5.1 | 0 | 0 |
| 2018 | 80.4 | 117.6 | 12.9 | 79.1 | 7.9 | 0 | 0 |
| 2019 | 69.9 | 123.9 | 15.5 | 74.5 | 9.9 | 0 | 0 |
| 2020 | 91.7 | 146.2 | 7.8 | 83.9 | 8.3 | 0 | 0 |
| 2021 | 87.6 | 128.0 | 8.2 | 74.1 | 17.7 | 0.1 | 0 |
| 2022 | 83.2 | 153.5 | 9.1 | 75.3 | 15.5 | 0.1 | 0 |
| 2023 | 76.9 | 112.1 | 9.8 | 82.5 | 7.5 | 0.1 | 0 |
| 2024 | 55.5 | 90.9 | 4.1 | 83.8 | 12.0 | 0.1 | 0 |
| 2025 | 73.4 | 114.5 | 5.7 | 87.7 | 6.6 | 0.1 | 0 |

## SOURCES OF UNCERTAINTY

Interim-year updates involve several classes of uncertainty. For Northern Shrimp, the most relevant ones include:

- Observation uncertainty or measurement error associated with direct data inputs to the assessment such as catch, survey indices, length composition, and biological characteristics.
- The relative catchabilities for the four research vessels (Cape Ballard, Aqviq, Kinguk, and Katsheshuk II) that have been used throughout the time-series of the NSRF-DFO collaborative survey and the relative catchability between the vessels is unknown.
- The variability of Northern Shrimp's vertical distribution across space and time is unclear. Biomass estimates rely on bottom trawl surveys, which may miss shrimp which are higher in the water column, influencing observed fluctuations rather than population size.
- Environmental data in the NSAR lacks predation mortality indices, comprehensive physical ocean data, and pelagic production data, which are needed to include impacts of environmental conditions and predation in the NSAR and adopt an ecosystem approach to fisheries management.
- The assessment results assume consistent spatial patterns in fishery removals. Historically, allocations in the NSAR and SSAR have been made at the management-area level, which is

smaller than the stock assessment region scale. This approach has likely helped limit localized concentrations of fishing effort by distributing fishing activity across the management areas. It is unclear how changes in the distribution of fishing effort could impact the broader population.

## LIST OF MEETING PARTICIPANTS

| NAME | AFFILIATION |
|---|---|
| Aaron Adamack | DFO NL - Science |
| Robert Deering | DFO - CSAS - Major Projects |
| Dave Boguski | DFO - CSAS - Arctic |
| Erika Parrill | DFO NL - Science |
| Nicolas Le Corre | DFO NL - Science |
| Krista Baker | DFO NL - Science |
| Wojciech Walkusz | DFO Arctic - Science |
| Samantha Fulton | DFO Arctic - Science |
| Nicholas Duprey | DFO NCR - Science |
| Susan Thompson | DFO NCR - Science |
| Will Coffey | DFO NL - Science |
| Liliya Baranova | DFO NCR - Resource Management |
| Hannah Munro | DFO NL - Science |
| Darren Sullivan | DFO NL - Science |
| Darrell Mullowney | DFO NL - Science |
| Mariano Koen-Alonso | DFO NL - Science |
| David Belanger | DFO NL - Science |

## SOURCES OF INFORMATION

Baker, K.D., Le Corre, N., Bourret, A., Parent, G., Fulton, S., Duprey, N.M.T., and Cox, S. 2025. Spatial stock structure of northern shrimp *Pandalus borealis* Krøyer, 1838 (Decapoda: Caridea: Pandalidae) in Canada's Northwest Atlantic. J. Crustacean Biol. 45(2).

DFO. 2025. Northern Shrimp (*Pandalus borealis*) in North and South Stock Assessment Regions in 2024. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2025/042.

Le Corre, N., Baker, K.D., Coffey, W., Enright, D., Walkusz, W., Munro, H., Bélanger, D., Coyne, J., Koen-Alonso, M., Malayny, C., Sullivan, D., and Atchison, S. In press. Assessment of Northern Shrimp (*Pandalus borealis*) in Northern and Southern Stock Assessment Regions in 2024. DFO Can. Sci. Advis. Sec. Res. Doc.

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*Aussi disponible en français :*
*MPO. 2026. [Titre – il doit correspondre exactement à celui de la page couverture, mais en lettres minuscules]. Secr. can. des avis sci. du MPO. Rép. des Sci. 2026/nnn.*

APPENDIX 2 DRAFT NSAC Record of Discussion

**Northern Shrimp Advisory Committee (NSAC)**
**March 25, 2026.**

## Welcome and Opening Remarks

Todd Williams, DFO Resource Management (RM), Ottawa, Chair, Northern Shrimp Advisory Committee (NSAC), outlined the Agenda for the meeting.

- Members did not voice any comments or concerns on the Agenda items

## Science – Stock Updates

Stock updates were provided for Northern shrimp (*Pandalus borealis*) in the North and South Stock Assessment Regions (NSAR and SSAR) and Striped shrimp (*P. montagui*) in Shrimp Fishing Area (SFA) 4 and the Eastern and Western Assessment Zones (EAZ and WAZ).

**Northern shrimp (*P. borealis*)**

Nicolas Le Corre, DFO Science, Newfoundland and Labrador Region, presented an overview of the survey coverage, environmental and ecosystem conditions, and survey biomass indices that provided the basis for the March 2026 *P. borealis* stock update.

- The stock status for the NSAR and SSAR is only updated during full assessments; it is not possible to estimate stock status during interim-year updates.
- Fishable Biomass (FB) and Spawning Stock Biomass (SSB) survey indices, estimated using spatiotemporal models, are updated for use in the harvest decision rules that are being tested via Management Strategy Evaluation (MSE).
- Proportional breakdown of each assessment region's FB survey index into management areas is provided.
- The ocean climate in the NL Bioregion has shown decadal-scale cold and warm phases. The warm phase that started around 2020 continued in 2025.
- The biomass of key predatory fishes (Greenland Halibut, Atlantic Cod, and redfish) have increased in both assessment regions in the 2020s and remains high in 2025.
- Clearwater FNC requested the rationale for the warm water observed on the Labrador Shelf (3O), which is noteworthy because there are colder temperatures evident on the Eastern Scotian Shelf.
    - DFO Science suggested that it may be due to increased mixing of warm water from deeper off the ocean shelf.
- Ocean Choice International (OCI) indicated that warmer bottom ocean temperatures are occurring in other nearby areas (3N) and affecting other fisheries (i.e., yellowtail).
- Nunavut Fisheries Association (NFA) raised that comparing pre- (recent past) and post-collapse (current) biomass in the system is not a fair comparison; it is currently a shellfish dominant regime and it doesn't make sense to compare this to a groundfish dominated regime.
- Northern Coalition (NC) asked if the ecosystem is stabilizing at pre-collapse levels and if pre-collapse is referring to the early 1980s timeframe?
    - DFO Science indicated that pre-collapse refers to pre-1990s and there is uncertainty if the system will return to pre-collapse levels because of warming waters, etc.
- OCI noted that a more groundfish dominant ecosystem is returning, yet shrimp SSB and FB is increasing – what could be a rationale for this?

    - DFO Science indicated that it is difficult to decipher the effect of predation – there are multiple aspects at play.
        - Potential predator-prey index is reported and this doesn't mean that predators are present in the same location as the shrimp.
        - There's an abundance of small redfish in the North and it is challenging to determine how much shrimp they are consuming.
        - Depends on fishing pressure.
- The Canadian Association of Prawn Producers (CAPP) noted that the biomass of shrimp in the deeper strata does not appear to be included in the ecosystem survey.
    - DFO Science responded that the survey covers 100m to 750m depth.

