Northwest Atlantic Fisheries Organization



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

20–22 July 2023 Edinburgh, United Kingdom

NAFO Halifax, Nova Scotia, Canada 2023

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A.A.

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

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20–22 July 2023 Edinburgh, United Kingdom

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 11:02 hours (UTC/GMT +1 hours in Edinburgh, United Kingdom) on Thursday, 20 July 2023.

The co-Chairs welcomed participants attending in person and virtually. This included representatives from Canada, European Union, Iceland, Japan, Norway, Russian Federation, Ukraine, United Kingdom, and the United States of America. The Scientific Council (SC) Chair participated virtually, and an observer from the Deep Sea Conservation Coalition was present (Annex 1).

2. Appointment of Rapporteur

The NAFO Secretariat was appointed as Rapporteur.

3. Adoption of Agenda

The working group agreed to include the following items under agenda item 13 – Other Business

- updates from the NAFO Secretariat on the progress for the BBNJ (Biodiversity Beyond National Jurisdiction), the ABNJ (Areas Beyond National Jurisdiction) Deep Seas Project, and the ICES (International Council for the Exploration of the Sea) MOU (Memorandum of Understanding,
- as well as a presentation from the Scientific Council Chair on the results of Informal Group to Reflect on the Workload of the Scientific Council.

The adopted agenda is outlined in Annex 2.

4. Presentation of Scientific Council responses to Commission requests for advice (COM Doc. 22-20) relevant to WG-EAFFM

The WG-EAFFM co-Chair, Mar Sacau Cuadrado, presented the Scientific Council advice relevant to the WG-EAFFM (see SCS Doc. 23/18). The co-Chair noted that the Scientific Council advice will be discussed in detail in subsequent agenda items and presented a summarized overview of each of the responses. The working group thanked the Scientific Council for their work and the co-Chair for the presentation.

5. VME Assessments

a. Review of VME areas 7a, 11a, 14a, and 14b (COM Request #6.a)

Andrew Kenny (United Kingdom) presented a summary of the Scientific Council response to Commission request #6.a, as outlined in the Scientific Council report (SCS Doc. 23/18), and summarized in COM-SC EAFFM-WP 23-09. The Commission's request to SC was to complete the re-assessment of VME closures of 7a, 11a, 14a and 14b, incorporating catch and effort data for fisheries of shrimp from 2020 and 2021 into the fishing impact assessments. The Scientific Council analysis concluded that there was no discernible overlap between the re-assessed closures and the shrimp fishery, and that the four closures would have resulted in no discernible losses in catch for the shrimp fishery during 2020 and 2021. As a result, Scientific Council recommended that



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VME closures 7a, 11a, 14a and 14b remain closed until December 31, 2026, and be included in the reassessment along with the other VME and seamount closures. The working group agreed with the Scientific Council's advice and to forward a recommendation to the Commission that the VME closures 7a, 11a, 14a and 14b remain closed until 31 December 2026 and be re-assessed with NAFO's other VME and seamount closures.

The working group thanked the Scientific Council for their work and noted that the next assessment of the NAFO VME closures should, where available, take into account historical fishing activity prior to 2010, to have additional information for consideration when reviewing the VME closures in 2026. One Contracting Party noted that Article 23.2(a) of the NAFO Conservation and Enforcement Measures (NCEM) speaks to the Commission considering reassessing bottom fishing activities and NAFO's VME closures if there is a "significant change in the fishery". It noted that this element will be important to keep in mind when considering future reassessments of significant adverse impacts of bottom fishing on VMEs, and that evidence of significant changes in the fishery and/or in the distribution of fisheries resources should be an element of NAFO's VME review process, alongside updated scientific information on the distribution of VMEs.

The working group also reflected on whether the VME areas can be combined (e.g., area 7 be combined with area 7a moving forward) and noted that this would fall outside of the scope of the current Commission request, but that it could be reviewed by the Scientific Council during the re-assessment process in 2026.

b. Review of Article 17.3bis of the NAFO CEM

Reflecting the discussion under agenda 5a, the working group proposed text amendments to NAFO CEM Article 17.3 to maintain VME closures 7a, 11a, 14a, and 14b to 31 December 2026 and to incorporate these closures with the other VME and seamount closures in COM-SC EAFFM-WP 23-15 (Annex 3). The working group agreed to forward these changes to the Commission for adoption pending its decision on the extension of the four VME closures.

c. Data for VME and SAI assessments (COM Request #6.b)

Andrew Kenny presented a summary of the Scientific Council response to Commission request #6.b, summarized in COM-SC EAFFM-WP 23-10 from the Scientific Council report (SCS Doc. 23/18). It was noted that the Scientific Council established a data sub-group, which has identified standard data products and procedures developed by the Scientific Council, including VME data, VMS data, fishing effort calculations, catch data and spatial analysis methods. The Scientific Council continues to work with the NAFO Secretariat to develop a centralized data repository using ArcGIS online to host the data and data-products for scientific advice.

The working group thanked the sub-group and the Scientific Council for the progress update on this request. The working group discussed the sensitive nature of the data and highlighted that currently the data repository is only available to Scientific Council members that are undertaking the VME and SAI assessment work. The working group noted that, as the data sub-group continues progress on the repository, it should consider the issue of data access (privacy) and sensitivity, noting the existing guidelines for data confidentiality in NAFO, and reflect on potential data sharing possibilities in the future.

d. Work towards developing operational objectives for the protection of VMEs and biodiversity in the NRA (COM Request #6.c)

The co-Chair, Elizabethann Mencher, reflected on the discussions that have taken place in NAFO over the years on operational objectives in relation to the ecosystem roadmap and, more recently VMEs specifically in the reassessment of the closures during the 2021 Annual Meeting. Andrew Kenny (United Kingdom) presented a summary of the Scientific Council response to Commission request #6.c, available in COM-SC EAFFM-WP 23-11 from the Scientific Council report (SCS Doc. 23/18).

