



NAFO Northwest
Atlantic
Fisheries
Organization

Committed to
**Conservation and Management of
Fisheries and Ecosystems** in the Northwest Atlantic

Sustainable Fisheries Management and Protection of VMEs in the Northwest Atlantic Fisheries Organization (NAFO)

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Outline

- About NAFO
- NAFO's Ecosystem Approach to Fisheries Management
- NAFO's Precautionary Approach Framework
- Protection of Vulnerable Marine Ecosystems (VME)
- Concluding Remarks

NAFO Convention and Regulatory Area



NAFO is the RFMO responsible for managing the fish stocks (except salmon, tuna and sedentary species) in the NW Atlantic outside the EEZs of Coastal States (FAO Statistical Area 21).

Biological Resources under NAFO Regulation

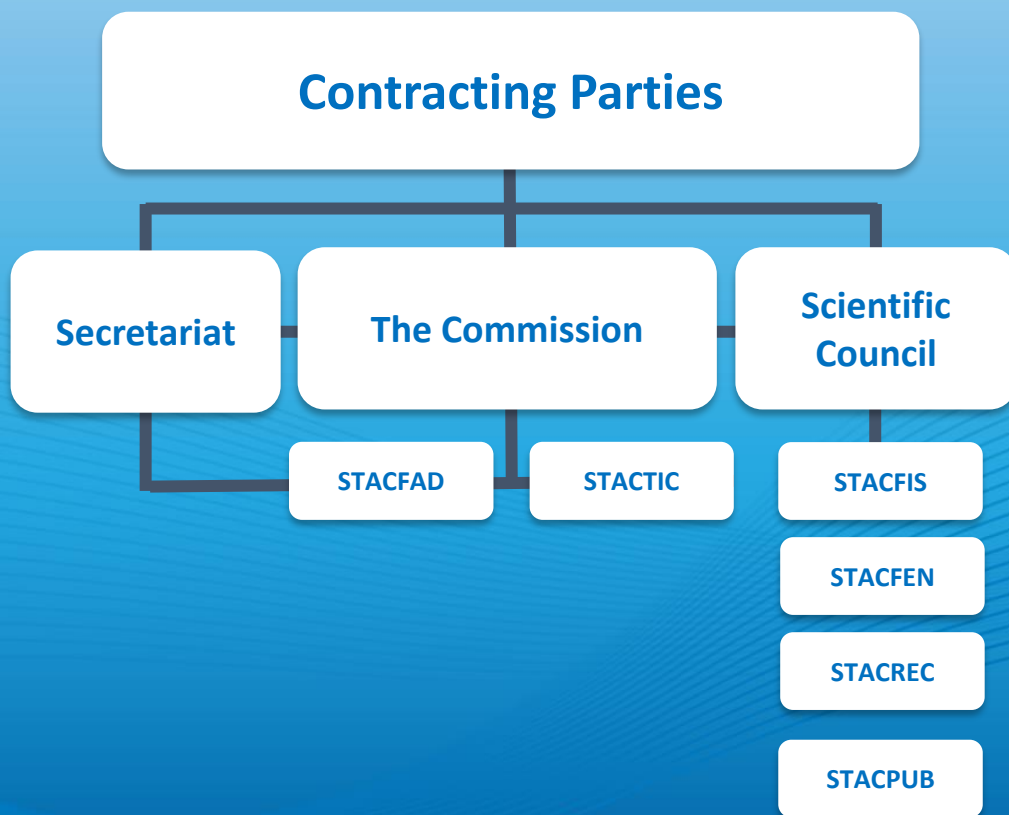


NAFO manages most fishery resources of the Northwest Atlantic except sedentary species (e.g. shellfish) and species managed by other fishery bodies, i.e. salmon, tunas, marlins and marine mammals.

