

Report of the NAFO Joint Commission–Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) Meeting

03-05 August 2026
Halifax, Nova Scotia, Canada

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1. Opening by the co-Chairs, Mar Sacau Cuadrado (European Union) and Elizabethann Mencher (United States of America)

The meeting was opened by the co-Chairs, Mar Sacau Cuadrado (European Union) and Elizabethann Mencher (United States of America), at 09:32 hours (UTC -3 hours) on Monday, 03 August 2026. The co-Chairs welcomed participants attending in-person and virtually from Canada, Denmark (in respect of Faroe Islands and Greenland), European Union, Iceland, Japan, Norway, Russian Federation, United Kingdom, and the United States of America, and the Chairs of the Commission and the Scientific Council (Annex 1).

2. Appointment of Rapporteur

The NAFO Secretariat was appointed as rapporteur of this meeting.

3. Adoption of Agenda

The working group agreed to add one additional item under agenda item 7 to discuss the prototype TCI app developed by the Scientific Council for assessing candidate TAC options in relation to the 2TCI Ecosystem Reference Point. Additionally, two items under “Other Business” were added: an update on the Scientific Council’s workload and an update on the ad hoc virtual working group to consider the initiation of a potential third Performance Review of NAFO (WG-PR).

The agenda was adopted following the revisions above and is outlined in Annex 2.

4. Presentation of Scientific Council responses to Commission requests for advice (COM Doc. 25-13) relevant to WG-EAFFM

The co-Chair of WG-EAFFM, Mar Sacau Cuadrado (European Union), provided a summary of the Scientific Council advice relevant to the WG-EAFFM ([SCS Doc. 26/12](#)). The co-Chair presented a summarized overview of each of the responses, noting that the advice would be discussed in detail in subsequent agenda items. The working group thanked the Scientific Council for their work and the co-Chair for the presentation.

5. VME and SAI Assessments

a. Update on the centralized data repository (COM Request 6.a)

On behalf of the Scientific Council, Andrew Kenny (United Kingdom) provided an update on the response to Commission request #6.a on the centralized data repository. Andrew Kenny reported on the ongoing work to develop and populate the repository, including plans to incorporate additional data layers (e.g. VME KDE and SDM files, gridded biomass), together with associated metadata and documentation to support traceability and reproducibility and to ensure appropriate recognition of data contributors through a standard acknowledgement statement. The repository was noted as an important tool for the Scientific Council during the upcoming SAI reassessment process. The working group thanked the Scientific Council for the work to date and appreciated the progress.

b. Update on reassessment of VMEs and impact of bottom fisheries on VMEs for 2027 including potential management options in the reassessment of bottom fisheries (COM Request 6.b)

The working group reviewed the Scientific Council response to Commission request #6.b, which noted that the SC had updated the delineation of VMEs in the NAFO Regulatory Area using data from the research vessel surveys conducted between 1995-2024. The general areas of the updated VMEs are highly consistent with prior analyses. SC notes the estimated areas of most VME functional groups increased relative to the 2019 assessment, with large gorgonian corals and black corals showing comparatively little change. The largest increase was observed for small gorgonian corals, which also identified new polygons on the Flemish Cap, some of which overlap with existing closures and thereby increase their conservation value. Despite these changes in estimated area, there was high spatial congruence between the 2019 and 2025 analyses. Scientific Council agreed to a workplan for the 2027 reassessment of SAI and associated management options for NAFO bottom fisheries (Table 1). The SC also noted that, due to changes in available resources after the 2025 WG-ESA meeting, several of the secondary SAI indicators used in the 2021 SAI assessment cannot be updated for the 2027 assessment. However, the primary SAI indicators (proportion of VME protected, VME at risk and VME impacted) will be recalculated using the newly updated VME and fishery effort data sets, and used in the 2027 assessment of SAI and management options. The 2021 assessment showed that considering secondary SAI metrics did not change the overall outcome of the assessment from when it was conducted solely on the basis of primary SAI metrics, but secondary metrics were useful to further consolidate the assessment results.