The Scientific Council developed a draft framework for operational objectives for the protection of biodiversity and prevention of overfishing in the NAFO Regulatory Area (NRA) using internationally recognized definitions



(table 3 in COM-SC EAFFM-WP 23-11). The working group had an open and detailed discussion around the proposed framework as well as possible operational objectives, noting that any objectives must be consistent with NAFO's mandate.

Representatives from WG-EAFFM will work intersessionally to develop a draft framework document for presentation at the next WG-EAFFM meeting in August 2024, reflecting the working group's discussions. It was agreed that this work will be completed secretarially, and that interested working group members may decide to meet virtually, if required.

6. Ecosystem Roadmap

a. Inclusion of TCI information in stock summary sheets, management considerations for occasions in which the 2TCI ecosystem reference point were to be exceeded and exploration of effective methods to communicate TCI-related information (COM Request #5a and #5b)

Mariano Koen-Alonso presented a summary of the Scientific Council responses to Commission request #5.a and 5.b, summarized in COM-SC EAFFM-WP 23-06 and COM-SC EAFFM-WP 23-07, with the final advice being outlined in the Scientific Council report (SCS Doc. 23/18). In relation to the management consideration of ecosystem reference points, the Scientific Council developed a template for inclusion of Total Catch Index (TCI) information in Stock Summary Sheets (SSSs). The template included a reference to TCI in the summary table, and a new section describing sustainability of the catches for the guild and EPUs to which the SSS focal stock belongs. These modifications have been implemented in SSSs of the stocks assessed in 2023. The working group thanked Mariano and the Scientific Council for their work and agreed that the inclusion of TCI information in the Stock Summary Sheets would be useful for managers. The working group requested that, going forward, Scientific Council not include a description of risk in SSSs unless assessed to be over the 2TCI Ecosystem Reference Point adopted by the Commission in 2022 (high risk). Scientific Council would continue to include the numeric value in relation to TCI in SSSs. The working group recommended that the Commission request the Scientific Council to annually provide information on ecosystem overfishing in relation to 2TCI as summarized and presented more fully in the report on sustainability of catches that SC created in 2023. It was agreed the SC should include recent cumulative catch levels and a scoping of expected cumulative catch levels as well, with associated information about the assumptions made during the calculations (e.g., assumed TAC and catch levels).

The working group also noted that it would be extremely valuable to have SSSs for all NAFO stocks. It was noted that the development of these sheets would be a lower priority item and that the Scientific Council could develop the SSSs in accordance with the schedule for full assessments. The working group recommended that the Commission request the Scientific Council to develop stock summary sheets for all NAFO managed stocks, with a priority for those that are evaluated using Harvest Control Rules (HCR) or Management Strategy Evaluation (MSE) processes, as practicable and taking into account any capacity constraints of the Scientific Council.

b. Discussion of Ecosystem summary sheets for subareas 3M and 3LNO (COM Request #5.c)

Mariano Koen-Alonso presented a summary of the Scientific Council response to Commission request #5.c, available in COM-SC EAFFM-WP 23-08 (Revised) with the final advice being outlined in the Scientific Council report (SCS Doc. 23/18). Mariano presented the Ecosystem Summary Sheets (ESSs) for the Grand Bank (3LNO) and Flemish Cap (3M) Ecosystem Production Units (EPUs). The Scientific Council will update all ESSs every five years, or more frequently if important ecosystem changes are detected. It was also noted that, in completing the ESSs, NAFO does not have a list of species of conservation concern (e.g. protected, endangered or threatened species) that can be used to focus monitoring of incidental mortality and/or other types of operational interactions. Developing such a list would be a necessary step to improve tracking, reporting, and assessment of this type of impact of fisheries operations. The working group thanked Mariano and the Scientific Council for the update and work that has gone into the development of the ESSs.

7. Outcomes of the NAFO Informal group of WG-EAFFM on "Other Effective Area-based Conservation Measures (OECMs)"

Andrew Kenny presented the outcomes of the informal working group on "Other Effective Area-based Conservation Measures (OECMs) as outlined in COM-SC WP 23-02 and reflected on the possibility of NAFO management measures being submitted as OECMs to the Convention on Biological Diversity (CBD). The working group reflected on the work completed by ICES / IUCN-CEM FEG Workshop on Testing OECM Practices and Strategies (WKTOPS), noting that WKTOPS determined that the Corner Rise seamounts closure area and the VME sponge closures (VME closed areas 1 to 6) met the criteria for OECMs. The working group underscored that there are no management implications associated with nominating management measures as OECMs. Moreover, the CBD – or any other international governance body- will not be evaluating proposed measures; rather it is NAFO's unilateral decision whether a management measure qualifies as OECM and if it should be submitted to the CBD's OECM repository. The working group underscored that in submitting NAFO management measures as OECMs, it would raise awareness of the work that NAFO is doing to protect VMEs and seamounts. Moreover, it will improve awareness of protected areas in the North Atlantic, thereby informing progress towards Target 3 of the United Nations Biodiversity COP-15 to protect 30% of lands, oceans, coastal areas, inland waters by 2030.

It was noted that the informal working group focused on a subset of potential NAFO management measures that could potentially meet the OECM criteria. The working group discussed the possibility of considering other management measures in the future. The working group specifically discussed VME closure area 10, and how to take into account other human activities taking place in the area (i.e., oil and gas exploration). The working group also reflected on the other VME closed areas, as well as areas within the NRA that could qualify (e.g., areas deeper than 2000 m).