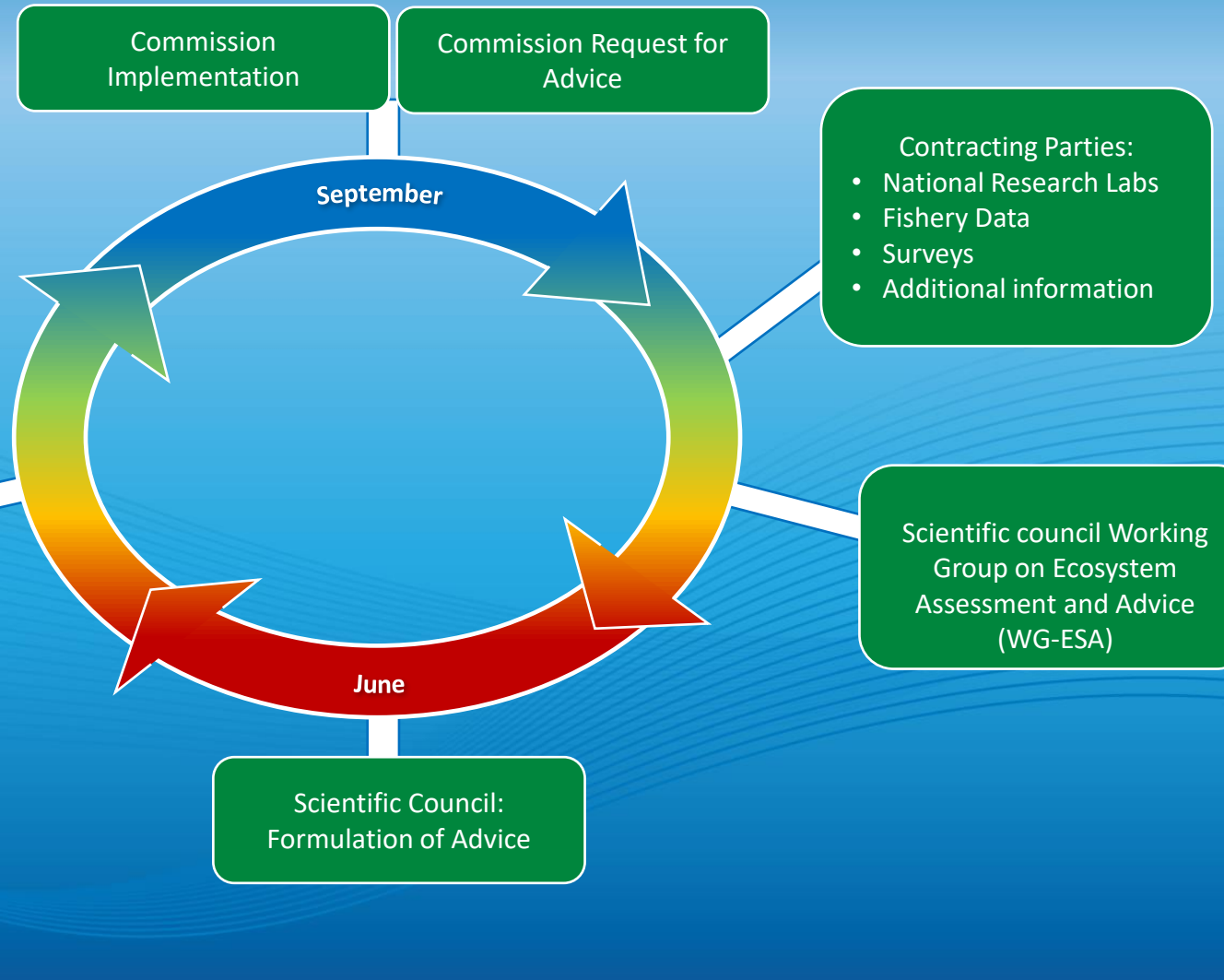


NAFO Structure

NAFO Convention Article V



Cycle of Ecosystem