NSAR Indices and Trends

- The stock status was not updated in March 2026. The stock was estimated to be in the Healthy Zone when last fully assessed in March 2025.
- The SSB survey index in 2025 (150,000 t) increased from 2024 (142,900 t), and remains above the time-series average.
- The FB survey index in 2025 (231,000 t) increased from 2024 (186,300 t), but remains below the time-series average.
- In the context of the overall trajectory of the stock, these interannual changes in the indices are consistent with the stock biomass remaining near their respective time-series averages.

SSAR Indices and Trends

- The stock status was not updated in March 2026. The stock was estimated to be in the Healthy Zone when last fully assessed in March 2025.
- The SSB survey index in 2025 (73,400 t) increased from 2024 (55,500 t), but remains below the time-series average and is around the lowest level in the survey time series.
- The FB survey index in 2025 (114,500 t) increased from 2024 (90,900 t), but remains below the time-series average and is around the lowest level in the survey time series.
- In the context of the overall trajectory of the stock, these interannual changes in the indices are consistent with the stock biomass remaining near their respective time-series low levels.

FB Spatial Distribution

- The spatial distribution (proportion) of the FB survey index within each stock assessment region was provided to inform the relative distribution of the stock assessment region harvest level into the management areas (i.e., the SFAs).
- CAPP, NFA, and OCI requested clarification on the methodology used to calculate the FB proportions and for DFO to provide calculations (including amounts) of FB in each management area under the old methodology (OGMAP and STRAP) and the new methodology (spatiotemporal modeling) dating back to 2016.
    - DFO Science indicated that the entire survey timeseries data (1996-2025) was input into the spatio-temporal model to calculate the FB and proportions over the entire survey timeseries, but only the most recent years were shown. The FB proportions were requested by DFO RM.
    - DFO RM indicated that tables illustrating these calculations will be provided.

**Striped shrimp (*P. montagui*)**

Samantha Fulton, DFO Science, Arctic Region, presented and an overview of the survey coverage and survey biomass indices that provided the basis for the March 2026 *P. montagui* stock update.

SFA 4

- Stock status is in the Healthy Zone.

- SSB index increased by 20% (to 30,000 t) from 2024.
- FB index increased by 19% (to 33,900 t) from 2024.

EAZ
- Stock status is in the Critical Zone.
- SSB decreased by 77% (to 3,045 t) from 2024.
- FB decreased by 79% (to 3,298 t) from 2024.

WAZ
- Stock status is in the Healthy Zone.
- SSB decreased by 16% (to 55,465 t) from 2024.
- FB index increased by 14% (to 82,646 t) from 2024.

*Discussions on TAC and Management Measures*
- NC remarked that the increase in the WAZ biomass is orders of magnitude higher than the biomass in EAZ, and these stock areas are likely not truly discreet; we are likely observing the biomass distribution at the moment it is surveyed, and the combined stock status as a whole may be relatively unchanged.
    - Noted that the relative shifts in stock biomass pose a challenge to developing management measures for these management areas and there was interest expressed in previous years to examine the stock in more holistic way.
    - From a science perspective, how significant should the EAZ stock assessment findings be as we approach management of the resource?
    - DFO Science responded that this year's survey catches of striped shrimp near Resolution Island were much lower relative to adjacent areas. Survey maps show that a concentration of biomass has moved from the EAZ to just over the WAZ management line.
    - Further, the SSB in EAZ is a relatively smaller value, so drops in percentage appear much worse than they actually are in absolute terms (tonnage amounts).
    - A one-year biomass decrease in the EAZ may not be not be of high concern from a science perspective in context of increases in adjacent regions, but is something to keep an eye on.
- NFA noted that there are several decreases in biomass followed by increases evident in the EAZ time series.
- NRL raised that that the dividing line between EAZ and WAZ has been problematic for many years. The changes in stock status are largely driven by migrations in distribution between EAZ and WAZ which yield mathematical effects (artifacts) due to the dividing line.
    - Requested that a Working Group be struck to address this issue.

## 2026-27 Total Allowable Catches (TACs)

DFO RM presented TAC recommendation options for *P. borealis* and *P. montagui*.

**Striped shrimp (*P. montagui*)**

TAC recommendations for the Striped shrimp stocks followed application of the 2-step Harvest Decision Rule (HDR) accepted by NSAC in previous years. TAC discussions for the WAZ were reserved for the Indigenous meeting.

SFA 4
- Applying the 2-step = 5,828t (ER of 17.2%).
- Maintaining the 2025 = 4,033t (ER of 11.9%).
- CAPP supported maintaining the TAC at 4,033 t. No objections were raised.

EAZ

- A 10% exploitation rate (ER), as per following the HDRs, results in a TAC of 330t.
- NRL, NC, and CAPP noted that 330 t would pose challenges to the directed *P. borealis* stock in the EAZ and re-iterated their request for a Working Group to examine the EAZ-WAZ management area border.
    - There was general agreement among NSAC members that 330 t is not sufficient for cover *P. montagui* bycatch in the *P. borealis* fishery.
- CAPP proposed applying an adaptation of the 2-step function of the HDR, resulting in a TAC of 1,578t.
    - No objections by industry were raised. The Chair noted the preference for a variation in the application of the HDR for a TAC of 1,578t.
- DFO Science clarified that a 20% maximum ER would not be a major concern for them at this time, however, they could not support removals beyond this level.
    - The Precautionary Approach framework should be used in managing the stocks, and as such, registering the adjustments as an overallocation may be preferable in this regard (as opposed to the overallocation integrated within the TAC).
    -

**Northern shrimp (*P. borealis*)**

TAC recommendations for Northern shrimp were based on MSE-tested HDRs, applying a 4-year moving average of the FB spatial distribution, and a catch utilization adjustment.

NSAR Harvest Level

- Stock status was in the Healthy Zone when last fully assessed (March 2025).
- Harvest levels for variations of the shortlisted 2-Step HDRs with an ER of 20% and 17% were presented.
- NSAC members (NC, OCI, CAPP) supported retaining NSAC's previous recommendation (from January 20, 2026 meeting) for the HDR with a 20% ER, a maximum harvest level change of 25%, and a 4-year phase-in period (Max25_4-year_20%).
- Max25_4-year_20% results in a NSAR harvest level of 41,760 t.

SSAR Harvest Level

- Stock status was in the Healthy Zone when last fully assessed (March 2025).
- Harvest levels for variations of the shortlisted 2-Step HDRs with an ER of 10%, 12.5%, and 15% were presented.
- NSAC members (FFAW, CAPP) supported retaining NSAC's previous recommendation (from January 20, 2026 meeting) for the HDR with a 15% ER and a maximum harvest level change of 25% (Max25_15%).
- Max25_15% results in a SSAR harvest level of 15,780 t.

Management Area TACs

TACs were presented with the various shortlisted HDRs for the NSAR and SSAR. TACs with the NSAC-recommended HDR for the NSAR and SSAR noted above were as follows:

- WAZ: 4-year average of biomass (19.3%) of the NSAR harvest level = 8,060t.
- EAZ: 4-year average of biomass (23.1%) of the NSAR harvest level = 9,636t.
- SFA 4: 4-year average of biomass (35.3%) of the NSAR harvest level = 14,752t.
- SFA 5-North: 4-year average of biomass (22.3%) of the NSAR harvest level = 9,302t.
- SFA 5-South: 4-year average of biomass (7.2%) of the SSAR harvest level = 1,132t.
- SFA 5 (North and South combined): 10,434t
- SFA 6: 4-year average of biomass (82.3%) of the SSAR harvest level = 12,991t.