The working group agreed that, in general, the Commission should support the concept of NAFO management measures being catalogued as OECMs, and at this time, the working group recommends that the Commission request the Secretariat to submit VME sponge closures 1 to 6 and the seamount closures as OECMs to CBD in accordance with its procedures, and to the United Nations Environment Programme World Conservation Monitoring Centre (UNEP WCMC) for inclusion in the World Database on OECMs. The working group reflected that NAFO would need to update the CBD and the UNEP WCMC if the management measures are amended in the future. Finally, the working group recommended that the Commission support further consideration of additional management measures to be submitted as OECMs.

8. SC advice on potential impact of activities other than fishing in the Convention Area (COM Request #12).

The WG-EAFFM co-Chair, Mar Sacau Cuadrado and Pablo Durán Muñoz (European Union) presented the Scientific Council advice relevant to the impact of human activities other than fishing in the Convention Area in COM-SC EAFFM-WP 23-12 with the final advice being outlined in the Scientific Council report (SCS Doc. 23/18). Scientific Council again underscored a lack of expertise and capacity to fully address these issues. The working group thanked Scientific Council for their work on this issue, noting their constraints.

In relation to the oil and gas activities, Canada noted that these activities remain under the sovereign jurisdiction of Canada and that the activities are reviewed and approved through a transparent, multi-agency review process. The European Union noted their appreciation to Canada for the transparent operations and regular bilateral meetings, but stressed the importance of continuing the discussions in NAFO, noting the ongoing work of the NEREIDA project that will contribute to these discussions. The European Union stressed that NAFO should continue to consider and monitor the impacts of oil and gas activities as there is overlap with some of the VME closed areas.

The working group discussed the Commission's request to the SC to provide advice on the impact of non-fishery related activities. The Scientific Council Chair, Karen Dwyer, reiterated that the Scientific Council continues to lack the expertise, data, and capacity to provide advice on the impacts of activities other than fishing and that

the workload of this request on SC is not commensurate with NAFO's decision making. The working group also discussed the scope of NAFO's mandate, noting that NAFO does not have the authority to regulate other activities in the NAFO Convention Area, while also reflecting the commitment to take an ecosystem approach to fisheries management. One Contracting Party suggested that, going forward, the working group not recommend that the Commission request the SC to conduct work on this issue this year, noting the capacity limitations and the need to prioritize core NAFO work. Another Contracting Party strongly supported its inclusion, noting NAFO's commitment to implementing the ecosystem roadmap. The working group also noted that this request is not only related to oil and gas activities, but also to marine litter, maritime traffic and any activities other than fishing occurring in the Convention Area. That said, it was noted that SC work in response to this request has focused primarily on oil and gas activities and marine litter in recent years.

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The working group did not reach consensus on whether or not to make the recommendation to continue to request the SC to provide advice on the potential impact of activities other than fishing in the Convention Area, noting the Scientific Council's constraints in terms of data, capacity, and expertise. The working group agreed to continue to discuss the potential impacts of activities other than fishing in the Convention Area, as a regular part of its agenda. The European Union noted their preference to continue to include this item in the Commission requests to the Scientific Council, and the working group reflected that Contracting Parties may table a proposal for the Commission, at the Annual Meeting.

9. SC advice on scientific trawl surveys on VME in closed areas (COM Request #3)

The WG-EAFFM co-Chair, Mar Sacau Cuadrado, presented the Scientific Council advice relevant to the impacts of scientific trawl surveys on VME closed areas, as summarized in COM-SC EAFFM-WP 23-05 with the final advice being outlined in the Scientific Council report (SCS Doc. 23/18). The Scientific Council, following their review and analysis, recommended that the surveys can operate inside the closed areas in the NRA, but that Contracting Parties must make every effort to minimize impacts of the sampling and maximize the data collection in the hauls within those vulnerable areas.

The Scientific Council advised on potential mitigation measures to minimize harm while maintaining the integrity of the survey design. Some of these measures include: moving sets outside the VME closed areas if possible, avoiding areas of particularly high density of VMEs within the closed areas, shortening the survey time within the closed areas and/or reducing the number of sets in the strata within the closed areas.

The working group thanked Scientific Council for their efforts in providing advice on this issue, noting that it had been a long-standing discussion within NAFO. The working group agreed to recommend that the Commission request Contracting Parties to make every effort to minimize impacts of the sampling and maximize the collection of data in the survey hauls made within VME closed areas.

10. Response from STACTIC on Recommendation 4 of COM-SC Doc. 20-03

The Secretariat noted that in 2020, WG-EAFFM requested STACTIC, through the Commission, to insert a footnote into Annex II.N of the NAFO CEM to clarify the definitions of start and end times for fishing activity (see Annex 4 of COM-SC Doc. 20-03). STACTIC reviewed the request in 2021 and 2022, noting that Contracting Parties have different definitions of start and end times and agreed to forward STACTIC WP 22-46 (Rev. 5) to WG-EAFFM for information as they continue to review this request.

11. Review of the Terms of Reference for WG-EAFFM

The working groups reviewed the draft updates to the WG-EAFFM Terms of Reference put forward by the co-Chairs in COM-SC EAFFM-WP 23-14. The working group reviewed and made additional edits to the Terms of Reference, with the final version being outlined in COM-SC EAFFM-WP 23-14 (Rev. 3) (Annex 4). The co-Chairs agreed to work with the co-Chairs of the WG-RBMS intersessionally to ensure consistency of the Terms of Reference between the two working groups. The Terms of Reference will be re-circulated to working group participants for approval in advance of the NAFO Annual Meeting.