Management Advice

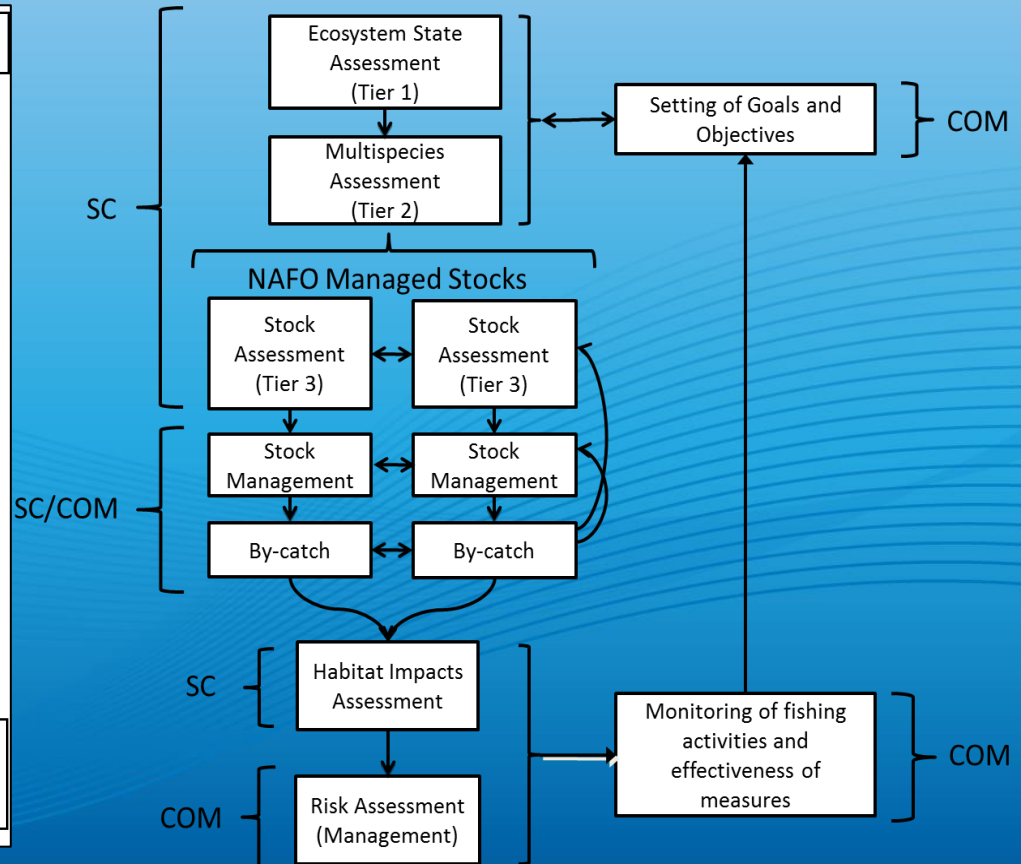
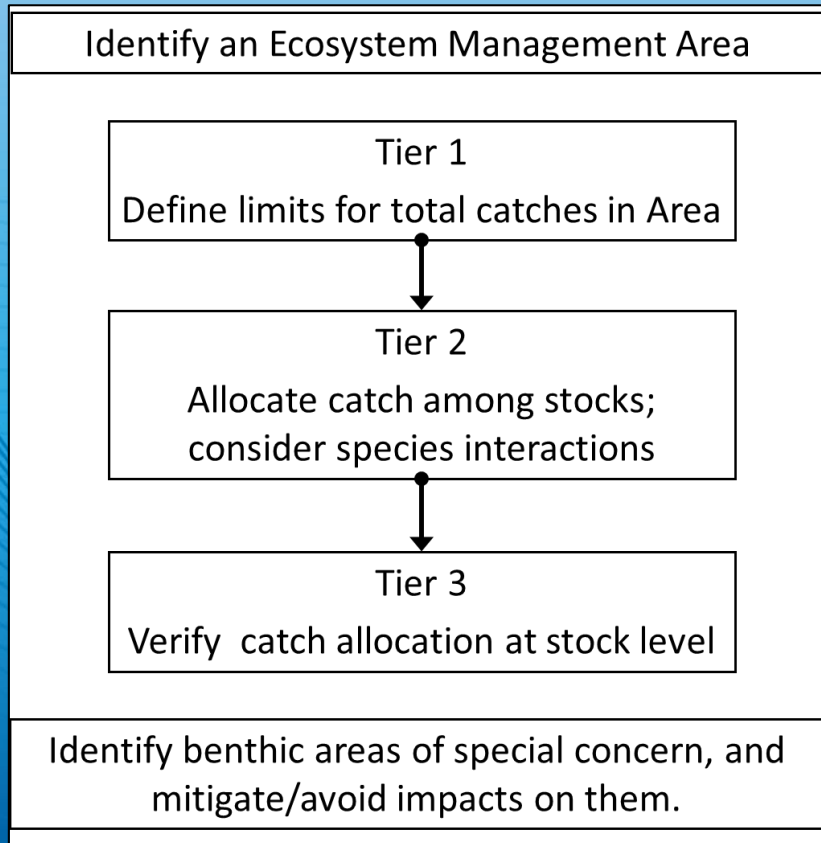