- 3L: 4-year average of biomass (10.4%) of the SSAR harvest level = 1,641t; Canadian domestic TAC for SFA 7 = 1,367t .
- 3NO: 4-year average of biomass (0.1%) of the SSAR harvest level = 16t.

Catch Utilization Adjustment

The industry proposal, tabled at the January 20, 2026 NSAC meeting, to add 5% of TAC to each management area in the NSAR was discussed.

- Since the January 20 meeting, views provided to the Department indicated limited benefits of the proposed 5% catch adjustment to Nunavut and Nunavik (NU and NK) entities. Land Claimants submitted a proposal for underutilized quota in the WAZ to benefit NU/NK entities in NU/NK-East and Davis Strait West (DSW), subject to co-management Board decisions.

*Discussions on TAC and Management Measures*

- NC asked why the new survey data was not integrated into the TAC_1 to TAC_5 projections? When will it be?
    - DFO Science responded that this data was not included in the MSE diagnostic performance statistics because the full MSE will not be run again until it is reviewed (i.e., 2028). However, the survey data was included in updating the biomass indices and determining the NSAR and SSAR harvest levels.
- OCI questioned why additional HDRs were tested after the past NSAC meeting, suggesting that it was not worth expending capital to add this calculation given that the improvements in LRP are minimal yet would have a significant impact on economics.
    - DFO RM responded that RM wanted to see the full profile of options for risk assessment purposes.
- CAPP indicated that the tests with the additional ERs have not changed their recommendation, noting that the 2025-26 ERI would be 17.8% if that TAC was fully caught, and that we're on track to be within the range for ER this year.
- FFAW re-iterated that their previous HDR recommendation with 15% ER still stands. The 0.2% difference in pLRP is an improvement, but has significant implications for inshore fleet amounting to ~$3 million in reduced TAC.
    - Questioned if the HDR numbers for 12.5% ER will be included in the advice to the Minister as an option?
    - DFO Science responded that they recognize the socio-economics implications and that the choice is a management decision, but recommended exploring additional HDRs with lower ERs from a conservation perspective because those lower ERs would be more closely aligned with Umsy values; 15% ERI is almost 2x Umsy numbers. Further, the LRP is much lower than in the past, presenting increased uncertainty with how the stock would respond should it enter the Critical Zone.
- CAPP suggested that with an HDR selected, SFA-specific TAC recommendations are simply arithmetic. Indicated that they are comfortable with the TACs, though their support is conditional on having a method of catching the full harvest level.
    - NC and NFA supported this argument.
- Regarding the catch utilization adjustment, CAPP indicated that it should be included in the TAC (i.e., SFA harvest level + utilization adjustment), rather than an over-allocation which may raise concerns from an MSC perspective.
    - The catch utilization adjustment could be viewed as a way to help the actual removals be more akin to what the model assumes was removed.
    - NFA questioned if this approach would have any impacts to MSE or the model?
    - DFO Science noted that the MSE assumes that 100% of the HDR amount is removed.
- St. Anthony Basin Resources Inc. requested clarification on why the catch utilization adjustment is only for the NSAR and not the SSAR?

    - DFO RM responded that greater utilization is realized in the SSAR, but views regarding a proposal for the SSAR are welcomed.
    - Clearwater FNC noted that SSAR underutilization would likely occur in the future once SFA 7 is re-opened.
- DFO Science indicated concerns that the catch utilization adjustment could result in increased localized fishing pressure and that this adjustment should be recorded separately from the TAC for tracking purposes.
- CAPP re-iterated that the industry proposal continues to be that each SFA in the NSAR receives a 5% increase to the TAC from the MSE HDR output, and that every quota holder within each NSAR SFA receives a 5% increase, which should also apply to Davis Straight West.
    - NFA supported including the 5% adjustment in the TAC, but recognized the need to document how the resulting TACs were determined.
    - DFO RM suggested that TAC can be articulated as inclusive of the HDR output and catch utilization adjustment.

## Other Updates

Electronic Video Monitoring (EVM) and Shore-based Reporting

DFO provided an update on the EVM and shore based reporting initiatives.

- EVM in the offshore fleet, which is voluntary, cannot be used while fishing inside the Nunavut and Nunavik Settlement Area waters. Using EVM would be subject to Board decisions to be used in the future.
- Similarly, EVM and the shore-based reporting do not apply for offloading in Greenland.
- The shore-based program will have mandatory and voluntary components:
    - Dockside carton counting (and weighing for industrial shrimp only) by independent service providers will be mandatory.
    - Package inspection to determine the “net frozen weight” of all product types will also be mandatory.
    - Further inspection to determine the net drained (or thawed) weight is optional.
- There will be a 1-year pilot phase for the shore-based program and the fleet will be given a 60-day notice prior to this program coming into effect.
- NRL supported that some aspects of the shore-based component are voluntary.
    - Clarified that industrial shrimp, which is a raw material sold as a raw material and at actual weight, wouldn’t require sampling.
    - Noted that it is important that the requirement to provide a complete and accurate hail on a daily basis remains the licence conditions.
- NC expressed concern at the pace that the initiative is being implemented, given and outstanding questions and concerns.
    - Operational considerations as to how this is going to work and additional costs that may be incurred. Will there be incremental effort and time constraints?
    - Next steps are unclear – is further dialog with inspection companies planned?
    - Supports EVM, as long as there's no intent to make it mandatory.
    - Unclear when the specific implementation date will be. Does the term "pilot" extend to EVM? Requested that draft protocols and forms be distributed to NSAC so members can have opportunity to review.
- The Chair indicated that the pilot is for the shore based component, to indicate that there could be changes to the sampling requirements etc., and that “pilot” does not imply mandatory EVM in the future.
    - Further, the Chair committed to:
    - Focus on the implementation questions and ground truthing operational requirements with the service providers.

- Send protocol documents to NSAC members for their review, and outline next steps in terms of engagement with service providers. Provide 60 days notice to NSAC once operational elements are developed.

Licence Conditions

DFO provided an update on the key changes in the 2026 conditions of licence.

- Added a requirement for licence holders with access to multiple quota types in Davis Straight West to record the allocation type being fished in the Comments section of the logbook.
- Added a requirement to report catches in SFA 5 to SFA 5 North or SFA 5 South in the Comments section of the logbook.
- Added requirement to report tows in SFA 5 that cross the line between SFA 5 North and SFA 5 South in the Comments section of the logbook.
- Added a new Schedule which outlines technical specification and conditions about the functioning and operation of the EVM system, noting that more specific requirements would be in the EVM protocol, which is being finalized and would be distributed.
- Added a new Schedule requiring those using EVM to hail out.

SFA 7

DFO provided an update on the potential re-opening of SFA 7.

- Regarding the 9.4% allocation to Prince Edward Island Atlantic Shrimp Company (PEIASC), the Minister was considering the potential for using that allocation for Section 10 purposes, and had requested PEIASC to provide information with respect to that.
- PEIASC chose not to submit an application, nor provide additional information related to the projects which had been funded through their allocation over the years, which DFO had offered to share with the NSAC memberships.
- The Minister is further contemplating what she would like to do with their allocation.
- The TAC for SFA 7 will be established along with SFAs 4-6, informed by the MSE-tested HDR. However, any decision to re-open SFA 7, and associated TAC, will be announced together with allocation decisions.
- The PEIASC clarified the position of the PEIASC and PEI Government on this matter.
    - While their allocation supported science research, it was never tied to scientific research, there have been all sorts of other projects supported over the years.
    - The PEIASC could mount a credible proposal, but they do believe their access to Northern shrimp in SFA 7 should not be subject to NSAC members support. It should be guaranteed by the Government of Canada, as re-iterated by PEI Minister Bell and Minister Hudson, who personally met with Minister Thompson.
    - PEIASC's and PEI Government's position is that if there is an allocation in SFA 7, PEI should continue to receive their 9.4% allocation.
    - Indicated they would be happy to share the PEIASC letter with the committee.