12. Implementation of the 2018 Performance Review Panel Recommendations

The NAFO Secretariat highlighted COM-SC EAFFM-WP 23-13 outlining the recommendations from the 2018 performance review panel relevant to WG-EAFFM. The working group noted the following updates in relation to the recommendations to be updated by the NAFO Secretariat following the closure of the meeting.

- **Recommendation 1:** WG-EAFFM noted that during the discussions under agenda item 5.d the working group made additional progress toward setting objectives and determining acceptable risks as outlined in the EAF Roadmap to ensure its implementation and noted that the status of this recommendation is still ongoing.
- **Recommendation 14:** WG-EAFFM noted that the status of this recommendation can be considered closed following the discussions that took place under agenda item 9.
- **Recommendation 37:** WG-EAFFM noted the discussions that took place under agenda item 8 and reflected that the status of this recommendation is still ongoing.

13. Other Business

a. Updates from the Executive Secretary

The NAFO Executive Secretary, Brynhildur Benediktsdóttir, provided an update on the status of the BBNJ (Biodiversity Beyond National Jurisdiction), the ABNJ (Areas Beyond National Jurisdiction) Deep Seas Project, and the ICES (International Council for the Exploration of the Sea) MOU (Memorandum of Understanding) as they relate to NAFO.

b. Scientific Council Workload

The chair of the Scientific Council, Karen Dwyer, provided an update from the meeting of the NAFO Informal Group to Reflect on the Workload of the Scientific Council (COM-SC WP 23-01). The Scientific Council Chair highlighted that the number and complexity of requests to the Scientific Council from the Commission have increased, and there are positions within the Scientific Council that are currently vacant. The Scientific Council Chair also highlighted some of the options for addressing this issue that were discussed during the meeting and are outlined in COM-SC WP 23-01. The Acting Chair of the Commission, Deirdre Warner-Kramer (United States of America), highlighted that there should be better collaboration when requests are submitted to the Scientific Council, and resources should be identified at the time of the request, and that Contracting Parties need to find ways to ensure that the Scientific Council has the resources and capacity available to complete the requests. The working group thanked the Scientific Council and Commission Chairs for the update, discussed possible ways forward, and noted that discussions on this issue will continue at the Annual Meeting.

14. Recommendations

The WG-EAFFM agreed to the following recommendations to the Commission.

- 1. In relation to VME areas 7a, 11a, 14a, and 14b (Agenda items 5.a and 5.b), maintain the VME closures until 31 December 2026 and adopt the proposed changes to the NAFO CEM outlined in COM-SC EAFFM-WP 23-15 (Annex 3).
- 2. In relation to the Ecosystem Roadmap (Agenda item 6):
 - a. requests the Scientific Council to annually provide information on ecosystem overfishing in relation to 2TCI, including recent cumulative catch levels and a scoping of expected cumulative catch levels.
 - b. requests the Scientific Council to develop stock summary sheets for all NAFO managed stocks, with a priority for those that are evaluated using HCR or MSE

processes, as practicable and taking into account any capacity constraints of the Scientific Council.

- 3. In relation to Other Effective Area-based Conservation Measures (agenda item 7):
 - a. requests the Secretariat, in consultation with the Scientific Council as required, to submit the seamount closure areas and the sponge VME fishery closures 1 to 6 to the CBD Secretariat and to the UN Environment Programme World Conservation Monitoring Centre (UNEP WCMC) for inclusion in the World Database on OECMs.
 - b. WG-EAFFM continues to review the other NAFO area-based management measures in relation to the CBD OECM criteria.
- 4. In relation to conducting scientific trawl surveys in areas closed to bottom fishing activities (agenda item 9), requests Contracting Parties to make every effort to minimize impacts of the sampling and maximize the collection of data in the hauls made in those areas.

15. Adoption of the Report

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

16. Adjournment

The meeting was adjourned at 12:33 hours (UTC/GMT +1 hours in Edinburgh, United Kingdom) on Saturday, 22 July 2023.

The co-Chairs thanked meeting participants for their cooperation and input. The participants likewise expressed their thanks and appreciation to the co-Chairs for their leadership. The working group also expressed their gratitude to the United Kingdom for hosting the meeting, and the NAFO Secretariat for their support.

CO-CHAIRS	In-person		
	Sacau Cuadrado, Mar (European Union)		
	Mencher, Elizabethann (United States of America)		
SC CHAIR	Virtual		
SC CHAIR	Dwyer, Karen		
CANADA	In-person		
	Chapman, Bruce		
	Johnson, Kate		
	Koen Alonso, Mariano		
	Simpson, Mark		
	Virtual		
	Dennis, Olivia		
	Diamond, Julie		
	Fagan, Robert		
	Fuller, Susanna		
	Her, Natalie		
	Kenchington, Ellen		
	Krohn, Martha		
	Lee, Robyn		
	Schleit, Katie		
EUROPEAN UNION	In-person		
	Alpoim, Ricardo		
	Belmonte Gonzalez, Luis		
	González-Troncoso, Diana		
	Teixeira, Isabel		
	Virtual		
	Blazkiewicz, Bernard		
	Caetano, Miguel		
	Durán Muñoz, Pablo		
	Garrido, Irene		
	Gonçalves, Patrícia		
	Granell, Ignacio		
	Jansone, Santa		
	Lopes, Luis		
	Mancebo, C. Margarita		
	Maricebo, C. Margarita Merino Buisac, Adolfo		
	Tuvi, Aare Ziaglan Irig		
	Ziegler, Iris		
ICELAND	In-person Bragason, Agnar Bragi		
LADAN			
JAPAN	In-person		
NODWAY	Taki, Kenji Virtual		
NORWAY			
	Bakke, Gunnstein		
	Hvingel, Carsten		
RUSSIAN FEDERATION	Virtual		
	Fomin, Konstantin		
	Tairov, Temur		
UKRAINE	Virtual		
	Honcharuk, Ihor		
	Paramonov, Valerii		

