

1601 Lower Water Street • Suite 401 Halifax • Nova Scotia • B3J 3P6 • Canada Telephone: + 1 902 468 5590
Email: info@nafo.int • Web: www.nafo.int

In all correspondence please refer to:

NAFO/25-086

26 March 2025

TO: Scientific Council Representatives; and Designated Experts for Stock Assessments

Dear Colleagues,

Subject: Provisional Agenda – *Meeting of the Scientific Council*, 29 May-12 June 2025

In accordance with Rule 4.1 of the *NAFO Rules of Procedure: Scientific Council*, the Provisional Agenda for the **Meeting of the Scientific Council**, **29 May-12 June 2025** is hereby circulated to all Contracting Parties.

Please find enclosed the following:

- General Information (Appendix I)
- Provisional Agenda (Appendix II)
 - o Requests for advice from the Commission (Annex 1),
 - o coastal State request for advice from Denmark (on behalf of Greenland) (Annex 2),
 - o coastal State request from Canada (Annex 3).
- Provisional Timetable (Appendix III)
- Experts for Preliminary Assessment of Certain Stocks (Appendix IV)
- Meeting Venue (Appendix V)
- Accommodation and Travel Information (Appendix VI)

All relevant meeting documentation will be accessible on the NAFO Meetings SharePoint (https://meetings.nafo.int/sc/2025/june) as it becomes available. We kindly ask your assistance in providing this information to the members of your meeting delegation.

Yours sincerely,

Brynhildur Benediktsdóttir
Executive Secretary

BB:dbm

APPENDIX I: GENERAL INFORMATION

Scientific Council Meeting, 29 May-12 June 2025

1. Agenda

In accordance with Rule 4.1 of the *NAFO Rules of Procedure: Scientific Council*, the Provisional Agenda for the **29 May-12 June 2025 Meeting of the Scientific Council** is hereby circulated to all Contracting Parties (Appendix II). This includes the requests for advice from the Commission (Annex 1), Denmark (on behalf of Greenland) (Annex 2) and Canada (Annex 3).

2. Time and Place

- a) The Scientific Council and its Standing Committees will meet at the Saint Mary's University, 903 Robie St., Halifax, NS, Canada from 29 May 12 June 2025. Registration will begin at 1000 hours on 29 May 2025 in the on-site Secretariat office. In anticipation of continuing travel restrictions on some participants, provisions will also be made to allow participation by Webex.
- b) The **Executive Committee** will meet at 1000 hours on 29 May 2025. The opening session of the **Scientific Council** will begin at 1100 hours on 29 May 2025.
- c) The Provisional Timetable for the Scientific Council and its Standing Committees is in Appendix III.

3. Documentation

Documentation concerning the June 2025 Meeting is also on the Scientific Council SharePoint site. Please contact the Secretariat if login information is required.

Designated Experts

- a) Further to the Scientific Council nominations at its meetings in 2024, Designated Experts responsible for providing preliminary assessments for certain stocks to STACFIS are listed in Appendix IV.
- b) The Scientific Council has recommended that National Representatives to the Scientific Council take an active role in ensuring that all data (see item 4 below), including the STATLANT 21A reports for 2024, are prepared and submitted to the Secretariat in advance of the meeting. Special attention is required of them to ensure Designated Experts receive the necessary data for assessments and other relevant data by <u>08 May 2025</u>.
- c) Designated Experts are requested to forward their assessment papers to reach the Secretariat before 22 May 2025, for pre-meeting distribution. These preliminary assessments will be first issued as working papers and then will be revised as necessary before the end of the meeting for issue as formal documents. Papers sent to the Secretariat will be posted on the SC SharePoint site (see above).

Scientific Papers

- a) Scientists submitting papers (Research Documents (SCR Docs), Summary Documents (SCS Docs)), for consideration at the Meeting are **requested to submit their papers in advance for pre-meeting distribution before 22 May 2025**. Title, Author(s) and Abstract (250 words or less) must be submitted in order for documents to be assigned a number. The Scientific Council prescribed format guidelines for preparation of scientific papers (and assessment papers) are given on the SharePoint site. All papers being submitted are requested in electronic form (MS Word compatible format). Documents must be presented to the meeting in person or by a designate.
- b) Author(s) are requested to inform the Secretariat (personally or through the representative) at the time of submission, whether or not STACPUB should consider its suitability for publication in the *Journal of Northwest Atlantic Fishery Science* (information for preparing manuscripts for primary publications is given at https://jnafs.scholasticahq.com/for-authors).

4. Data Requirements

- a) In accordance with the *Rules of Procedure: Scientific Council* (Rule 4.4), **STATLANT 21A** data from Contracting Parties containing provisional nominal catches in 2024 for all species by Division, are required to reach the Secretariat before the deadline of **01 May 2025**.
- b) In accordance with the *Rules of Procedure: Scientific Council* (Rule 4.4), **STATLANT 21B** data from Contracting Parties containing final nominal catches and fishing effort in 2024 for all species by Division and Month, are required to reach the Secretariat before the deadline of **31 August 2025**.