Section 10 for NSRF in SFA 4

- The Minister decided to allocate 1,500t for 2026-27 from the SFA 4 TAC, and that, from now on, the 1,500t will be distributed proportionately to all allocation holders in SFA 4 according to the sharing key.

Conservation and Protection (C&P)

- C&P provided an update on enforcement activities over the past year.

Safety at Sea

- Transport Canada presented information pertaining to safety at sea.

**Participants**

Sherry Glynn – Fish Food Allied Workers Union (FFAW)

Julian Ryan – 3K North, FFAW
Catherine Boyd, Dany Jabbour, and Jim Gibbons – Clearwater Seafoods
Bruce Chapman – Canadian Association of Prawn Producers
Carey Bonnell – Ocean Choice International
Michelle Moffat – MV Osprey
Brian McNamara, Brent McNamara, and Mark Quinlan – Newfound Resources Ltd.
Tony Wright – Makivvik Corporation
Alastair O'Reilly – Northern Coalition
Brynne Divine – Oceans North
Patrick Martin and Jerry Ward – Qikiqtaaluk Corporation / Qikiqtaaluk Fisheries Corporation
Derek Butler – Nunavut Fisheries Association
Christopher Mitchelmore – St. Anthony Basin Resources Inc.
Ron Johnson – Torngat Fish Producers Co-operative Society Ltd.
Emma-Rose Murphy – Nunatsiavut Government
Paul Loder and Peter Adams – Baffin Fisheries Cooperative
Ann-Julie Cote – Ministère de l'Agriculture, des Pêcheries et le l'Alimentation du Québec
Shawn Frank – Pikalujak Fisheries
Dave MacEwan – Government of Prince Edward Island
Lewis Creed – Prince Edward Island Atlantic Shrimp Company
Cyril Boudreau – Government of Nova Scotia Department of Fisheries and Aquaculture
Leigh Gustafson – Nunavut Wildlife Management Board (NWMB)
Keith Coady – Arctic Fishery Alliance
Ben Davis – Torngat Wildlife Plants and Fisheries Secretariat

Todd Williams – DFO Resource Management (RM) National Capital Region (NCR), Chair
Leigh Edgar – DFO RM NCR
Liliya Baranova – DFO RM NCR
Dirk Algera – DFO RM NCR
Brian Lester – DFO RM NCR
Nicholas Duprey – DFO Science NCR
Nicolas Rolland – DFO Science NCR
Nicolas Le Corre – DFO Science NL Region
Krista Baker – DFO Science NL Region
William Coffey – DFO Science NL Region
Martin Henri – DFO RM NL Region
Wojciech Walkusz – DFO Science Arctic Region
Samantha Fulton – DFO Science Arctic Region
Matt Martens – DFO FM Arctic Region
Sandra Moore – DFO FM Arctic Region
Danielle Roy – DFO RM Gulf Region
Andrew Humber – DFO Conservation and Protection NL Region
Paul Glavine – Transport Canada

**Northern Shrimp Advisory Committee - Indigenous Meeting – March 26, 2026**

A virtual meeting of the Northern Shrimp Advisory Committee (NSAC) took place on March 25, 2026. The Department held a virtual post-meeting with Indigenous participants on March 26, 2026, which included representatives from:

- Nunavut Fisheries Association (NFA)
- Torngat Fish Producers Co-Op
- Qikiqtaaluk Corporation (QC) / Qikiqtaaluk Fisheries Corporation (QFC)
- Northern Coalition (NC)
- Canadian Association of Prawn Producers (CAPP)
- NunatuKavut Community Council (NCC)
- Ueushuk Fisheries
- Torngat Joint Fisheries Board
- Nunatsiavut Government (NG)
- Baffin Fisheries Coalition (BFC)
- Makivvik Corporation
- Newfound Resources Ltd (NRL)

The perspectives on science and management of *P. borealis* and *P. montagui* in the EAZ and WAZ in this document encompass views expressed at the Indigenous meeting; views at the broader NSAC meeting on March 25, 2026 are provided in a separate document.

**Science – Stock Updates**
DFO Science recapped the *P. borealis* and *P. montagui* stock updates presented at the NSAC main table.

- NFA asked if biomass trends for *P. montagui* in WAZ and EAZ could be assessed and reported similarly to SFA 4 *P. montagui (i.e.,* a model-based assessment method)?
- DFO Science indicated that it is not possible to parse out the trends for *P. montagui* in WAZ and EAZ because they are encompassed within SFA 4, which uses the entire region to determine the spawning stock biomass trends.
    - The most effective way to address this would be to emulate what has been done for Northern shrimp – treat it as one biological stock.

**2026-27 Total Allowable Catches (TACs)**
DFO RM presented TAC recommendation options for *P. borealis* in the EAZ and WAZ, and for *P. montagui* in SFA 4, EAZ, and WAZ.

**Striped shrimp (*P. montagui*)**
TAC recommendations for the Striped shrimp stocks followed application of the 2-step Harvest Decision Rule (HDR) accepted by NSAC.

<u>EAZ</u>

- Stock status is in the Critical Zone.
- A 10% exploitation rate (ER), as per following the HDRs, results in a TAC of 330t.
- There was recognition of the movement of the stock across the EAZ and WAZ dividing line, which creates uncertainty and potential for fluctuations in the stock dynamics.
- NSAC recommended applying a modified 2-step HDR = 1,578t (ER of 47.8%)instead.
- Indigenous meeting participants supported the NSAC recommendation to apply the modified 2-step HDR, resulting in a TAC of 1,578t.

<u>SFA 4</u>

- Stock status is in the Healthy Zone.
- Applying the 2-step HDR = 5,828t (ER of 17.2%).

- Maintaining the 2025 TAC = 4,033t (ER of 11.9%) (recommended at NSAC).
- No objections were raised against the NSAC recommendation.

WAZ

- Stock status is in the Healthy Zone.
- Applying the 2-step HDR = 15,743t (ER of 19.0%)
- QC/QFC, Makivvik, NFA, BFC, and NC indicated their support for an ER of 20% or higher given the current Healthy status and the stock's past biomass trends that illustrate the stock is able to easily tolerate a 20%+ ER with no conservation risks.
    - Should take advantage of the stock being in the Healthy Zone while the opportunity exists.
- NRL raised that larger, older shrimp are increasingly accounting for more of the catches, which is very desirable from a marketing perspective.
    - It is possible that by setting conservative TACs, we're seeing the sizes of shrimp increase because they are surviving longer.
    - To maximize sustaining catching older, larger shrimp, it would be advantageous to know what the mortality-at-age rates are.
    - NC noted that the science update supports NRL's conclusions: fishable biomass has increased while spawning stock biomass has decreased, suggesting that there's more in the fishable biomass reaching the end of the life cycle.

**Northern shrimp (P. borealis)**

TAC recommendations for Northern shrimp in the EAZ and WAZ were consistent with the approach presented at NSAC.

EAZ

- Stock status was in the Healthy Zone when last fully assessed (March 2025).
- NSAC recommended applying the MSE-tested HDR selected for the NSAR and the 4-year average of biomass in EAZ = 9,636t .
- No objections were raised against the NSAC recommendation.

WAZ

- Stock status was in the Healthy Zone when last fully assessed (March 2025).
- NSAC recommended applying the MSE-tested HDR for the NSAR and the 4-year average of biomass in WAZ = 8,060t.
- No objections were raised against the NSAC recommendation.