UNITED KINGDOM	In-person		
	Gibbins, Imogen		
	Hutchinson, Nikki		
	Kenny, Andrew		
UNITED STATES OF AMERICA	In-person		
	Kelly, Moira		
	Warner-Kramer, Deirdre		
	Yanoff, Callan		
	Virtual		
	Jaburek, Shannah		
	Sosebee, Kathy		
OBSERVERS	In-person		
	Diz, Daniela (Deep Sea Conservation Coalition)		
NAFO SECRETARIAT	In-person		
	Benediktsdóttir, Brynhildur		
	Aker, Jana		
	Blasdale, Tom		
	LeFort, Lisa		

Annex 2. Agenda

- 1. Opening by the co-Chairs, Mar Sacau Cuadrado (European Union) and Elizabethann Mencher (United States of America)
- 2. Appointment of Rapporteur
- 3. Adoption of Agenda
- 4. Presentation of Scientific Council responses to Commission requests for advice (COM Doc. 22-20) relevant to WG-EAFFM
- 5. VME Assessments
 - a. Review of VME areas 7a, 11a, 14a, and 14b (COM Request #6.a)
 - b. Review of Article 17.3bis of the NAFO CEM
 - c. Data for VME and SAI assessments (COM Request #6.b)
 - d. Work towards developing operational objectives for the protection of VMEs and biodiversity in the NRA (COM Request #6.c)
- 6. Ecosystem Roadmap
 - a. Management considerations for occasions in which the 2TCI ecosystem reference point were to be exceeded and effective methods to communicate TCI-related information (COM Request #5a and #5b)
 - b. Discussion of Ecosystem summary sheets for subareas 3M and 3LNO (COM Request #5.c)
- 7. Outcomes of the NAFO Informal group of WG-EAFFM on "Other Effective Area-based Conservation Measures (OECMs)"
- 8. SC advice on potential impact of activities other than fishing in the Convention Area (COM Request #12).
- 9. SC advice on scientific trawl surveys on VME in closed areas (COM Request #3)
- 10. Response from STACTIC on Recommendation 4 of COM-SC Doc. 20-03
- 11. Review of the Terms of Reference for WG-EAFFM
- 12. Implementation of the 2018 Performance Review Panel Recommendations
- 13. Other Business
 - a. Updates from the Executive Secretary
 - b. Scientific Council Workload
- 14. Recommendations
- 15. Adoption of the Report
- 16. Adjournment

Annex 3. Proposed changes to Article 17.3 of the NAFO CEM (COM-SC EAFFM-WP 23-15)

The objective of the following edits to the NAFO CEM is to maintain VME closures 7a, 11a, 14a, and 14b to 31 December 2026 and incorporate these closures with the other VME Area closures outlined in article 17.3. and Table 7 of the NAFO CEM.

Article 17 – Area Restrictions for Bottom Fishing Activities

Vulnerable Marine Ecosystem Area Closures

- Until 31 December 2026, no vessel shall engage in bottom fishing activities in areas 1-14b3 illustrated in Figure 5 and defined by connecting the coordinates specified in Table 7a in numerical order and back to coordinate 1.
 - Table 7a. Boundary Points Delineating the Vulnerable Marine Ecosystem Area Closures in the NAFO Regulatory Area Referenced in Article 17.3.

	Description	Coordinate No.	Latitude	Longitude
		1.1	44° 02' 53.88" N	48° 49' 09.48" W
		1.2	44° 21' 31.32" N	48° 46' 48.00" W
		1.3	44° 21' 34.56" N	48° 50' 32.64" W
1	Tail of the Bank	1.4	44° 11' 48.12" N	48° 50' 32.64" W
		1.5	44° 02' 54.60" N	48° 52' 52.32" W
		1.6	44° 00' 01.12'' N	48° 53' 28.75'' W
		1.7	43° 59' 57.52'' N	48° 49' 26.47'' W
		2.1	44° 50' 56.40" N	48° 43' 45.48" W
		2.2	46° 18' 54.72" N	46° 47' 51.72" W
		2.3	46° 25' 28.56" N	46° 47' 51.72" W
		2.4	46° 46' 32.16" N	46° 55' 14.52" W
		2.5	47° 03' 29.16" N	46° 40' 04.44" W
		2.6	47° 11' 47.04" N	46° 57' 38.16" W
2	Flemish Pass/	2.7	46° 40' 40.80" N	47° 03' 04.68" W
	Eastern Canyon	2.8	46° 30' 22.20" N	47° 11' 02.93" W
		2.9	46° 17' 13.30" N	47° 15' 46.64" W
		2.10	46° 07' 01.56" N	47° 30' 36.36" W
		2.11	45°49' 06.24" N	47° 41' 17.88" W
		2.12	45° 19' 43.32" N	48° 29' 14.28" W
		2.13	44° 53' 47.40" N	48° 49' 32.52" W
		3.1	45° 49' 10.20" N	46° 06' 02.52" W
3	Doothuls Vnoll	3.2	45° 59' 47.40" N	46° 06' 02.52" W
3	Beothuk Knoll	3.3	45° 59' 47.40" N	46° 18' 08.28" W
		3.4	45° 49' 10.20" N	46° 18' 08.28" W
		4.1	46° 44' 34.80" N	44° 03' 14.40" W
		4.2	46° 58' 19.20" N	43° 34' 16.32" W
4	Eastern Flemish	4.3	47° 10' 30.00" N	43° 34' 16.32" W
4	Сар	4.4	47° 10' 30.00" N	43° 20' 51.72" W
		4.5	46° 48' 35.28" N	43° 20' 51.72" W
		4.6	46° 39' 36.00" N	43° 58' 08.40" W
	Northeort	5.1	47° 47' 46.00" N	43° 29' 07.00" W
5	Northeast Flemish Cap	5.2	47° 40' 54.47" N	43° 27' 06.71" W
-		5.3	47° 35' 57.48" N	43° 43' 09.12" W