Table 1. Timeline of key processes/events to deliver finalised set of management options as part of the next reassessment of bottom fisheries.

Stage / Timing	Process / Event	Key Output / Results	Purpose / Outcome
By March 2027 (latest)	Intersessional online meeting of WG-ESA	Maps and tables summarising results of all analytical steps, including draft management options	Present and review scientific outputs and supporting evidence for improving VME closures design to minimize the risk of SAI
March/ April 2027	Participation of managers in WG-ESA/ WG-EAFFM intersessional meeting	Direct engagement and communication of scientific rationale and methodology, including early sharing of draft management options	Early involvement of managers to inform and gather initial feedback on draft management options ahead of the SC meeting where the management options will be formalized
June 2027 (SC)	Scientific Council	Proposed management options (e.g. new VME closures and/or boundary adjustments)	Scientific review of the SAI-VME assessment and management options, and development of the formal SC advice to COM on these matters
July 2027 (WG-EAFFM)	Review by WG-EAFFM	Further evaluation and potential refinement of proposed management options	Potential agreement on a finalised set of management options to be recommended to COM for adoption

If required (2027)	Additional intersessional WG-EAFFM	Further discussion of management options	Resolve outstanding issues (if needed)
September 2027 Annual Meeting	Submission to Commission	Final agreed management options	Consideration for adoption and implementation

The working group thanked the Scientific Council for the work and supported the updated VME polygons as presented and encouraged the Scientific Council to continue the work as outlined in the workplan (Table 1). WG-EAFFM underscored that this proposed timeline is contingent on WG-ESA being able to complete its work at its November 2026 meeting and flagged that the Commission should be made aware that WG-ESA may not be able to meet this timeline due to meeting logistics.

WG-EAFFM discussed and supported a proposal presented by Canada to amend Commission request #6.b, as outlined in COM-SC EAFFM-WP 26-04, with the aim of improving the integration of scientific and management perspectives in the VME management process. The proposal requests that the Scientific Council, wherever relevant, develop multiple potential management options for any VME areas for Commission consideration in the reassessment of bottom fisheries. The proposal further requests that, where potential fishery closures are identified, the SC should aim to provide multiple boundary options, where appropriate, to inform the consideration of trade-offs between fishing activities and conservation objectives. The proposal also included a joint WG-EAFFM/WG-ESA intersessional meeting in spring 2027 to facilitate early input from managers and inform the proposed management options in advance of the June 2027 Scientific Council meeting. This meeting is reflected in the workplan above for March/April 2027 as drafted by SC, and the proposal noted the importance of allowing for discussion of the management options identified, and for managers to potentially request modifications to the initial management options, while being mindful of workload implications.

6. Review of the bottom fishing closure dates

The working group discussed that under Article 17 of the NAFO Conservation and Enforcement Measures (CEM), the bottom fishing closures are in place until 31 December 2026 and noted that because of the 2024 Commission decision to delay the reassessment until 2027 ([COM Doc. 24-25](#)), this date is no longer aligned with the Scientific Council timeline. As a result, the working group agreed to recommend updating all of the relevant bottom fishery closure dates from 31 December 2026 to 31 December 2027 in Article 17 of the NAFO CEM with the caveat that if the Scientific Council is unable to complete the full review in 2027, the Commission may need to consider extending the fishery closure dates further.

7. Ecosystem Roadmap

a. Ecosystem Roadmap Document (COM Request 5)

On behalf of the Scientific Council, Mariano Koen-Alonso (Canada) presented the response to Commission request #5 on the development of a reference document detailing the Ecosystem Roadmap ([SCS Doc. 26/12](#) and COM-SC EAFFM-WP 26-01). Mariano Koen-Alonso reported that comments received from one Contracting Party following the 2025 WG-EAFFM meeting had been integrated, including changes in language to maintain consistency with the NAFO Convention, the inclusion of climate change elements in the document and emphasis on the adaptive nature of the Roadmap.