NAFO's Ecosystem Approach Framework to Fisheries Management

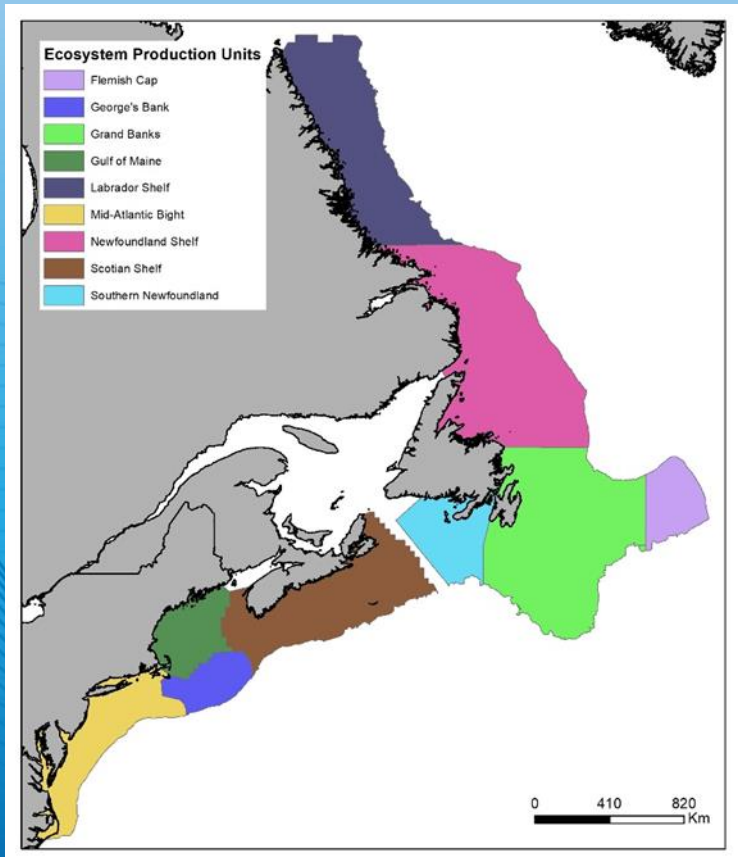
Background

- 2005 – NAFO began the process to formulate and adopt measures to implement an ecosystem approach to fisheries in the NAFO Regulatory Area (NRA)
- 2006 – UNGA Resolution 61/105 called on RFMOs to adopt conservation and management measures to prevent significant adverse impacts on vulnerable marine ecosystems (VMEs);
- 2007 – NAFO amended its Convention, *inter alia*, to incorporate an ecosystem approach to fisheries management;
- 2008 – FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas; and
- 2008 – NAFO Resolution to give effect to the amended NAFO Convention's objective of incorporating an ecosystem approach to fisheries management pending its coming-into-force.

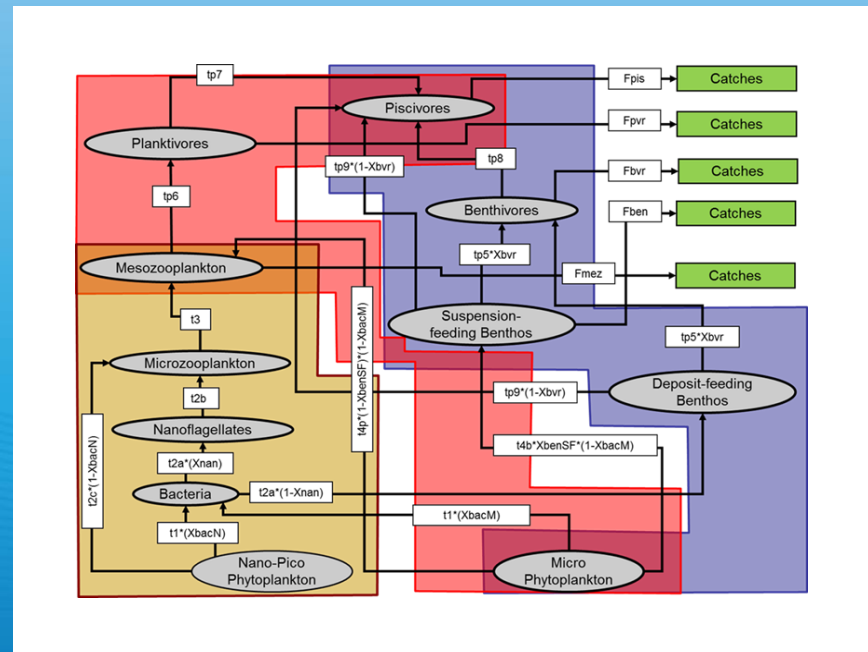
The NAFO Ecosystem Approach 'Roadmap'