**Management Measures**

Catch Utilization Adjustment Proposals

- In response to the catch utilization adjustment proposed by CAPP at NSAC on January 20, Nunavut (NU) and Nunavik (NK) entities (Makivvik/NRL and NFA) requested an alternative catch utilization proposal for NU/NK to allow an additional 800t to be fished in EAZ (NU/NK E and DSW). This alternative proposal from NU/NK was discussed.
    - Department suggested that this 800t could be split by adding 200t to NU/NK-E and 600t to NU/NK-DSW, to be shared 50/50 between NU and NK.
- DFO Science requested clarification on when in the season the adjustment would be applied and whether the amount of removals already registered would be considered before the adjustment is applied.
    - DFO RM indicated that the proposed adjustments would be considered as part of the TAC for each management area, applied at the beginning of the season.
    - NFA raised that the NU/NK proposal would be a one-year trial, with potential adjustments made the following year.
- CAPP expressed support for the flexibilities and the NU/NK proposal in principle, but concern with allowing additional quota to be fished in EAZ without any transfer of the quota out of the WAZ, essentially resulting in overallocation in the EAZ.
- DFO Science asked whether the increased QC/QFC fishing capacity would mean that the TACs in WAZ

and EAZ will be become more fully utilized, and what that may mean regarding these catch utilization proposals.
    - NRL noted that even with the increased fishing capacity, the risk of fully utilizing the catch in these areas is very low.
- CAPP raised that the *P. borealis* and *P. montagui* biomass distributions may be shifting between EAZ and WAZ such that the decrease/increase in biomass in one area could be resulting in a corresponding decrease/increase in the other, highlighting the importance of accounting for adjustments between the two areas.
- DFO RM noted for awareness that applying the increases equally within the settlement areas would change the traditionally held 80:20 NU-NK sharing arrangement to 73:27.
    - NRL acknowledged that the minor change to 73:27 sharing was known among NU and NK interests when developing their catch utilization proposal.
- NFA raised that the NU/NK proposal is conceptually similar to the 5% proposal discussed at the NSAC table. The key difference is the amount of quota made available and potentially caught in the EAZ and WAZ.
- CAPP highlighted that allowing quota from one management area to be fished in another (i.e., WAZ quota fished in EAZ) conceptually departs from the 5% proposal and how the management of the fishery has operated to date, and could be considered precedential. Would others be allowed the flexibility to fish quota from one area in another area? Is the NU/NK proposal to be treated as an exception (i.e., one-off)?
    - DFO RM indicated the NU/NK proposal is similar in objective to the CAPP proposal.
    - Striving to provide flexibility without changing allocation keys, sharing arrangements, or opening up new access for entities that didn't have access previously.
- CAPP expressed that ad hoc operationalization and precedent-setting potential of the NU/NK proposal should be avoided. Further, a rationale for the amount in the NU/NK should be developed, so it is not arbitrarily selected. A unifying proposal that meets the flexibility objectives and melds consistency in the 5% and NU/NK proposals regarding rationale and approach should be developed.
    - NFA noted that the 5% proposal is also based on allowing uncaught quota in one area to be fished in another (i.e., Davis Strait East quota to be caught in SFA 4 and SFA 5).
    - NRL noted that the two proposals are the same in concept and complementary in terms of amounts. However, there needs to be consideration regarding the source of the underutilization and adjustments should equally benefit those entities from where it is occurring. To the extent it is sourced from land claims areas, land claimants should benefit accordingly.
- BFC indicated that land claim agreements are a critical component towards evaluating the catch adjustment proposals, and supported NRL's position regarding land claims beneficiaries.
    - The desire for flexibility stems from minimizing environmental (sea ice affecting northern companies to a greater extent) and operational (fleet availability) constraints.
    - Seeking flexibility not to be able to catch more quota necessarily, rather to be able to catch quota in more appropriate areas depending upon the time of year.
- CAPP noted that the 800t adjustment amounts to ~10% of the potential WAZ TAC, which is twice the percentage increase of the 5% proposal, and raises potential equitability and conservation concerns. Further, the EAZ contains commercial and land claims areas, so adjustment decisions in this area affects all harvesters.
    - Reiterated that limits should be set on adjustment amounts for the NU/NK proposal.
    - BFC indicated that the 5% proposal results in similar tonnage amounts being allocated to industry stakeholders in SFA 4 and 5-North relative to the NU/NK proposal.
- NC raised that the stocks are not biologically divided, this is only for management purposes to retain the existing allocation structures. In situations where there is no risk to the resource, maximum flexibility should be implemented to improve operational efficiencies without prejudice to the risk to people's respective shares.
- DFO Science noted concerns with both the 5% proposal and NU/NK proposal regarding uncertainty with resultant concentration of effort and increased fishing pressure in the NSAR management areas, especially in light of the other proposed flexibilities (e.g. carry forward) that may be operationalized, which will also result in increased pressure.
- The Chair noted the the committee's agreement on the desire to have a catch utilization adjustment included in the TAC. The Department will follow up in the coming days with further information and

invite participants to submit views and potential alternative proposals that reconcile the two existing proposals.

**Other Updates**

Nunavut Fisheries Regulations (NFRs)

DFO provided an update on the NFRs, which are being co-developed with Indigenous partners.

- The Atlantic Fishery Regulations will no longer apply within the Nunavut Settlement Area and Nunavik Marine Region; key provisions will be "ported over" to avoid disruption. No anticipated changes to commercial shrimp fishing or licensing; existing licenses will continue to be valid.
- QC/QCF sought confirmation that NFRS would not affect existing commercial operations outside Nunavut (e.g., Ungava Bay) and whether communal fish plans could be used outside settlement areas.
- DFO clarified that communal plans apply only within settlement areas and that commercial fishing outside of settlement areas remains unchanged.

Electronic Video Monitoring (EVM) and Shore-based Reporting

DFO provided an update on the EVM and shore based reporting initiatives.

- EVM in the offshore fleet, which is voluntary, cannot be used while fishing inside the Nunavut and Nunavik Settlement Area waters. Using EVM would be subject to Board decisions to be used in the future.
- Similarly, EVM and the shore-based reporting do not apply for offloading in Greenland.
- The shore-based program will have mandatory and voluntary components:
    - Dockside carton counting (and weighing for industrial shrimp only) by independent service providers will be mandatory.
    - Package inspection to determine the "net frozen weight" of all product types will also be mandatory.
    - Further inspection to determine the net drained (or thawed) weight is optional.
- There will be a 1-year pilot phase for the shore-based program and the fleet will be given a 60-day notice prior to this program coming into effect.
- NRL noted that the term service providers need to be expanded beyond what been used in recent years to include offloading companies, independent contractors.

Licence Conditions

DFO provided an update on the key changes in the 2026 conditions of licence.

- Added a requirement for licence holders with access to multiple quota types in Davis Straight West to record the allocation type being fished in the Comments section of the logbook.
- Added a requirement to report catches in SFA 5 to SFA 5 North or SFA 5 South in the Comments section of the logbook.
- Added requirement to report tows in SFA 5 that cross the line between SFA 5 North and SFA 5 South in the Comments section of the logbook.
- Added a new Schedule which outlines technical specification and conditions about the functioning and operation of the EVM system, noting that more specific requirements would be in the EVM protocol, which is being finalized and would be distributed.
- Added a new Schedule requiring those using EVM to hail out.

SFA 7

DFO provided an update on the potential re-opening of SFA 7.

- Regarding the 9.4% allocation to Prince Edward Island Atlantic Shrimp Company (PEIASC), the Minister was considering the potential for using that allocation for Section 10 purposes, and had requested PEIASC to provide information with respect to that.
- PEIASC chose not to submit an application, nor provide additional information related to the projects which had been funded through their allocation over the years, which DFO had offered to share with the NSAC memberships.
- The Minister is further contemplating what she would like to do with their allocation.
- The TAC decision for SFA 7 will align with SFAs4-6, however, the decision to re-open SFA 7 will align with allocation decisions.