Contracting Parties highlighted the importance of the Roadmap as a guiding framework for implementing an ecosystem approach to fisheries in NAFO and expressed their appreciation for the work of the Scientific Council to support implementation of the Roadmap including the progress made on the document. The working group also discussed the relationship between this work, the Scientific Council capacity challenges, and potential recommendations arising from a proposed performance review focused on addressing those challenges.

The co-Chairs expressed their gratitude to the Scientific Council for the document, and, underscoring the challenging workload of the Scientific Council over the next year, offered to draft the next version in collaboration with the Secretariat. To support that work, the WG-EAFFM co-Chairs requested Contracting Parties to submit comments by 04 September 2026 on the most recent draft. The co-Chairs will update the document and share it with WG-EAFFM members to facilitate an intersessional online exchange of views and edits, with a view to having a document for consideration at the 2027 WG-EAFFM meeting.

b. TCI App

On behalf of the Scientific Council, Mariano Koen-Alonso (Canada) presented a prototype application developed by the Scientific Council to assist managers in evaluating the impacts of candidate Total Allowable Catch (TAC) values on the risk of exceeding the 2TCI Ecosystem Reference Point, as well as a draft questionnaire for testers. The application allows managers to modify candidate TAC values for individual stocks and view, in real-time, the resulting changes in the scoped Catch/TCI ratios for the corresponding functional guilds and Ecosystem Production Units (EPUs). The working group thanked the Scientific Council for the work on the application and did not note any concerns regarding its functionality. Discussions were also held on the interpretation and use of 2TCI in NAFO, with the working group noting that it is an Ecosystem Reference Point intended to inform management discussions by flagging an increased risk of ecosystem overfishing, rather than serving as an automatic management trigger.

The working group noted that the information currently provided by the Scientific Council on the ecosystem sustainability of catches was sufficient and did not identify a need for further development or refinement of the application, noting the ongoing capacity concerns in the Scientific Council. Consequently, while acknowledging the work undertaken, the working group did not support further work on the application at this stage.

8. Other Effective Area-based Conservation Measures (OECMs) (COM Request 6.c)

On behalf of the Scientific Council, Andrew Kenny (United Kingdom) provided an update on the response to Commission request #6.c on the materials developed for the potential submission of the fishery closures for coral VME protection as OECMs, and highlighted the draft submission document contained in COM-SC EAFFM-WP 26-02 (Revised). The proposed submission includes Fishery Closure Areas 7, 7a, 8, 9, 11, 11a, 12, 13, 14a and 14b, selected based on their role in protecting coral VMEs and their potential suitability for recognition as OECMs. The selected areas were assessed against the relevant OECM criteria, including geographic definition, governance and management arrangements, and their capacity to deliver effective and long-term conservation outcomes for coral VMEs. The working group agreed not to include Fishery Closure Area 10 in the proposed submission at this stage, noting its overlap with oil and gas exploration activities and the associated cross-sectoral considerations regarding its assessment and reporting as an OECM, and to update the document and associated maps to ensure consistency with the document on the six sponge areas previously submitted as OECMs. The working group supported that the Secretariat submit the fishery closures and justifications for coral VME protection (7, 7a, 8, 9, 11, 11a, 12, 13, 14a and 14b) as outlined in COM-SC EAFFM-WP 26-02 (Rev. 2) once updated, to the UN Environment Programme World Conservation Monitoring Centre (UNEP WCMC) for inclusion in the World Database on OECMs.

9. Scoping document for potential meeting to explore approaches for integrating information related to climate change throughout Scientific Council operations (COM Request 10)

On behalf of the Scientific Council, Mariano Koen-Alonso (Canada) provided an update on the response to Commission request #10 on the development of a scoping document for a potential meeting to identify actionable strategies for the practical integration of climate change considerations across Scientific Council operations ([SCS Doc. 26/12](#) and COM-SC EAFFM-WP 26-03). WG-EAFFM agreed that it did not support moving forward with the proposed meeting in 2027.