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	Description	Coordinate	Latitude	Longitude
	Description	No.		_
		5.4	47° 51' 14.40" N	43° 48' 35.64" W
		5.5	48° 27' 19.44" N	44° 21' 07.92" W
		5.6	48° 41' 37.32" N	43° 45' 08.08" W
		5.7	48° 37' 13.00" N	43° 41' 24.00" W
		5.8	48° 30' 15.00" N	43° 41' 32.00" W
		5.9	48° 25' 08.00" N	43° 45' 20.00" W
		5.10	48° 24' 29.00" N	43° 50' 50.00" W
		5.11	48° 14' 20.00" N	43° 48' 19.00" W
		5.12	48° 09' 53.00" N	43° 49' 24.00" W
		6.1	48° 18' 51.12" N	46° 37' 13.44" W
		6.2	48° 28' 51.24" N	46° 08' 33.72" W
6	Sackville Spur	6.3	48° 49' 37.20" N	45° 27' 20.52" W
0	Sackville Spul	6.4	48° 56' 30.12" N	45° 08' 59.99" W
		6.5	49° 00' 09.72" N	45° 12' 44.64" W
		6.6	48° 21' 12.24" N	46° 39' 11.16" W
		7.1	48° 25' 02.28" N	45° 17' 16.44" W
		7.2	48° 25' 02.28" N	44° 54' 38.16" W
7	Northern	7.3	48° 19' 08.76" N	44° 54' 38.16" W
/	Flemish Cap	7.4	48° 19' 08.76" N	45° 01' 58.56" W
		7.5	48° 20' 29.76" N	45° 01' 58.56" W
		7.6	48° 20' 29.76"N	45° 17' 16.44" W
		<u>7a.1</u>	<u>48° 25' 02.28" N</u>	<u>45° 17' 16.44" W</u>
		<u>7a.2</u>	<u>48° 25' 02.28" N</u>	<u>44° 54' 38.16" W</u>
		<u>7a.3</u>	<u>48° 19' 08.76" N</u>	<u>44° 54' 38.16" W</u>
		<u>7a.4</u>	48° 18' 06.84'' N	44° 44' 22.81" W
-	<u>Northern</u>	<u>7a.5</u>	48° 08' 18.42'' N	44° 23' 10.57" W
<u>7a</u>	Flemish Cap	<u>7a.6</u>	48° 10' 08.98'' N	44° 15' 54.97" W
	•	<u>7a.7</u>	48° 19' 30.47" N	44° 26' 38.40" W
		7a.8	48° 24' 57.13" N	44° 37' 58.40" W
		7a.9	48° 26' 21.37" N	44° 54' 34.60" W
		7a.10	48° 27' 52.20" N	45° 17' 19.25" W
		8.1	48° 38' 07.95" N	45° 19' 31.92" W
		8.2	48° 38' 07.95" N	45° 11' 44.36" W
		8.3	48° 40' 09.84" N	45° 11' 44.88" W
0	Northern	8.4	48° 40' 09.84" N	45° 05' 35.52" W
8	Flemish Cap	8.5	48° 35' 56.40" N	45° 05' 35.52" W
	-	8.6	48° 35' 56.40" N	45° 19' 31.92" W
		8.7	48° 34' 23.52" N	45° 26' 18.96" W
		8.8	48° 36' 55.08" N	45° 31' 15.96" W
		9.1	48° 34' 23.52" N	45° 26' 18.96" W
		9.2	48° 36' 55.08" N	45° 31' 15.96" W
	NT	9.3	48° 30' 18.36" N	45° 39' 42.48" W
9	Northern Flemish Cap	9.4	48° 12' 06.60" N	45° 54' 12.94" W
		9.5	48° 17' 11.82" N	45° 47' 25.36" W
		9.6	48° 16' 07.06" N	45° 45' 48.19" W
		9.7	48° 27' 30.60" N	45° 34' 40.44" W
		10.1	47° 49' 41.51" N	46° 22' 48.18" W
	Northwest	10.2	47° 47' 17.14" N	46° 17' 27.91" W
10	Flemish Cap	10.2	47° 58' 42.28" N	46° 06' 43.74" W
			47° 59' 15.77" N	46° 07' 57.76" W

