SCIENTIFIC COUNCIL - 2025

Canada's Coastal State Request to NAFO Scientific Council for Scientific Advice – 2026

Canada would like to submit its request to the Scientific Council for advice on the following species:

1. Greenland halibut (Subarea 0 + 1 (offshore))

The Scientific Council is requested to provide an overall assessment of status and trends in the total stock area throughout its range and to specifically provide risk-based advice on a range of TAC options for 2026 and 2027. The stock status should be evaluated in the context of management requirements for long-term sustainability and the advice provided should be consistent with NAFO's Revised (2024) Precautionary Approach Framework (PAF).

Specifically, Canada requests that, in addition to the risk table inputs provided in Table 2 of NAFO Revised PAF, the following options also be included:

- $F_{status\ quo}$
- Current TAC
- the 2019-2022 TAC level (36,370 t)

For each of the projections, please include the probabilities that biomass will increase or remain the same (P(B2027 ≥ B2025)); and the probability that biomass will decrease (P(B2027 < B2025).

Canada also requests that the NAFO Scientific Council define, in a table within the assessment document, stock reference points/indicators such as maximum sustainable yield (MSY), biomass at MSY (B_{MSY}), limit reference point (B_{lim}), and $B_{trigger}$.

Canada encourages the Scientific Council to continue to advance a model-based approach to bridge survey time series (i.e. data from the RV Paamiut and RV Tarajoq).

2. Northern shrimp (Subarea 1 and Division 0A)

Canada requests that the Scientific Council consider the following options in assessing and projecting future stock levels for Northern shrimp (*Pandalus borealis*) in Subarea 1 and Division 0A:

The status of the stock should be determined and risk-based advice provided for catch options corresponding to Z_{msy} in 5,000t increments with forecasts for 2026 to 2028 (inclusive). These options should be evaluated in relation to Canada's Harvest Strategy (2022 revised version attached) and NAFO's Revised Precautionary Approach Framework.

Presentation of the results should include graphs and/or tables related to the following:

- Historical and current yield, biomass relative to B_{msy}, total mortality relative to Z_{msy}, and recruitment (or proxy) levels for the longest time period possible;
- Total mortality (Z) and fishable biomass for a range of projected catch options (as noted above) for the years 2026 to 2028. Projections should include both catch options and a range of effective cod predation biomass levels considered appropriate by the Scientific Council. Results should include risk analyses of falling below: B_{msy}, 80% B_{msy} and B_{lim} (30% B_{msy}), and of being above Z_{msy}

based on the 3-year projections, consistent with the Harvest Decision Rules in Canada's Harvest Strategy; and

- Total area fished for the longest time period possible.

Please provide the advice relative to Canada's Harvest Strategy as part of the formal advice (i.e., grey box in the advice summary sheet).