10. Continued discussions on Greenland shark bycatch

The WG-EAFFM co-Chair opened the floor for the continued discussion on Greenland shark bycatch and the workplan that was outlined at the 2024 WG-EAFFM meeting ([COM-SC Doc. 24-02](#)). There were no updates provided by the working group and some clarity was requested on the purpose of the discussion. It was noted that discussions on Greenland shark bycatch in NAFO were first initiated from Commission request #8 in 2017 ([SCS Doc. 17/01](#)) and were tasked to the WG-EAFFM at the 2023 Annual Meeting ([COM Doc. 23-28](#)). The working group discussed the current measures outlined in Article 12 of the NAFO Conservation and Enforcement Measures, with some participants noting that the measures are sufficient, but welcomed additional discussions if the available data indicates there are issues that the current measures are not accounting for. In preparation for conversations at WG-EAFFM in 2027, the working group requested the Secretariat to compile available observer data and background information on Greenland shark bycatch to inform future discussions. The analysis should include, where possible, the identification of potential spatial, temporal, and/or targeted fishery trends/patterns.

11. Other Business

a. Scientific Council workload

The Scientific Council Chair, Diana González-Troncoso (European Union), provided an update on the ongoing Scientific Council workload and capacity challenges. The 2026 June meeting had an exceptionally heavy agenda and, given the increasing number of requests and declining participation, the Scientific Council was unable to fully address all requests from the Commission. The SC Chair also highlighted vacancies for 2027 for Designated Experts (DEs) for several stocks, the 3LNO Ecosystem Designated Expert (EDE) and the Chair of STACPUB, as well as a co-Chair of WG-ESA, and all the challenges these have created. The 2026 STACFEN meeting was cancelled due to a lack of Chair, and as such no environmental information was reviewed and made available to SC. This marked the first time that STACFEN had not met since its creation. It was further noted that vacancies in the DE positions resulted in two stocks - 3LNOPs thorny skate and 3NOPs white hake – not being assessed or monitored in 2026. In addition, due to workload constraints, 3LNO American plaice did not undergo a full assessment. The working group thanked the SC Chair for the presentation and update, and reiterated their great concern with the gravity of the situation.

b. Performance Review

The Chair of the *ad hoc* virtual working group to consider the initiation of a potential third Performance Review of NAFO (WG-PR), Robert Fagan (Canada), provided an update on the progress that the working group has made towards the development of the draft Terms of Reference and criteria to conduct the third NAFO Performance Review with a focus on the Scientific Process. The Chair reported that the draft Terms of Reference have been developed through virtual meetings and by correspondence, and that the latest version of the documents have been circulated to the working group, with the intention of making them available on the Annual Meeting SharePoint in mid-August to allow Contracting Parties to have ample time to review in advance of the meeting.

12. Recommendations

The WG-EAFFM agreed to forward the following recommendations to the Scientific Council and the Commission for consideration and adoption at the 2026 Annual Meeting of NAFO:

1. **In relation to the habitat impact assessment component of the Roadmap (VME and SAI analyses), the WG-EAFFM recommends that the Commission:**
 - a. **Requests the Scientific Council to complete the reassessment of VMEs and impact of bottom fisheries on VMEs for 2027, and provide input and analysis of potential management options, with the goal of supporting meaningful and effective discussions between scientists and managers at the 2027 WG-EAFFM meeting.**