Section 10 for NSRF in SFA 4

- The Minister decided to allocate 1,500t for 2026-27 from the SFA 4 TAC, and that, from now on, the 1,500t will be distributed proportionately to all allocation holders in SFA 4 according to the sharing key.

# APPENDIX 3 Fishery Profile

**Table 1.** Total allowable catch (TAC), exploitation rate, and stock indicators (fishable biomass (FB), spawning stock biomass (SSB)) for *P. borealis* in the WAZ (2022-23 to 2026-27). For *P. borealis*, "FB WAZ" and "SSB WAZ" represent stock assessment methods used up to and including the 2024 assessment, which have been updated and changed with the adoption of a new stock assessment framework (represented by "FB NSAR" and "SSB NSAR"). The NSAR covers a larger geographic area combining the WAZ, EAZ, SFA 4, and the portion of SFA 5 north of the border between NAFO Divisions 2H and 2J.

| | **Fishery Management Year** | | | | |
|---|---|---|---|---|---|
| *P. borealis* | **2022-23** | **2023-24** | **2024-25** | **2025-26** | **2026-27** |
| **TAC (t)** | 3,958 | 4,788 | 4,186 | 3,584 | *TBD* |
| **% Change TAC** | -22.2 | 21.0 | -12.6 | -14.4 | *TBD* |
| **FB* (t) WAZ** | 19,967[1] | 23,939 | 17,919 | 17,919[2] | 66,528[3] |
| **SSB* (t) WAZ** | 14,083 | 15,899 | 15,713 | N/A[3] | N/A[3] |
| **Potential Exploitation Rate (t)** | 19.8 | 20.0 | 23.4 | 20.0 | N/A[3] |
| **% Change FB WAZ** | -42.8 | 19.9 | -25.1 | 0[2] | N/A[3] |
| **% Change SSB WAZ** | -19.8 | 12.9 | -1.2 | N/A[4] | 0[5] |
| **FB* (t) NSAR** | 197,700 | 208,000 | 230,700 | 186,300 | 231,000 |
| **SSB* (t) NSAR** | 103,700 | 132,900 | 114,200 | 142,900 | 150,000 |
| **% Change FB NSAR** | 22.9 | 5.0 | 11.1 | -19.7 | 24.0 |
| **% Change SSB NSAR** | 0.3 | 28.2 | -14.1 | 55.7 | 4.9 |

**Biomass values reflect the prior year's survey (e.g. 2024-25 FB/SSB values are reflective of the 2023 survey).*

[1] FB value updated 2023, affects associated potential ER.

[2] 2024 FB stock assessment value used for *P. borealis* 2025-26 TAC; consequently, no change results.

[3] Stock assessment method changed; previous methods no longer being used and/or not comparable.

[4] No change in SSB is reported because the new assessment model outputs are not comparable to the previous years.

[5] No change in SSB because the stock status is updated every three years.

**Table 2.** Total allowable catch (TAC), exploitation rate, and stock indicators (fishable biomass (FB), spawning stock biomass (SSB) for *P. borealis* in the EAZ (2022-23 to 2026-27). For P. borealis, "FB EAZ" and "SSB EAZ" represent stock assessment methods used up to and including the 2024 assessment, which have been updated and changed with the adoption of a new stock assessment framework (represented by "FB NSAR" and "SSB NSAR"). The NSAR covers a larger geographic area combining the WAZ, EAZ, SFA 4, and the portion of SFA 5 north of the border between NAFO Divisions 2H and 2J.

| | **Fishery Management Year** | | | | |
|---|---|---|---|---|---|
| *P. borealis* | **2022-23** | **2023-24** | **2024-25** | **2025-26** | **2026-27** |
| **TAC (t)** | 10,732 | 7,383 | *8,513* | 9,600 | *TBD* |
| **% Change TAC** | -12.4 | -31.2 | *15.3* | 12.8 | *TBD* |
| **FB* (t) EAZ** | 52,617[1] | 36,911 | 48,216 | 48,216[2] | 44,583[3] |
| **SSB* (t) EAZ** | 35,000 | 23,771 | 32,659 | N/A[3] | N/A[3] |
| **Potential Exploitation Rate (%)** | 20.4 | 20.0 | *17.7* | *TBD* | N/A[3] |
| **% Change FB EAZ** | -40.5 | -29.8 | 30.6 | 0[2] | N/A[3] |
| **% Change SSB EAZ** | -41.6 | -32.1 | 37.4 | N/A[4] | 0[5] |
| **FB* (t) NSAR** | 197,700 | 208,000 | 230,700 | 186,300 | 231,000 |
| **SSB* (t) NSAR** | 103,700 | 132,900 | 114,200 | 142,900 | 150,000 |
| **% Change FB NSAR** | 22.9 | 5.2 | 11.1 | -19.7 | 24.0 |
| **% Change SSB NSAR** | 0.3 | 28.2 | -14.1 | 55.7 | 4.9 |

**Biomass values reflect the prior year's survey (e.g. 2024-25 FB/SSB values are reflective of the 2023 survey).*

[1] FB value updated 2023, affects associated potential Exploitation Rate.

[2] 2024 FB stock assessment value used for *P. borealis* 2025-26 TAC; consequently, no change results.

[3] Stock assessment method changed; previous methods no longer being used.

[4] No change in SSB is reported because the new assessment model outputs are not comparable to the previous years.

[5] No change in SSB because the stock status is updated every three years.

# APPENDIX 4 - Quota profile

**Table 3.** Northern shrimp (*P. borealis*) quota distribution according to management unit or fleet/interest in the Eastern and Western Assessment Zones (EAZ and WAZ) over the past 5 years.

| Management Area | Management unit_Fleet/Interest | 2021/22 Quota (t) | 2022/23 Quota (t) | 2023/24 Quota (t) | 2024/25 Quota (t) | 2025/26 Quota (t) |
|---|---|---|---|---|---|---|
| ***EAZ*** | DSW_Offshore | 5,250 | 4,884 | 3,360 | 3,874 | 4,390 |
| | DSE_Offshore | 1,150 | 1,008 | 693 | 799 | 905 |
| | DSE_Nunavut | 1,845 | 1,616 | 1,112 | 1,282 | 1,452 |
| | DSW_Nunavut | 2,753 | 2,155 | 1,483 | 1,710 | 1,937 |
| | DSW_Nunavik | 305 | 239 | 165 | 190 | 215 |
| | NU-E_Nunavut | 758 | 664 | 456 | 526 | 561 |
| | NK- E_Nunavik | 190 | 166 | 114 | 131 | 140 |
| | ***TOTAL*** | ***12,251*** | ***10,732*** | ***7,383*** | ***8,513*** | ***9,600*** |
| ***WAZ*** | NU-W_Nunavut | 2,545 | 1,976 | 2,394 | 2,093 | 1,792 |
| | NK-W_Nunavik | 2,545 | 1,976 | 2,394 | 2,093 | 1,792 |
| | ***TOTAL*** | ***5,090*** | ***3,958*** | ***4,788*** | ***4,186*** | ***3,584*** |

# APPENDIX 5 - MSE

**Background**
Management strategy evaluation (MSE) is a tool that scientists and managers can use to simulate the workings of a fisheries system and allow them to test whether potential harvest decision rules (HDRs) — or management procedures— can achieve pre-agreed management objectives and operationalize the Precautionary Approach. Rather than relying on year-to-year adjustments, MSE allows managers to test different harvest strategies in advance using simulations that reflect uncertainty in stock dynamics, environmental conditions, and data limitations.