	D	Coordinate		
	Description	No.	Latitude	Longitude
		10.5	48° 07' 48.97" N	45° 59' 58.46" W
		10.6	48° 09' 34.66" N	46° 04' 08.54" W
		10.7	48° 07' 59.70'' N	46° 05' 38.22'' W
		10.8	48° 09' 13.46'' N	46° 09' 31.03'' W
		10.9	47° 51' 30.13'' N	46° 26' 15.61'' W
		11.1	47° 25' 48.00" N	46° 21' 23.76" W
11	Northwest	11.2	47° 30' 01.44" N	46° 21' 23.76" W
11	Flemish Cap	11.3	47° 30' 01.44" N	46° 27' 33.12" W
		11.4	47° 25' 48.00" N	46° 27' 33.12" W
		<u>11a.1</u>	<u>47° 27' 36.29" N</u>	<u>46° 21' 23.69" W</u>
		<u>11a.2</u>	<u>47° 30' 01.44" N</u>	<u>46° 21' 23.76" W</u>
		<u>11a.3</u>	<u>47° 30' 01.44" N</u>	<u>46° 27' 33.12" W</u>
11a	<u>Northwest</u>	<u>11a.4</u>	<u>47° 37' 38.86" N</u>	<u>46° 16' 31.12" W</u>
<u>11a</u>	<u>Flemish Cap</u>	<u>11a.5</u>	<u>47° 34' 39.61" N</u>	<u>46° 12' 03.92" W</u>
		<u>11a.6</u>	<u>47° 32' 28.90" N</u>	<u>46° 16' 26.58" W</u>
		<u>11a.7</u>	<u>47° 32' 10.00" N</u>	<u>46° 14' 29.87" W</u>
		<u>11a.8</u>	<u>47° 28' 27.80" N</u>	<u>46° 16' 05.74" W</u>
		12.1	48° 12' 06.60" N	45° 54' 12.94" W
12	Northwest	12.2	48° 17' 11.82" N	45° 47' 25.36" W
12	Flemish Cap	12.3	48° 16' 07.06" N	45° 45' 48.19" W
		12.4	48° 11' 03.32" N	45° 52' 40.63" W
		13.1	46° 13' 58.80" N	45° 41' 13.20" W
		13.2	46° 13' 58.80" N	46° 02' 24.00" W
13	Beothuk Knoll	13.3	46° 21' 50.40" N	46° 02' 24.00" W
15		13.4	46° 21' 50.40" N	45° 56' 48.12" W
		13.5	46° 20' 14.32" N	45° 55' 43.93" W
		13.6	46° 20' 14.32" N	45° 41' 13.20" W
		<u>14a.1</u>	<u>47° 45' 24.44'' N</u>	<u>44° 03' 06.44'' W</u>
		<u>14a.2</u>	<u>47° 47' 54.35'' N</u>	<u>44° 03' 06.44'' W</u>
	<u>Eastern</u>	<u>14a.3</u>	<u>47° 50' 11.33'' N</u>	<u>44° 03' 34.49'' W</u>
<u>14a</u>	a <u>Flemish Cap</u>	<u>14a.4</u>	<u>47° 50' 10.86'' N</u>	<u>43° 58' 28.99'' W</u>
		<u>14a.5</u>	<u>47° 47' 54.35'' N</u>	<u>43° 59' 23.39'' W</u>
		<u>14a.6</u>	<u>47° 45' 55.19'' N</u>	<u>43° 58' 08.94'' W</u>
		<u>14a.7</u>	<u>47° 44' 44.59'' N</u>	<u>44° 02' 41.50'' W</u>
		<u>14b.1</u>	<u>47° 35' 21.77'' N</u>	<u>43° 56' 50.10'' W</u>
	Eastern	<u>14b.2</u>	<u>47° 37' 33.53'' N</u>	<u>43° 52' 56.50'' W</u>
<u>14b</u>	<u>Flemish Cap</u>	<u>14b.3</u>	<u>47° 30' 04.79'' N</u>	<u>43° 48' 18.54'' W</u>
	<u>riemisn cap</u>	<u>14b.4</u>	<u>47° 27' 34.88'' N</u>	<u>43° 48' 18.54'' W</u>
		<u>14b.5</u>	<u>47° 27' 34.88'' N</u>	<u>43° 52' 00.34'' W</u>

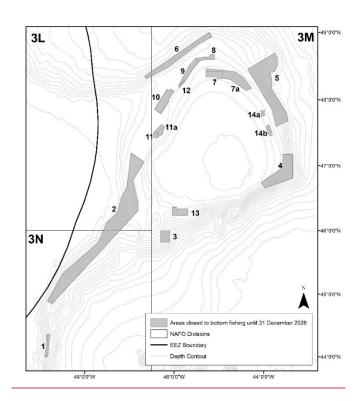
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3 bis. Until 31 December 2023, no vessel shall engage in bottom fishing activities in the areas illustrated in Figure 5 and defined by connecting the coordinates specified in Table 7b in numerical order and back to coordinate 1.

Table 7b. Boundary Points Delineating the Vulnerable Marine Ecosystem Area Closures in the NAFORegulatory Area Referenced in Article in Article 17.3 bis.