Designated Experts should recognize that the STATLANT 21B returns for 2024 are not normally available for the June meeting.

This letter also serves as a reminder of other data requirements (NAFO/25-032):

- National Research Reports for 2024.
- Inventories of biological surveys in 2024 and planned for 2025 and early 2026.
- List of Biological sampling data for 2024.
- RV Surveys on a stock by stock basis by Designated Experts.

These should be submitted to reach the Secretariat by **02 May 2025**.

Similarly, environmental data to the Department of Fisheries and Oceans Canada, Oceans Science Branch, Marine Environmental Data Section (MEDS), formerly the Integrated Science Data Management (ISDM), to facilitate the work of the Standing Committee of Fisheries and Environment (STACFEN) should be submitted directly to MEDS (NAFO/25-031).

5. Representatives, Alternates, Experts and Advisers

In accordance with Rule 1 of the *Rules of Procedure: Scientific Council*, each Contracting Party shall notify the Executive Secretary of the <u>names of its representatives</u>, <u>alternates</u>, <u>experts and advisers</u> who will attend the meeting, before the commencement of the meeting.

6. Location

Information on the location (CLARI Hub (AT340), Atrium Building, Saint Mary's University, 903 Robie St., Halifax, NS, Canada) is given in Appendix V with additional travel information provided in Appendix VI.

APPENDIX II: PROVISIONAL AGENDA

Scientific Council Meeting, 29 May -12 June 2025

- I. Opening (Scientific Council Chair: Diana González-Troncoso)
 - 1. Appointment of Rapporteur
 - 2 Presentation and Report of Proxy Votes
 - 3. Adoption of Agenda
 - 4. Attendance of Observers
 - 5. Appointment of Designated Experts
 - 6. Plan of Work
 - 7. Housekeeping issues
- II. Review of Scientific Council Recommendations in 2024
- III. Fisheries Environment (STACFEN Chair: Miguel Caetano)
 - 1. Opening
 - 2. Appointment of Rapporteur
 - 3. Adoption of Agenda
 - 4. Review of Recommendations in 2024
 - 5. Invited speakers
 - 6. Department of Fisheries and Oceans Canada, Oceans Science Branch, Marine Environmental Data Section (MEDS) Report for 2024
 - 7. Review of the physical, biological and chemical environment in the NAFO Convention Area during 2024
 - 8. Formulation of recommendations based on environmental conditions during 2024
 - 9. Other Matters
 - a) Analysis of progress and/or outcomes of work for Commission request #10 "Addressing the Impacts of Climate Change on NAFO Fisheries and Ecosystems"
 - 10. Adjournment
- IV. Publications (STACPUB Chair: Rick Rideout)
 - 1. Opening
 - 2. Appointment of Rapporteur
 - 3. Adoption of Agenda
 - 4. Review of Recommendations in 2024
 - 5. Review of Publications
 - a) Annual Summary
 - i) Journal of Northwest Atlantic Fishery Science (JNAFS)
 - ii) Scientific Council Studies
 - iii) Scientific Council Reports
 - 6. Other Matters
 - 7. Adjournment
- V. Research Coordination (STACREC Chair: Mark Simpson)
 - 1. Opening
 - 2. Appointment of Rapporteur
 - 3. Review of Recommendations in 2024
 - 4. Invited speaker
 - 5. Fishery Statistics
 - a) Progress report on Secretariat activities in 2024/2025
 - i) Presentation of catch estimates from the CESAG, daily catch reports and STATLANT 21A and 21B
 - ii) Review of STATLANT 21B submission form

6. Research Activities

- a) Biological sampling
 - i) Report on activities in 2024/2025
 - ii) Report by National Representatives on commercial sampling conducted
 - iii) Report on data availability for stock assessments (by Designated Experts)
- b) Biological surveys
 - i) Review of survey activities in 2024 and early 2025 (by National Representatives and Designated Experts)
 - ii) Surveys planned for 2025 and early 2026
- c) Tagging activities
- d) Other research activities
- 7. Review of SCR and SCS Documents
- 8. Other Matters
- 9. Adjournment