MSE does not attempt to predict a single future outcome. Instead, it evaluates the risks and trade-offs associated with different management choices, including their implications for conservation, yield, and catch stability over time. By drawing on multiple years of data and explicitly incorporating uncertainty, MSE provides a more realistic and robust basis for decision-making than approaches based on a single year of information. This approach is well established in Canada and internationally and supports more transparent and defensible management decisions.

The objective of the Northern shrimp MSE is to aide the selection of a long-term, precautionary HDR that will be used in setting Total Allowable Catch (TAC) levels on an annual cycle. Once implemented, the HDRs reliability depends on catches remaining broadly aligned with the harvest levels it generates; significant deviations can undermine the MSE's analysis and associated risk evaluations. The framework also includes built-in review points and safeguards to ensure it remains appropriate as conditions evolve.

**How the Northern shrimp MSE was developed**
Development of the Northern shrimp MSE began in March 2024, when the Department committed to exploring this approach in response to industry interest. An industry-led MSE Working Group was established, bringing together industry, provincial and co-management partners, DFO science and resource management, and a technical consultant (Landmark Fisheries Research).

In September 2024, the Northern Shrimp Advisory Committee (NSAC) endorsed proceeding with MSE development. An updated stock assessment model in December 2024 provided the foundation for the MSE framework. The Working Group resumed in May 2025 to incorporate this model and, through 2025, developed and tested candidate HDRs across a range of scenarios, based on agreed management objectives and performance metrics.

The framework and key scientific components were peer-reviewed through the Canadian Science Advisory Secretariat (CSAS) in December 2025. The MSE working group short-listed several HDRs for each of the NSAR and SSAR, which were presented to NSAC on January 20, 2026. NSAC industry stakeholders endorsed one HDR for each the NSAR and SSAR. This endorsement was confirmed at the March 25 NSAC meeting, when HDR outputs were presented using updated survey indices.

**How MSE is used for Northern shrimp**
For Northern shrimp, MSE is used to develop and evaluate HDRs that calculate harvest limits for the North and South Stock Assessment Regions (NSAR and SSAR). Candidate HDRs are tested through simulation to assess how well they meet key management objectives under a range of plausible scenarios.

These objectives reflect core fisheries management priorities and were grouped into primary and secondary categories. Primary objectives focus on:

- Conservation (maintaining biomass above the Limit Reference Point),
- Short-term yield (providing viable catch levels over a 10 year period), and

- Catch stability (limiting year-to-year TAC changes).

Secondary objectives include maintaining biomass above the Upper Stock Reference, supporting long-term yield (over a 30-year period), avoiding very low catch outcomes, and limiting abrupt or extreme TAC changes.

Each candidate HDR was evaluated against these objectives, allowing decision-makers to compare trade-offs among conservation performance, economic outcomes, and stability. The MSE therefore provides structured advice on which HDRs best meet policy objectives under uncertainty, rather than prescribing a single "optimal" solution.

**Science considerations in the Northern shrimp MSE**

The new stock assessment framework for Northern shrimp estimated the stock statuses of NSAR and SSAR as Healthy (March 2025). The March 2025 assessment also estimated the maximum sustainable yield for each region based on each stock's current productivity and population characteristics. The maximum sustainable yields corresponded to exploitation rates (ER) of approximately 17 per cent in the NSAR and approximately 10 per cent in the SSAR. Along with the new assessment framework new reference points were also set for the two regions. Historically, neither stock has reached biomass levels as low as either LRP values set for the NSAR and SSAR. Considering the low biomass levels now required to enter the Critical Zones and the important role of Northern shrimp in the ecosystem, DFO-Science has been consistently clear it is considered crucial to avoid entering the Critical Zone with the highest probability possible.

The HDRs selected by NSAC use ERs above the maximum sustainable yields for both stocks, particularly in the SSAR (SSAR: 15 per cent, NSAR: 20 per cent), and cause frequent positioning in the Cautious Zone and, eventually, increased probability of declining into the Critical Zone.
Considering this, Science indicated lower exploitation rates (e.g., NSAR = 17 per cent; SSAR = 10 per cent) would be consistent with MSY. Considering the low biomass levels required to enter the Critical Zone it is unknown how either stock would react if biomass were reduced to these LRP levels. It is also uncertain how long it would take, if even possible, for the stock to recover to the Cautious Zone once in the Critical Zone. These lower exploitation rates were also closer to each stock's maximum sustainable yield. These lower exploitation rates do cause reduced yields.

To comply with the United Nations Fish Stocks Provisions, and as stated in DFO's Sustainable Fisheries Framework, the maximum exploitation rate must be less than or equal to the removal rate associated with maximum sustainable yield.

**MSE-tested HDRs for NSAR and SSAR**

Table 1: NSAR short-term (10-year projections) performance metrics comparing the short-listed two-stage HDRs with versions using a 17% exploitation rate. The HDR selected by NSAC at the January 20th meeting is shaded in red.

| HDR | Exploitation rate | Prob B > LRP | Prob B > USR | Median TAC | Median change in TAC |
|---|---|---|---|---|---|
| 4-year + max 25% | 20% | 92% | 54% | 25.45 kt | 15.15% |
| | 17% | 93% | 57% | 23.90 kt | 15.25% |
| | ***Difference*** | ***+1%*** | ***+3%*** | ***-1.55 kt (-6%)*** | ***+0.10%*** |
| Max 25% | 20% | 95% | 58% | 24.75 kt | 16.90% |
| | 17% | 97% | 65% | 22.85 kt | 16.95% |
| | *Difference* | *+2%* | *+7%* | *-1.90 kt (-8%)* | *+0.05%* |
| 4-year | 20% | 96% | 61% | 24.45 kt | 27.40% |
| | 17% | 97% | 66% | 22.95 kt | 27.60% |
| | *Difference* | *+1%* | *+5%* | *-1.50 kt (-6%)* | *+0.20%* |

Table 2: NSAR long-term (30-year projections) performance metrics comparing the short-listed two-stage HDRs with versions using a 17% exploitation rate. The HDR selected by NSAC at the January 20th meeting is shaded in red. Median TAC = average annual TAC in years 21-30.

| HDR | Exploitation rate | Prob B > LRP | Prob B > USR | Median TAC |
|---|---|---|---|---|
| 4-year + max 25% | 20% | 88% | 56% | 20.65 kt |
| | 17% | 91% | 62% | 19.95 kt |
| | ***Difference*** | ***+3%*** | ***+6%*** | ***-0.70 kt (-3%)*** |
| Max 25% | 20% | 89% | 58% | 20.65 kt |
| | 17% | 92% | 64% | 20.15 kt |
| | *Difference* | *+3%* | *+6%* | *-0.50 kt (-2%)* |
| 4-year | 20% | 91% | 58% | 20.55 kt |
| | 17% | 93% | 65% | 19.65 kt |
| | *Difference* | *+2%* | *+7%* | *-0.90 kt (-4%)* |

Table 3: SSAR short-term (10 year projections) performance metrics comparing the shortlisted 2-stage HDRs with versions using 8% and 12.5% exploitation rates (ER). The HDR selected by NSAC at the January 20th meeting (2SHDR_max 25% change in TAC_ER20%) is shaded in red.

| HDR | Exploitation rate | Prob B > LRP | Prob B > USR | Median TAC | Median change in TAC |
|---|---|---|---|---|---|
| Max 25% | 8% | 99% | 91% | 9.92 kt | 12.39% |
| | 10% | 99% | 89% | 11.84 kt | 12.78% |
| | 12.5% | 99% | 87% | 13.89 kt | 13.38% |
| | 15% | 98% | 85% | 15.84 kt | 13.95% |
| 3-year | 8% | 99% | 91% | 10.25 kt | 14.14% |
| | 10% | 99% | 89% | 11.98 kt | 15.60% |
| | 12.5% | 99% | 87% | 13.95 kt | 17.17% |
| | 15% | 99% | 85% | 15.91 kt | 18.63% |