	Description	Coordinate No.	Latitude	Longitude
		7a.1	48° 25' 02.28" N	45° 17' 16.44" W
		7a.2	48° 25' 02.28" N	44° 54' 38.16" W
		7a.3	48° 19' 08.76" N	44° 54' 38.16" ₩
		7a.4	4 <u>8° 18' 06.84'' N</u>	<u>44° 44' 22.81" ₩</u>
7	Northern	7a.5	4 <u>8° 08' 18.42'' N</u>	44° 23' 10.57" ₩
7a	Flemish Cap	7a.6	4 <u>8° 10' 08.98'' N</u>	44° 15' 54.97" W
	·	7a.7	4 <u>8° 19' 30.47" N</u>	44° 26' 38.40" W
		7a.8	4 <u>8° 24' 57.13" N</u>	44° 37' 58.40" W
		7a.9	4 8° 26' 21.37" N	44° 54' 34.60" W
		7a.10	4 8° 27' 52.20" N	4 <u>5° 17' 19.25" W</u>
		11a.1	47° 27' 36.29" N	46° 21' 23.69" ₩
		11a.2	4 7° 30' 01.44" N	4 <u>6° 21' 23.76" ₩</u>
	Northwest Flemish Cap	11a.3	47° 30' 01.44" N	4 <u>6° 27' 33.12" ₩</u>
11a		11a.4	47° 37' 38.86" N	4 <u>6° 16' 31.12" ₩</u>
110		11a.5	4 7° 34' 39.61" N	46° 12' 03.92" W
		11a.6	47° 32' 28.90" N	4 6° 16' 26.58" ₩
		11a.7	4 7° 32' 10.00" N	46° 14' 29.87" ₩
		11a.8	47° 28' 27.80" N	46° 16' 05.74" ₩
		14a.1	47° 45' 24.44'' N	44° 03' 06.44" ₩
		14a.2	47° 47' 54.35'' N	44° 03' 06.44'' ₩
	Eastern	14a.3	4 7° 50' 11.33'' N	44° 03' 34.49'' W
14a	Flemish Cap	14a.4	4 <u>7° 50' 10.86'' N</u>	4 <u>3° 58' 28.99'' W</u>
		14a.5	47° 47' 54.35'' N	43° 59' 23.39'' W
		14a.6	4 <u>7° 45' 55.19'' N</u>	4 <u>3° 58' 08.94'' W</u>
		14a.7	4 <u>7° 44' 44.59'' N</u>	44° 02' 41.50'' W
		14b.1	4 <u>7° 35' 21.77'' N</u>	4 <u>3° 56' 50.10'' W</u>
	Eastern Flemish Cap	<u>14b.2</u>	4 7° 37' 33.53'' N	4 <u>3° 52' 56.50'' W</u>
14b		14b.3	4 <u>7° 30' 04.79'' N</u>	4 <u>3° 48' 18.54'' W</u>
		14b.4	4 <u>7° 27' 34.88'' N</u>	4 <u>3° 48' 18.54'' W</u>
		14b.5	4 <u>7° 27' 34.88'' N</u>	4 <u>3° 52' 00.34'' W</u>

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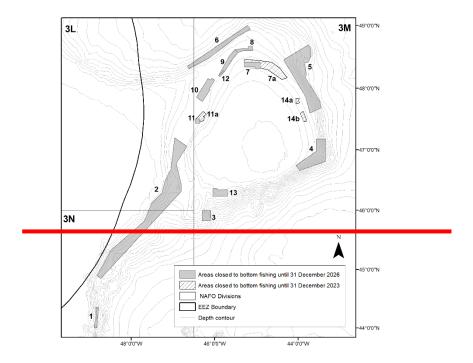


Figure 5. Polygons Delineating Vulnerable Marine Ecosystem Area Closures Referenced in Article 17.3-and Article 17.3 bis.

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Annex 4. REVISED Terms of Reference – Joint Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (COM-SC EAFFM-WP 23-14 (Rev. 3)

Structure:

The Working Group on Ecosystem Approach Framework to Fisheries Management reports to both the Commission (COM) and Scientific Council (SC); considers the advice of Scientific Council; and provides recommendations to the Commission.

The Working Group shall be comprised of fishery managers, scientists, and advisors from Contracting Parties, supported by observers and invited experts. The Co-chairs will consist of a fishery manager and a scientist.

Plenary discussions will be conducted in an informal, open manner, unless the Contracting Parties, decide to conduct sessions in a delegation format. Recommendations to the Commission will be developed and agreed upon through formal sessions of official delegations. When the Working Group breaks from plenary session and reverts to participation by delegation, individual scientists remain as part of their delegations and Scientific Council as a whole would be represented by the Scientific Council Chair or a designated alternate.

Accredited observers may attend meetings of the Working Group. Participation will be subject to the *NAFO Rules of Procedure*.

If a Contracting Party so requests, particular agenda items of the meeting, or parts thereof, shall be restricted to delegates representing Contracting Parties and Scientific Council.

Objective:

The main objective of the Working Group is to make recommendations to the Commission and provide feedback to Scientific Council on the development and effective implementation of ecosystems approaches to fisheries management.

Specific Duties:

In responding to requests for advice and recommendations from the Commission, considering the associated advice of Scientific Council, the Working Group shall:

- Further develop and provide recommendations on the application of the Ecosystem Approach to Fisheries (EAF) Roadmap.
- Consider ecosystem status, functioning and dynamics of NAFO marine ecosystems, including species interactions, and their productivity,
- Consider impacts of non-fisheries activities.
- Consider the impacts of climate change as an element of work on the EAF roadmap.
- Make recommendations on mitigation strategies and measures to avoid significant adverse impacts of fishing activities on vulnerable marine ecosystems, including the evaluation of associated risks.
- Review area closures periodically and other measures as outlined in the NAFO Conservation and Enforcement Measures (CEMs).
- Provide recommendations in relation to requests to conduct exploratory bottom fishing and evaluate authorized exploratory fishing activities.
- Provide recommendations for updating the CEMs in relation to EAF including the text in Chapter II (Bottom Fisheries in the NAFO Regulatory Area) and any associated Annexes (e.g., the Exploratory Protocol for New Fishing Areas Annex I.E), as necessary.

• Provide recommendations and information, and support the Secretariat, on coordination with other regional or global organizations on activities related to the implementation of the ecosystem approach to fisheries management.

Meetings:

Meetings will be held annually, and additional meetings may be held as agreed by the Commission and the Scientific Council.

Whenever possible, the regular meeting of the Working Group should occur after the June Scientific Council meeting and prior to the NAFO annual meeting.

Reporting out

The Working Group will issue a written report to the Commission and the Scientific Council, prior to the NAFO annual meeting.