VI. Fisheries Science (STACFIS Chair: Martha Krohn)

- I. Opening
- II. General Review of Catches and Fishing Activity
- III. Stock Assessments
 - 1. Greenland halibut (*Reinhardtius hippoglossoides*) in SA 0+1 offshore (full assessment)
 - 2. Greenland halibut (*Reinhardtius hippoglossoides*) Div. 1A inshore Divs. 1BC inshore, Div. 1D inshore and Divs. 1EF inshore (monitor)
 - 3. Demersal redfish and deep-sea redfish (*Sebastes* spp.) in SA 1 (monitor)
 - 4. Wolffish in SA 1 (monitor)
 - 5. Golden redfish (Sebastes norvegicus aka S. marinus) in Div. 3M (monitor)
 - 6. Cod (*Gadus morhua*) in Div. 3M (full assessment)
 - 7. Redfish (Sebastes mentella and Sebastes fasciatus) in Div. 3M (monitor)
 - 8. American plaice (*Hippoglossoides platessoides*) in Div. 3M (monitor)
 - 9. Cod (Gadus morhua) in Divs. 3NO (monitor)
 - 10. Redfish (Sebastes mentella and Sebastes fasciatus) in Divs. 3L and 3N (monitor)
 - 11. American plaice (*Hippoglossoides platessoides*) in Divs. 3LNO (monitor)
 - 12. Yellowtail flounder (*Limanda ferruginea*) in Divs. 3LNO (full assessment)
 - 13. Witch flounder (*Glyptocephalus cynoglossus*) in Divs. 3NO (monitor)
 - 14. Capelin (*Mallotus villosus*) in Divs. 3NO (monitor)
 - 15. Redfish (Sebastes mentella and Sebastes fasciatus) in Div. 30 (full assessment)
 - 16. Thorny skate (*Amblyraja radiata*) in Divs. 3LNO and Subdiv. 3Ps (monitor)
 - 17. White hake (*Urophycis tenuis*) in Divs. 3NO and Subdiv. 3Ps (full assessment/monitor)
 - 18. Roughhead grenadier (Macrourus berglax) in SA 2 and 3 (monitor)
 - 19. Greenland halibut (*Reinhardtius hippoglossoides*) in SA 2 + Divs. 3KLMNO (in MSE process: monitor, COM requests #2 and 4)
 - 20. Northern shortfin squid (Illex illecebrosus) in SA 3+4 (full assessment)
 - 21. Splendid alfonsino (Beryx splendens) in SA 6 (monitor)

IV. Other Matters

- a) FIRMS Classification for NAFO Stocks
- b) Vacant Designated Experts
- c) Interim Monitoring Reports (IMRs)
- d) Other Bussiness

V. Adjournment

- VII. Management Advice and Responses to Special Requests (See Annex 1)
- 1. Commission (Annex 1)
 - a) Request for Advice on TACs and Other Management Measures (request #1, Annex 1)
 For 2026
 - cod in Div. 3M

For 2026 and 2027

- vellowtail flounder in Divs. 3LNO
- white hake in Divs. 3NO (to discuss)
- northern shrimp in Divs. 3LNO

For 2026, 2027 and 2028

- redfish in Div. 30
- northern shortfin squid in Subareas 3+4
- b) Monitoring of Stocks for which Multi-year Advice was provided in 2023 or 2024 (request #1)
 - golden redfish in Div. 3M
 - redfish in Div. 3M
 - american plaice in Div. 3M
 - cod in Divs. 3NO
 - redfish in Divs. 3LN
 - american plaice in Divs. 3LNO
 - witchflounder in Divs. 3NO
 - capelin in Divs. 3NO
 - thorny skate in Divs. 3LNO and Subdiv. 3Ps
 - alfonsino stocks in the NAFO Regulatory Area
 - roughhead grenadier in Subareas 2 and 3
- c) Special Requests for Management Advice
 - i) The Commission requests the Scientific Council to monitor the status of Greenland halibut in Subarea 2 + Divisions 3KLMNO annually to compute the TAC using the agreed Management Procedure and determine whether exceptional circumstances are occurring. If exceptional circumstances are occurring, the exceptional circumstances protocol will provide guidance on what steps should be taken (request #2, Commission priority).
 - ii) The Commission requests that Scientific Council continue to advance work on the 3LN redfish MSE processes during 2024-2025 (request #3, Commission priority).
 - iii) As practicable and taking into account Scientific Council capacity constraints, develop stock summary sheets for NAFO managed stocks that are evaluated using MSE processes (request #4).
 - iv) In relation to the Ecosystem Roadmap as a whole, the Commission requests that the Scientific Council develop a reference document detailing the ecosystem roadmap, for completion in the next 1-3 years (request # 5).
 - v) In relation to the habitat impact assessment component of the Roadmap (VME and SAI analyses), the Commission requests that Scientific Council:
 - a) Continue the development of a centralized data repository using ArcGIS online to host the data and data-products for scientific advice, in conjunction with the NAFO Secretariat (request #6a).
 - b) Work towards the reassessment of VMEs and impact of bottom fisheries on VMEs for 2027; including potential management options in the reassessment of bottom fisheries (request #6b).