Table 4: SSAR long-term (30 year projections) performance metrics comparing the shortlisted 2-stage HDRs with versions using 8% and 12.5% exploitation rates. The HDR selected by NSAC at the January

20th meeting (2SHDR_max 25% change in TAC_ER20%) is shaded in red. Median TAC = average annual TAC in years 21-30.

| HDR | Exploitation rate | Prob B > LRP | Prob B > USR | Median TAC |
|---|---|---|---|---|
| Max 25% | 8% | 94% | 77% | 7.08 kt |
| | 10% | 93% | 74% | 8.22 kt |
| | 12.5% | 92% | 71% | 9.47 kt |
| | 15% | 90% | 67% | 10.51 kt |
| 3-year | 8% | 94% | 77% | 7.23 kt |
| | 10% | 93% | 75% | 8.46 kt |
| | 12.5% | 92% | 71% | 9.69 kt |
| | 15% | 91% | 68% | 10.71 kt |

Table 5. MSE-tested HDRs evaluated and harvest level output, compared with 2025-26 aggregate TACs for the NSAR and SSAR. (ER = exploitation rate)

| **MSE-tested HDRs** | **Harvest Level Output (t)** |
|---|---|
| **NSAR** | |
| 17 per cent ER, 4 year phase in | 40,900 |
| 20 per cent ER, 4 year phase in | 41,760 |
| 17 per cent ER, maximum 25 per cent change in TAC from one year to the next | 40,200 |
| 20 per cent ER, maximum 25 per cent change in TAC from one year to the next | 43,660 |
| 17 per cent ER, 4-year phase in, and maximum 25 per cent change in TAC from one year to the next | 40,900 |
| **20 per cent ER, 4-year phase in, and maximum 25 per cent change in TAC from one year to the next (recommended)** | **41,760** |
| Aggregate TAC from 2025-26 (EAZ, WAZ, SFA 4, SFA 5N) | 41,128 |
| **SSAR** | |
| 10 per cent ER and 3-year phase in | 13,900 |
| 12.5 per cent ER and 3-year phase in | 14,370 |
| 15 per cent ER and 3-year phase in | 14,850 |
| 10 per cent ER and maximum 25 per cent change in TAC from one year to the next | 12,920 |
| 12.5 per cent ER and maximum 25 per cent change in TAC from one year to the next | 14,350 |
| **15 per cent ER and maximum 25 per cent change in TAC from one year to the next (recommended)** | **15,780** |
| Aggregate TAC from 2025-26 (SFA 5S+SFA6) | 14,387 |

**Planned Review and Exceptional Circumstances Protocol**

As part of MSE implementation, the Department will develop an Exceptional Circumstances (EC) protocol over the coming year. This protocol will define conditions under which the standard management procedure may no longer be appropriate and identify potential management responses. In general, ECs may be considered where: (a) there is evidence that stock conditions fall outside the range of scenarios evaluated in the MSE; (b) the data required to apply the management procedure are unavailable or no longer reliable; or (c) total catches in either the NSAR or SSAR exceed the TACs established

through the management procedure. The protocol will provide a structured and transparent approach to responding to these situations while maintaining the integrity of the MSE framework.
In addition, the performance of the selected HDRs will be formally reviewed in 2028, aligned with the next stock assessment cycle. This review will evaluate how well the HDRs are meeting established objectives related to conservation, yield, and stability. At that time, the MSE will be updated and rerun, as needed, to ensure that management advice remains appropriate and reflects the best available science and data.

**Example of HDR application**
NSAR:
Industry endorsed a variation of the HDR currently used in 2025-26, adding a 25 per cent maximum change in harvest limit each year and a phase-in of this HDR over 4-years, with a 20 per cent exploitation rate.
*2026-27 TACs presented*

- Spawning Stock Biomass (SSB) index = 150,000 t (above the upper control point in the HDR), therefore:
    - Exploitation rate (ER) = target exploitation rate = 20%
- Fishable biomass (FB) index based on March 2026 update:
    - FB-index (2025) = 231,000 t
    - FB-index (2024) = 186,300 t

*HDR TAC calculation:*

- Previous aggregated NSAR TAC (2025-26) = 41,128 t
- Initial Catch Limit (ICL) (2026-27): FB-index for NSAR (2025) * ER = 231,000 t * 20% = 46,200 t
    - 50% between 2025-26 TAC and 2026-27 ICL = 43,664 t
    - Previous ICL (2025-26) = 37,260 t
- Trend in FB-index is increasing, therefore the higher of two options was selected = 43,664 t
- Then check TAC (43,664 t) does not result in a exploitation rate over 150% the target ER
    - It does not, therefore maintain 43,664 t
- Then apply the first year of the "4-year phase-in":
    - 75% of 2026-27 TAC based on 2025-26 TAC (41,128 t) = 30,846 t
    - 25% of 2026-27 TAC based on 2026-27 HDR result (43,664 t) = 10,916 t
    - Resulting TAC for 2026-27 = 41,762 t

This 41,762 t is then separated into the management areas based on the 4-year average proportions. SFA 4 had 35.33% of the FB (2022-2025 average, Table 6). The recommended SFA 4 TAC = 14,754 t.

Table 6: 4-year moving average of fishable biomass in the various management areas.

| Period | EAZ (%) | WAZ (%) | SFA 4 (%) | SFA 5-N (%) | SFA 5-S (%) | SFA 6 (%) | NAFO 3L (%) | NAFO 3N (%) | NAFO 3O (%) |
|---|---|---|---|---|---|---|---|---|---|
| 2022-2025 | 23.1 | 19.3 | 35.3 | 22.3 | 7.2 | 82.3 | 10.4 | 0.1 | 0.0 |
| 2021-2024 | 23.5 | 15.3 | 37.4 | 23.9 | 7.8 | 78.9 | 13.2 | 0.1 | 0.0 |
| 2020-2023 | 24.3 | 16.7 | 36.3 | 22.7 | 8.7 | 79.0 | 12.3 | 0.1 | 0.0 |
| 2019-2022 | 26.6 | 18.0 | 34.9 | 20.6 | 10.2 | 77.0 | 12.9 | 0.1 | 0.0 |

# APPENDIX 6 – Catch Utilization Adjustment

**Table 1.** If approved, a catch utilization adjustment would be applied in the EAZ and WAZ shared as per below.

| | 2025-26 % | 2026-27 (t) | 5% Adjustment applied (t) | Administrative transfers (t) | TAC incl. adjustment (t) |
|---|---|---|---|---|---|
| DS West Offshore | 46% | 4,433 | 222 | | 4,654 |
| DS E offshore (expl Borealis E of 63 W) | 9% | 867 | 43 | | 911 |
| DS E - NU (expl E of 63W) | 15% | 1,445 | 72 | | 1,518 |
| NU DS W Borealis | 20% | 1,927 | 96 | 151.125 | 2,175 |
| NK DS W Borealis | 2% | 193 | 10 | 151.125 | 353 |
| NU - E Borealis | 6% | 578 | 29 | 50.375 | 657 |
| NK - E Borealis | 2% | 193 | 10 | 50.375 | 253 |
| **EAZ Borealis Total** | **100%** | **9,636** | **482** | **403** | **10,521** |
| **WAZ** | | 8,060 | 403 | -403 | **8,060** |
| **SFA 4** | | 14,752 | 738 | | **15,490** |
| **SFA 5 North** | | 9,302 | 465 | | **9,767** |
| **NSAR Total Incl. Adjustments** | | | | | **43,838** |