Tier 1: Ecosystem production model



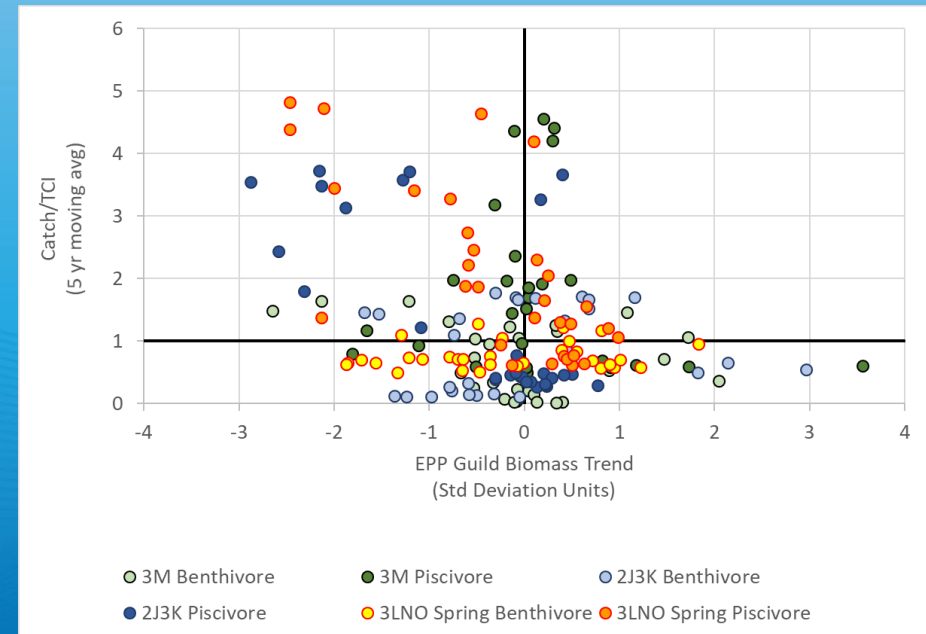
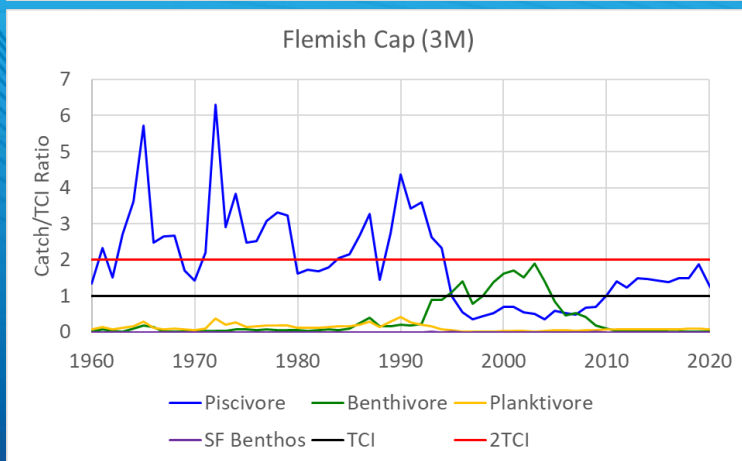
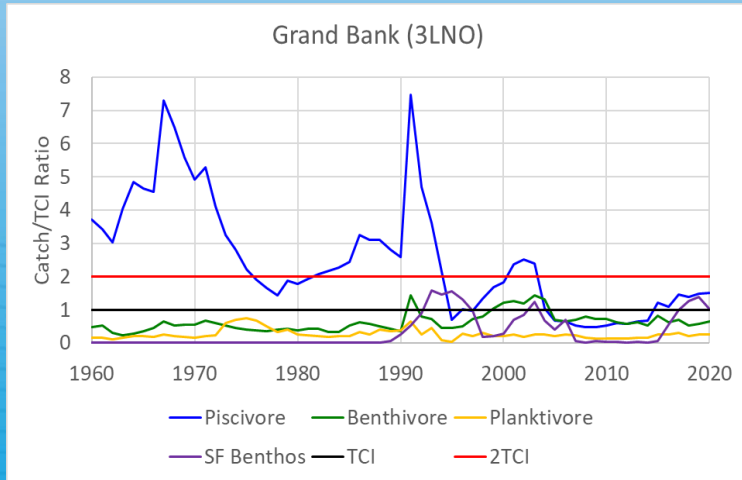
Ecosystem production model