- c) Develop materials on the potential of submitting NAFO coral bottom fishing closed areas as OECMs for discussion at the 2025 WG-EAFFM meeting (request #6c).
- vi) The Commission requests the Scientific Council to develop reference points to facilitate the implementation of the Revised NAFO Precautionary Approach Framework, for stocks that currently do not have them (request #7).
- vii) In relation to its workload, the Commission requests the Scientific Council to:
 - a) Continue to update the 3-5 year work plan, which reflects requests arising from the 2024 Annual Meeting, other multi-year stock assessments and other scientific inquiries already planned for the near future. The work plan should identify what resources are necessary to successfully address these issues, gaps in current resources to meet those needs and proposed prioritization by the Scientific Council of upcoming work based on those gaps (request #8a).
 - b) Consider undertaking internal, or support external, assessments to inform the ongoing effort to address the Scientific Council workload. Such assessments could include how to optimize:
 - the organization / structure and function of the Scientific Council, its standing committees and working groups,
 - ii) further development and implementation of the Scientific Council's workplan (request #8b).
- viii) The Commission requests Scientific Council to conduct ongoing analysis of the Division 3M cod fishery data by 2025 in order to:
 - a) monitor the consequences of the management decisions (including the analysis of the redistribution of the fishing effort along the year and its potential effects on ecosystems, the variation of the cod catch composition in lengths/ages, and the bycatch levels of other fish species, benthos in general, and VME taxa in particular) (request #9a); and
 - b) carry out any additional monitoring that would be required, including Division 3M cod caught as bycatch in other fisheries during the closed period (request #9b).
- ix) Noting the voluntary contribution of the United States to support a consultant to provide feedback on NAFO's processes to address climate change impacts, requests the SC to conduct an analysis of progress and/or outcomes of that work (request #10).

2. Coastal States

- a) Request by Denmark (Greenland) for Advice on Management in 2026 (Annex 2)
 - i) Monitoring of Stocks for which Multi-year Advice was provided in 2023 or 2024
 - demersal redfish and deep-sea redfish (Sebastes spp.) in SA 1
 - wolffish in SA 1
 - Greenland halibut SA 1 (inshore)
- b) Request by Canada and Greenland for Advice on Management in 2025 and 2026 (Annex 2, Annex 3)
 - i) Greenland Halibut, offshore.

VIII. Review of Future Meetings Arrangements

- 1. Scientific Council and STACFIS Shrimp Assessment Meeting, 9-11 September 2025
- 2. Scientific Council, 15-19 September 2025
- 3. WG-ESA, 4-13 November 2025
- 4. Scientific Council, June 2026

- 5. Scientific Council and STACFIS Shrimp Assessment Meeting, 2026
- 6. Scientific Council, Sep. 2026
- 7. WG-ESA, Nov. 2026
- 8. NAFO/ICES Joint Groups
 - a) NIPAG
 - b) WG-DEC
 - c) WG-HARP

IX. Arrangements for Special Sessions

- 1. Topics for future special sessions
- 2. Recently attended special sessions
 - a) 11th International flatfish symposium
 - b) EAFM Symposium, 2025

X. Meeting Reports

- 1. Working Group on Ecosystem Science and Assessment (WG-ESA), 12-21 November 2024
- 2. NAFO Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG) meeting, 26 Febraury 2025.
- 3. Report from ICES-NAFO Working Group on Deepwater Ecosystems (WG-DEC), 24-28 March 2025
- 4. NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS), 8 April 2025.
- 5. Precautionary Approach Working Group (PA-WG), 6 May 2025.
- 6. Meetings attended by the Secretariat

XI. Review of Scientific Council Working Procedures/Protocol

1. General Plan of Work for September 2025 Annual Meeting

XII. Other Matters

- 1. Designated Experts
- 2. Election of Chairs
- 3. Budget items
- 4. Other Business
 - a) SOFIA State of the Stocks
 - b) Scientific Council Process
 - c) Guidelines for carriying out an MSE
 - d) Greenland shark

XIII. Adoption of Committee Reports

- 1. STACFEN
- 2. STACREC
- 3. STACPUB
- 4. STACFIS

XIV. Scientific Council Recommendations to Commission

XV. Adoption of Scientific Council Report

XVI. Adjournment

ANNEX 1. COMMISSION'S REQUEST FOR SCIENTIFIC ADVICE ON MANAGEMENT IN 2026 AND BEYOND OF CERTAIN STOCKS IN SUBAREAS 2, 3 AND 4 AND OTHER MATTERS (NAFO SCS Doc. 25/01)

Following a request from the Scientific Council, the Commission agreed that items 1, 2, and 3 should be the priority for the June 2025 Scientific Council meeting subject to resources.

1. The Commission requests that the Scientific Council provide advice for the management of the fish stocks below according to the assessment frequency presented below. In line with the Revised NAFO Precautionary Approach Framework (Annex 4 of COM-SC Doc. 24-03) the Commission should be informed by the range of options and associated risks provided by the Scientific Council. The Commission will decide upon the acceptable risk level in the context of the entirety of the Scientific Council advice for each stock guided and as foreseen by the NAFO Precautionary Approach.