- b. **Requests the Scientific Council, wherever relevant, to develop multiple potential management options for any VME areas for Commission consideration in the reassessment of bottom fisheries. Where potential fishery closures are identified, the SC should aim to provide multiple boundary options, where appropriate, to inform the consideration of trade-offs between fishing activities and conservation objectives.**
 - c. **In consultation with the Scientific Council, approve the spring 2027 WG-EAFFM/WG-ESA virtual intersessional meeting to inform the development of management options.**
- 2. **In relation to discussions on the review of the bottom fishing closure dates, the WG-EAFFM recommends that the Commission update the VME closure dates in Articles 17.1, 17.2, and 17.3 of the NAFO CEM from 31 December 2026 to 31 December 2027.**
- 3. **In relation to discussions on Other Effective Area-based Conservation Measures (OECMs), the WG-EAFFM recommends that the Commission requests the Secretariat to submit the fishery closures for coral VME protection (7, 7a, 8, 9, 11, 11a, 12, 13, 14a and 14b) as outlined in COM-SC EAFFM-WP 26-02 (Rev. 2), to the UN Environment Programme World Conservation Monitoring Centre (UNEP WCMC) for inclusion in the World Database on OECMs.**
- 4. **In relation to discussions on Greenland shark bycatch, the WG-EAFFM recommends that the Commission requests the Secretariat to provide a summary and analysis of the observer data related to Greenland shark. The analysis should include, where possible, the identification of potential spatial, temporal, and/or targeted fishery trends/patterns, and provide an updated presentation at the 2027 WG-EAFFM meeting.**
- 5. **In relation to the Scientific Council's workload, WG-EAFFM reiterated the dire shortage of Chairs and Designated Experts noted in 2025, and the WG's strong concern, and recommends the Commission encourage Contracting Parties to find ways to ensure the positions are filled by the close of the September 2026 Annual Meeting.**

13. Adoption of the Report

The report was adopted via correspondence following the end of the meeting.

14. Adjournment

The working group paused to commemorate the recent passing of Dr. Ricardo Alpoim (Portugal), a great scientist, valued colleague, and friend. His contributions to the Scientific Council and the joint working groups over his near 30 years of experience with NAFO are immeasurable. Ricardo will be deeply missed by all those who had the privilege of knowing and working with him.

The meeting was adjourned at 13:28 hours (UTC -3 hours) on Tuesday, 04 August 2026.

Annex 1. List of Participants

CO-CHAIRS	Mencher, Elizabethann (USA) Sacau Cuadrado, Mar (European Union)
SC CHAIR	González Troncoso, Diana
COM CHAIR	Paardekooper, Joost
CANADA	In-person Bourgeois, Vanessa Fagan, Robert Fuller, Susanna Kenchington, Ellen Koen Alonso, Mariano Krohn, Martha Marsden, Dale Muir, Carlie Rayner, Gemma Simpson, Mark Virtual Coombs, Samantha Rideout, Rick
DENMARK (IN RESPECT OF FAROE ISLANDS AND GREENLAND)	Virtual Svarrer Wang, Ulla
EUROPEAN UNION	In-person Billiet, Stijn Demblon, Jessica Virtual Belmonte, Luis Cortina Burgueño, Ángela Duran Muñoz, Pablo Garrido Fernández, Irene Gonçalves, Patrícia Leocadio, Ana Mancebo, C. Margarita Näks, Liivika Teixeira, Isabel Tuvi, Aare
ICELAND	In-person Bragi Bragason, Agnar
JAPAN	Virtual Iwano, Taisuke Mitome, Haruki Taki, Kenji
NORWAY	Virtual Bakke, Gunnstein Hallfredsson, Elvar H.
RUSSIAN FEDERATION	Virtual Fomin, Konstantin Tairov, Temur

UNITED KINGDOM	In-person Kenny, Andy Sharples, James Virtual Gawlyk, Joe Weiland, Molly
UNITED STATES OF AMERICA	In-person Jaburek, Shannah Williams, Kirsten Wintering, Rebecca Virtual Kelly, Moira
NAFO SECRETARIAT	In-person Benediktsdóttir, Brynhildur Aker, Jana Bell MacCallum, Dayna Guile, Sarah LeFort, Lisa Perreault, Andrea Thompson, Catherine

Annex 2. Agenda

1. Opening by the co-Chairs, Mar Sacau Cuadrado (European Union) and Elizabethann Mencher (United States of America)
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