Identification of Ecosystem Production Units

Tier 1: Ecosystem production model

Catches relative to Total Catch Index (TCI)



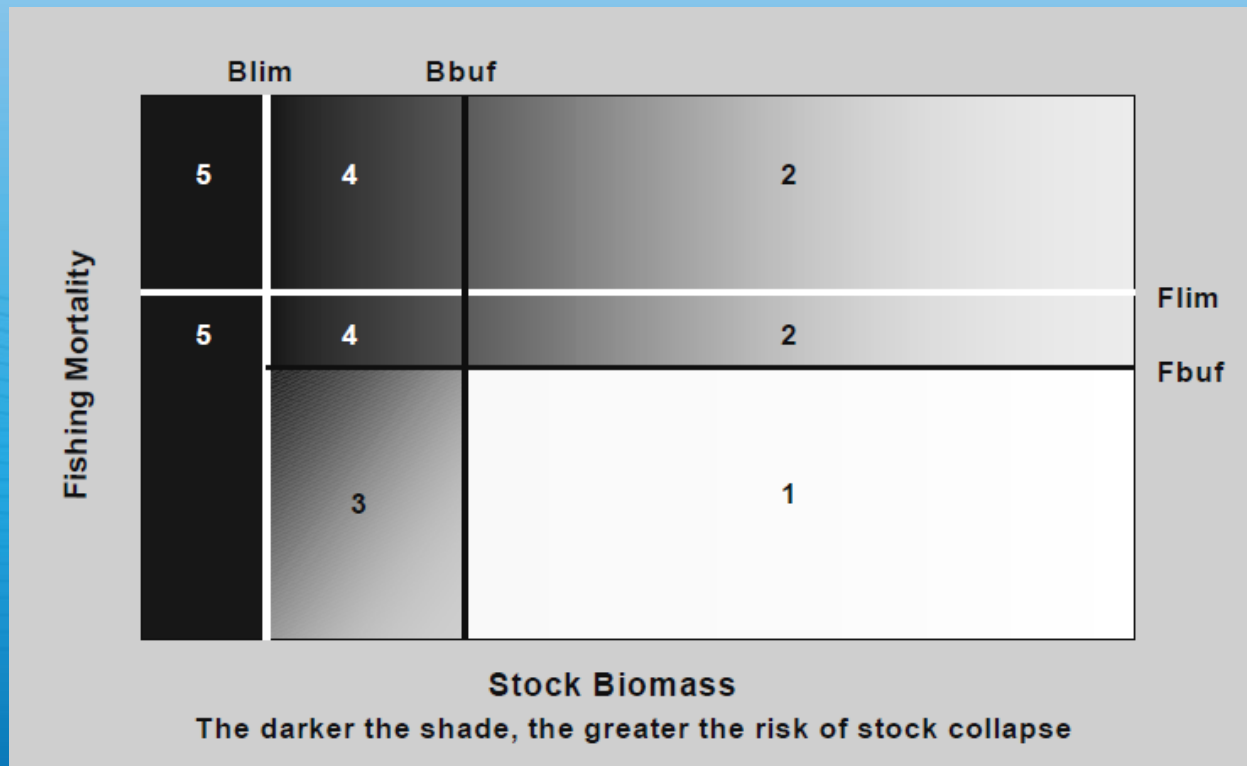
Biomass trends and catch relative to 2 X Total Catch Index.

The NAFO Ecosystem Approach 'Roadmap' next steps towards implementation

- Development of “ecosystem summary sheets” as a means of communicating ecosystem level advice to managers
- Ecosystem Approach Workshop 8-12 August 2022 with a goal to develop specific ecosystem level objectives for NAFO for Tiers 1 and 2 of the Roadmap
- Workshop outcomes to be considered by WG-EAFFM 13-16 August
- WG-EAFFM Recommendations to Commission September 2022