Yearly basis	Two-year basis	Three-year basis	Interim Monitoring Only
Cod in	Redfish in Division 3M	American plaice in Division	Subarea 6 Alfonsino
Division 3M	Thorny skate in Divisions 3LNO	3M	Subareas 2-3 Roughhead
	Witch flounder in Divisions 3NO	Northern shortfin squid in	Grenadier
	Redfish in Divisions 3LN	Subareas 3+4	Capelin in Divisions 3NO
	Yellowtail flounder in Divisions	Redfish in Division 30	
	3LNO	Cod in Divisions 3NO	
	Northern shrimp in Divisions	American plaice in Divisions	
	3LNO	3LNO	
	Northern shrimp in Division 3M		
	White hake in Divisions 3NO		

Advice should be provided using the guidance provided in **Annex A**, or using the predetermined Management Procedure in the cases where they exist (currently Greenland halibut 2+3KLMNO). For Division 3M shrimp supplementary advice in terms of fishing-days could also be considered as appropriate.

To implement this schedule of assessments, the Scientific Council is requested to conduct a full assessment of these stocks as follows:

- In 2025, advice should be provided for 2026 for: Cod in Division 3M
- In 2025, advice should be provided for 2026 and 2027 for: Yellowtail flounder in Divisions 3LNO, White hake in Divisions 3NO, Northern shrimp in Divisions 3LNO
 - With respect to Northern shrimp in Divisions 3LNO, Scientific Council is requested to provide its advice to the Commission prior to the 2025 Annual Meeting based on the survey data up to and including 2025.
- In 2025, advice should be provided for 2026, 2027 and 2028 for: Redfish in Division 30, Northern shortfin squid in Subareas 3+4.

The Commission also requests the Scientific Council to continue to monitor the status of all other stocks annually and, should a significant change be observed in stock status (e.g. from surveys) or in bycatch in other fisheries, provide updated advice as appropriate.

- 2. The Commission requests the Scientific Council to monitor the status of Greenland halibut in Subarea 2 + Divisions 3KLMNO annually to compute the TAC using the agreed Management Procedure and determine whether exceptional circumstances are occurring. If exceptional circumstances are occurring, the exceptional circumstances protocol will provide guidance on what steps should be taken.
- 3. The Commission requests that Scientific Council continue to advance work on the 3LN redfish MSE processes during 2024-2025.
- 4. As practicable and taking into account Scientific Council capacity constraints, develop stock summary sheets for NAFO managed stocks that are evaluated using MSE processes.
- 5. In relation to the Ecosystem Roadmap as a whole, the Commission requests that the Scientific Council

- develop a reference document detailing the ecosystem roadmap, for completion in the next 1-3 years.
- 6. In relation to the habitat impact assessment component of the Roadmap (VME and SAI analyses), the Commission requests that Scientific Council:
 - a. Continue the development of a centralized data repository using ArcGIS online to host the data and data-products for scientific advice, in conjunction with the NAFO Secretariat
 - b. Work towards the reassessment of VMEs and impact of bottom fisheries on VMEs for 2027; including potential management options in the reassessment of bottom fisheries.
 - c. Develop materials on the potential of submitting NAFO coral bottom fishing closed areas as OECMs for discussion at the 2025 WG-EAFFM meeting.
- 7. The Commission requests the Scientific Council to develop reference points to facilitate the implementation of the Revised NAFO Precautionary Approach Framework, for stocks that currently do not have them.
- 8. In relation to its workload, the Commission requests the Scientific Council to:
 - a. Continue to update the 3-5 year work plan, which reflects requests arising from the 2024 Annual Meeting, other multi-year stock assessments and other scientific inquiries already planned for the near future. The work plan should identify what resources are necessary to successfully address these issues, gaps in current resources to meet those needs and proposed prioritization by the Scientific Council of upcoming work based on those gaps.
 - b. Consider undertaking internal, or support external, assessments to inform the ongoing effort to address the Scientific Council workload. Such assessments could include how to optimize:
 - i. the organization / structure and function of the Scientific Council, its standing committees and working groups,
 - ii. further development and implementation of the Scientific Council's workplan.
- 9. The Commission requests Scientific Council to conduct ongoing analysis of the Division 3M cod fishery data by 2025 in order to:
 - a. monitor the consequences of the management decisions (including the analysis of the redistribution of the fishing effort along the year and its potential effects on ecosystems, the variation of the cod catch composition in lengths/ages, and the bycatch levels of other fish species, benthos in general, and VME taxa in particular); and
 - b. carry out any additional monitoring that would be required, including Division 3M cod caught as bycatch in other fisheries during the closed period.
- 10. Noting the voluntary contribution of the United States to support a consultant to provide feedback on NAFO's processes to address climate change impacts, requests the SC to conduct an analysis of progress and/or outcomes of that work.

ANNEX A: Guidance for providing advice on Stocks Assessed

The Commission requests the Scientific Council to consider the following in assessing and projecting future stock levels for those stocks listed above. These evaluations should provide the information necessary for the Commission to consider the balance between risks and yield levels, in determining its management of these stocks:

Stochastic short-term projections (3 years) should be performed with the F levels that are included in the risk table from the Revised PA Framework (Table 1 below), based on the point estimate of biomass. The first year of the projection should assume a catch equal to the agreed TAC for that year. In instances where Scientific Council expects catches to be significantly different from the agreed TAC, an additional projection could be provided based on the best available catch estimation.

In relation to Tier 1 of the Roadmap Scientific Council should provide annually catch information in relation to 2TCI, including recent cumulative catch levels and a scoping of expected cumulative catch levels.

For stocks assessed with a production model, the advice should include updated time series or plots of:

- Catch and TAC of recent years
- Catch to relative biomass
- Relative Biomass
- Relative Fishing mortality
- Stock trajectory against precautionary approach reference points

For stock assessed with an age-structured model, information should be provided on stock size, spawning stock sizes, recruitment prospects, historical fishing mortality. Graphs and/or tables should be provided for all of the following for the longest time-period possible:

- historical yield and fishing mortality;
- spawning stock biomass and recruitment levels;
- Stock trajectory against precautionary approach reference points

For stocks for which only general biological and/or catch data are available, few standard criteria exist on which to base advice. The stock status should be evaluated in the context of management requirements for long-term sustainability and the advice provided should be consistent with the precautionary approach.

The following graphs should be presented for the longest time-period possible:

- catch and TAC of recent years
- length distributions
- time trends of survey abundance estimates
- an age or size range chosen to represent the spawning population
- an age or size-range chosen to represent the exploited population
- recruitment proxy or index for an age or size-range chosen to represent the recruiting population.
- fishing mortality proxy, such as the ratio of reported commercial catches to a measure of the exploited population.
- stock trajectory against precautionary approach reference points

In all cases any additional information the Scientific Council deems appropriate should be provided.

Table 1. The Revised NAFO Precautionary Approach Framework risk table.

y current year (year in which the assessment is made, data until year y-1)

		Yield			P(F>Fli	m)		P(E	<b<sub>lim)</b<sub>		I	P(F>F _{tar}	·get)		P(B <b<sub>trigg</b<sub>	ger)	P(By+3 > By)	(By+3-By)/By
	Yield	Yield	Yield																
F in y+1 and	у	y+1	y+2																
following years	(50%)	(50%)	(50%)	у	y+1	y+2	у	y+1	y+2	y+3	у	y+1	y+2	у	y+1	y+2	y+3		
Critical Zone																			
F=0	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F=X% current*	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F current	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Cautious Zone																			
F lower edge leaf	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F midrib leaf	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F upper edge leaf	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Healthy Zone																			
F=0.75F _{msy}	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
$F_{target} {=} 0.85 F_{msy}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
$F_{lim} = F_{msy}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%

^{*}X% may vary stock by stock. In the future, this framework may be modified to include F bycatch. The number of years in the risk projections table will be the same as the years of advice.

ANNEX 2. DENMARK (ON BEHALF OF GREENLAND) REQUESTS FOR SCIENTIFIC ADVICE ON MANAGEMENT IN 2026 AND BEYOND OF CERTAIN STOCKS IN SUBAREA 0 AND 1

(from SCS Doc. 25/03)

Denmark (on behalf of Greenland) Coastal State Request for Scientific Advice - 2026

Denmark (on behalf of Greenland) hereby request scientific advice on management in 2026 of certain stocks in NAFO Subareas 0 and 1. Denmark (on behalf of Greenland) requests the Scientific Council for advice on the following species:

1. Golden Redfish and Demersal Deep-Sea Redfish

Advice on Golden redfish (*Sebastes marinus*) and demersal deep-sea redfish (*Sebastes mentella*) in Subarea 1 was in June 2023 given for 2024-2026. The Scientific Council is requested to continue its monitoring of the above stocks and provide updated advice as appropriate in the event of significant changes in stock levels.

2. Atlantic Wolffish and Spotted Wolffish

Advice on Atlantic Wolffish (*Anarhichas lupus*) and Spotted Wolffish (*Anarhichas minor*) in Subarea 1 was in June 2023 given for 2024-2026. The Scientific Council is requested to continue its monitoring of the above stocks and provide updated advice as appropriate in the event of significant changes in stock levels.

3. Greenland Halibut, Offshore

Advice on Greenland Halibut, Offshore in Subareas 0 and 1 was given in 2024 for 2025 and 2026. Denmark (on behalf of Greenland) request the Scientific Council to provide catch advice according to the NAFO Precautionary Approach Framework (PAF). The advice should also include a range of risk-based catch options for 2026-2027. Specifically, Denmark (on behalf of Greenland) recommends that for each option a clear technical basis is provided and that a table with defined reference points is provided in the advice. Catch options that are in accordance with the NAFO PAF should be highlighted.

The advice shall remain a two-year advice, but Denmark (on behalf of Greenland) recommends the advice cycle to start at even years (starting with the 2026-2027 advice) to follow a request by the Scientific Council with the purpose of better distributing the workload of the Scientific Council.

4. Greenland Halibut, Inshore, West Greenland

Advice on the inshore stocks of Greenland Halibut in Subarea 1 was given in 2024 for 2025-2026. Denmark (on Behalf of Greenland) requests the Scientific Council to continue its monitoring of the above stocks and provide updated advice in the event of significant changes in stock levels.

5. Northern Shrimp, West Greenland

Subject to the concurrence of Canada as regards to Subareas 0 and 1, Denmark (on behalf of Greenland) requests the Scientific Council before December 2025 to provide advice on the scientific basis for management of Northern Shrimp (*Pandalus borealis*) in Subareas 0 and 1 in 2026 in line with Greenland's stated management objective of maintaining a mortality risk of no more than 35% in the first year prediction and to provide a catch option table ranging with 5,000 t increments. Future catch options should be provided for as many years as data allows for.

6. Northern Shrimp, East Greenland

Furthermore, the Scientific Council is in cooperation with ICES requested to provide advice on the scientific basis for management of Northern Shrimp (*Pandalus borealis*) in Denmark Strait and adjacent waters east of southern Greenland in 2026 and for as many years ahead as data allows for.

ANNEX 3. REQUESTS FROM CANADA FOR COASTAL STATE ADVICE IN 2026

(from <u>SCS Doc. 25/04</u>)

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 $(P(B2027 \ge B2025))$; 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).

APPENDIX III: PROVISIONAL TIMETABLE

Scientific Council Meeting, 29 May -12 June 2024

Date	Time	Schedule
29 May (Thursday)	1000	Registration, network connection
	1000-1030	SC Executive
	1100-1130	SC Opening
	1130-1200	STACFIS (Catch WG report, status of documentation, interim monitoring reports)
	1200-1330	Break
	1330-1600	STACPUB
	1600-1800	SC/STACFIS
30 May (Friday)	0900-1800	STACFEN
	1830-2030	Scientific Council Reception/event
31 May (Saturday)	0900-1800	SC: Scientific Council Process
01 June (Sunday)	No meetings	
02 June (Monday)	0900-1200	STACREC
	1330-1800	STACFIS/SC
03 June (Tuesday)	0900-1800	STACFIS/SC
04 June (Wednesday)	0900-1800	STACFIS/SC
05 June (Thursday)	0900-1800	STACFIS/SC
06 June (Friday)	0900-1800	STACFIS/SC
07 June (Saturday)	0900-1800	STACFIS Reports
08 June (Sunday)	No meetings	
9 June (Monday)	0830-0900	Scientific Council Executive
	0900-1800	Scientific Council (Standing Committee Reports)
10 June (Tuesday)	0900-1800	Scientific Council
11 June (Wednesday)	0900-1800	Scientific Council
12 June (Thursday)	0900-1200	Scientific Council (advice and adoption of reports)

APPENDIX IV: EXPERTS FOR PRELIMINARY ASSESSMENT OF CERTAIN STOCKS

Designated Experts for 2025:

From the Science Branch, Northwest Atlantic Fisheries Centre, Department of Fisheries and Oceans, St. John's, Newfoundland & Labrador, Canada

Cod in Div. 3NO Rick Rideout rick.rideout@dfo-mpo.gc.ca
Redfish Div. 30 Danny Ings danny.ings@dfo-mpo.gc.ca
Redfish Div. 3LN VACANT

American Plaice in Div. 3LNO Laura Wheeland laura.wheeland@dfo-mpo.gc.ca Katherine.skanes@dfo-mpo.gc.ca Witch flounder in Div. 3NO Katherine Skanes Yellowtail flounder in Div. 3LNO Laura Wheeland Laura.wheeland@dfo-mpo.gc.ca Greenland halibut in Paul Regular paul.regular@dfo-mpo.gc.ca SA 2+3KLMNO Northern shrimp in Div. 3LNO Nicolas Le Corre nicolas.lecorre@dfo-mpo.gc.ca

Ecosystem Designated Expert 3LNO VACANT

From the Instituto Español de Oceanogra

fia, Vigo (Pontevedra), Spain

Roughhead grenadier in SA 2+3
Splendid alfonsino in Subarea 6
Cod in Div. 3M
Sorthern Shrimp in Div. 3

From the Instituto Nacional de Recursos Biológicos (INRB/IPMA), Lisbon, Portugal

American plaice in Div. 3M Ricardo Alpoim ralpoim@ipma.pt
Golden redfish in Div. 3M Ricardo Alpoim ralpoim@ipma.pt
Redfish in Div. 3M Ricardo Alpoim ralpoim@ipma.pt

From the Greenland Institute of Natural Resources, Nuuk, Greenland

Greenland halibut in SA 0+1 Kevin Hedges kevin.hedges@dfo-mpo.gc.ca

Demersal Redfish in SA1
Rasmus Nygaard
rany@natur.gl
Wolfish in SA1
Rasmus Nygaard
rany@natur.gl

From Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO),

Russian Federation

Capelin in Div. 3NO Konstantin Fomin fomin@pinro.ru

From National Marine Fisheries Service, NEFSC, Woods Hole, Massachusetts, United States of America

Northern Shortfin Squid in VACANT

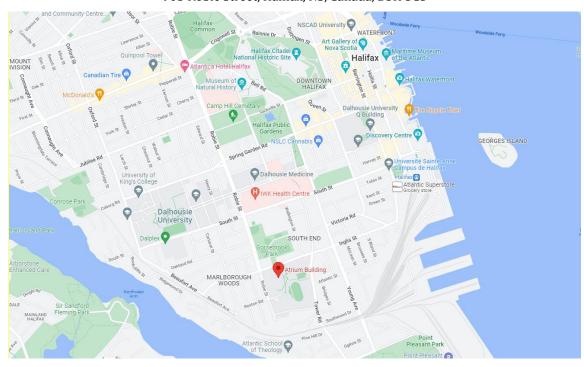
SA 3 & 4

Thorny skate in Div. 3LNO Katherine Sosebee katherine.sosebee@noaa.gov White hake in Div. 3NO Katherine Sosebee katherine.sosebee@noaa.gov

APPENDIX V: MEETING VENUE

Map of Halifax showing Meeting Venue

CLARI Hub (AT340), Atrium Building, Saint Mary's University, 903 Robie Street, Halifax, NS, Canada, B3H 3C3





Buildings

Art Gallery PPL Patrick Power Library AT Atrium Burke Building Rice Residence DC The Dauphinee Centre Science Building Homburg Centre for Health & Wellness Sobey Building SC O'Donnell Hennessey Student Centre Link Building Loyola Academic Comple LA LR Sobeys Inspiration Hub Loyola Residence Vanier Residence ME MM McNally East 867 Robie Street McNally Main 883 Robie Street MN McNally North 960 Tower Road McNally South 5960 Inglis Street

- Arena: General, Meters, Accessible
- 2.
- Inglis Street: General, Pay & Display Science: General, Meters, Faculty, Accessible
- McNally East: Meters, Accessible
- McNally Main: Faculty, Accessible Sobey/Gorsebrook: General, Faculty, Accessible
- Oaks: General Rice: General, Meters, Accessible
- Homburg Members Parking Only
 Tower Road: Meters, Accessible

APPENDIX VI. ACCOMMODATION AND TRAVEL INFORMATION

Meeting Venue

The meeting will be held at:

CLARI Hub (AT340), Atrium Building, Saint Mary's University, 903 Robie Street, Halifax, NS, Canada, B3H 3C3

Hotel Accommodations

Saint Mary's University provides modern, comfortable and affordable residence beds to conference delegates and tourists from May 23 to August 5. You can find more information about SMU accommodations on the University website.

Reservations

Reservations are to be made by participants directly with the University. Reservations can be made by telephone or email; please notify them you are with NAFO when booking:

Toll-Free: 1-888-347-5555 (Canada and US only)

Email: stay@smu.ca

Alternative Accommodations

There are a variety of hotels in close vicinity to the meeting venue including:

Hotel
Atlantica Hotel Halifax - https://www.atlanticahotelhalifax.com/
1980 Robie Street, Halifax, NS B3H 3G5
The Lord Nelson - http://www.lordnelsonhotel.ca/
1515 South Park Street, Halifax, NS B3J 2L2
The Westin - http://www.thewestinnovascotian.com
1181 Hollis Street, Halifax, NS B3H 2P6

Many people choose to stay in the downtown core of Halifax closer to a greater selection of restaurants and entertainment. You can find a list of accommodations and visitor information on our <u>website</u>.

For those participants choosing not to stay at the meeting venue, Saint Mary's University is conveniently located on several major bus routes.

On-campus dining options

Saint Mary's University has a variety of dining option. A full list of on campus dining options including open times and menus can be found <u>here</u>.

Electronic Travel Authorization (eTA)

Most travellers need a visa or an <u>Electronic Travel Authorization (eTA)</u> to fly to, or transit through, a Canadian airport. The eTA can be completed online and costs CAD \$7.00. You can find more information about applying for an eTA <u>here.</u>