NAFO's Precautionary Approach Framework to Fisheries Management

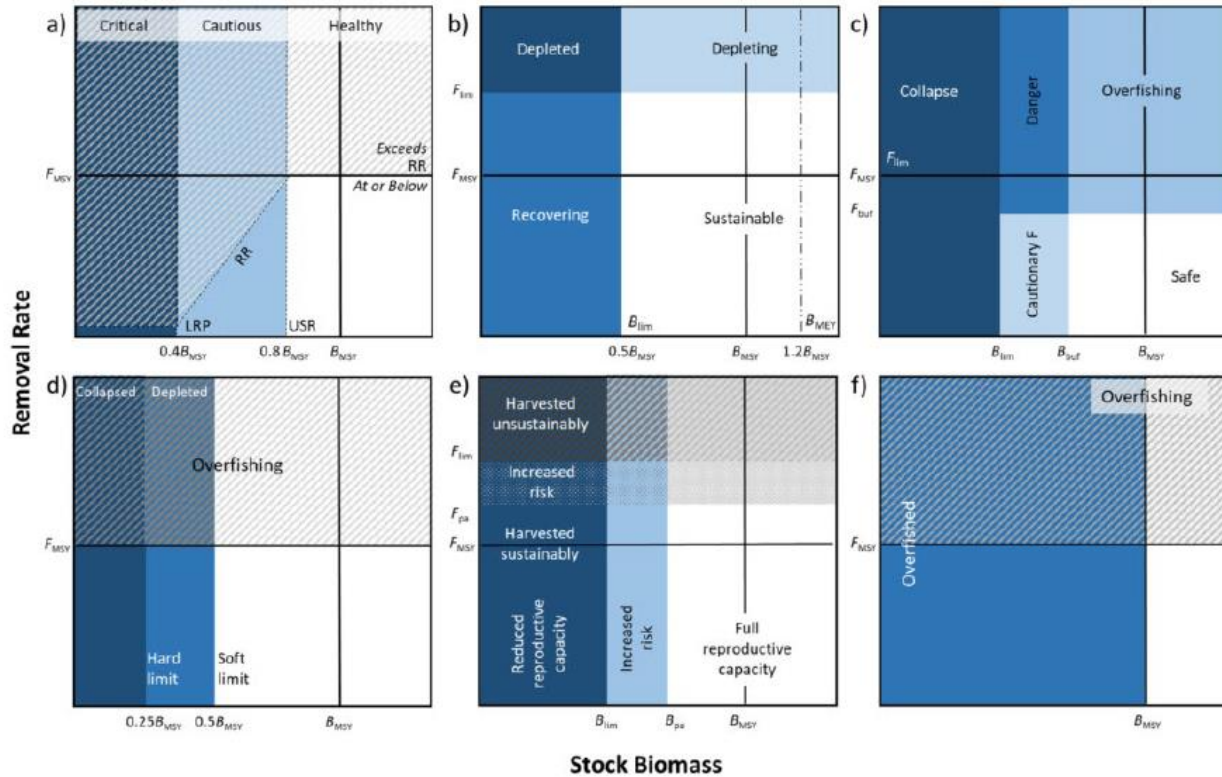
PA framework adopted by NAFO for advising on stocks in the NAFO Regulatory Area.



- 2018 Performance Review noted that implementation of the PA was incomplete with many stocks lacking reference points, and recommended working towards full implementation.
- In 2019, the Commission requested Scientific Council (in conjunction with WG-RBMS) to Review the NAFO PA framework.
- Scientific Council re-established its Precautionary Approach Working Group (PA-WG)
- Initiated a two year project (with EU funding) to review the NAFO PA. Three external experts contracted to provide independent review.

Workplan for the revision of the NAFO PA

WG and External Experts PAF Tasks	2021												2022											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Mapping objectives ToR 1 A, c, g																								
SC and RBMS review																								
Structural Aspects/Uncertainty & Risk																								
Workshop (PAF proposal)																								
SC and RBMS review																								
Commission discussion																								
Implementation guidelines																								
Workshop (Implementation and RP)																								



Comparison of the NAFO PA framework with other jurisdictions. a) Canada, b) Australia, c) NAFO, d) New Zealand, e) ICES, f) a generalize Kobe plot used in many international organizations.

Precautionary Approach next steps

- Workshop 15- 16 August 2022
- Presentation to WG-RBMS meeting 17-19 August 2022
- Discussion by the Commission September 2022
- Second workshop in early 2023
- Final recommendations for consideration by the Commission in 2023

Protection of Vulnerable Marine Ecosystems (VMEs)

Identifying VME Species and Elements

Species

- Large-sized sponges
- Stony Corals
- Gorgonian corals
- Sea pens
- Tube-dwelling anemones
- Erect bryozoans
- Sea lilies
- Sea squirts

Elements

- Seamounts
- Canyons
- Knolls
- Shoal
- Steep flanks

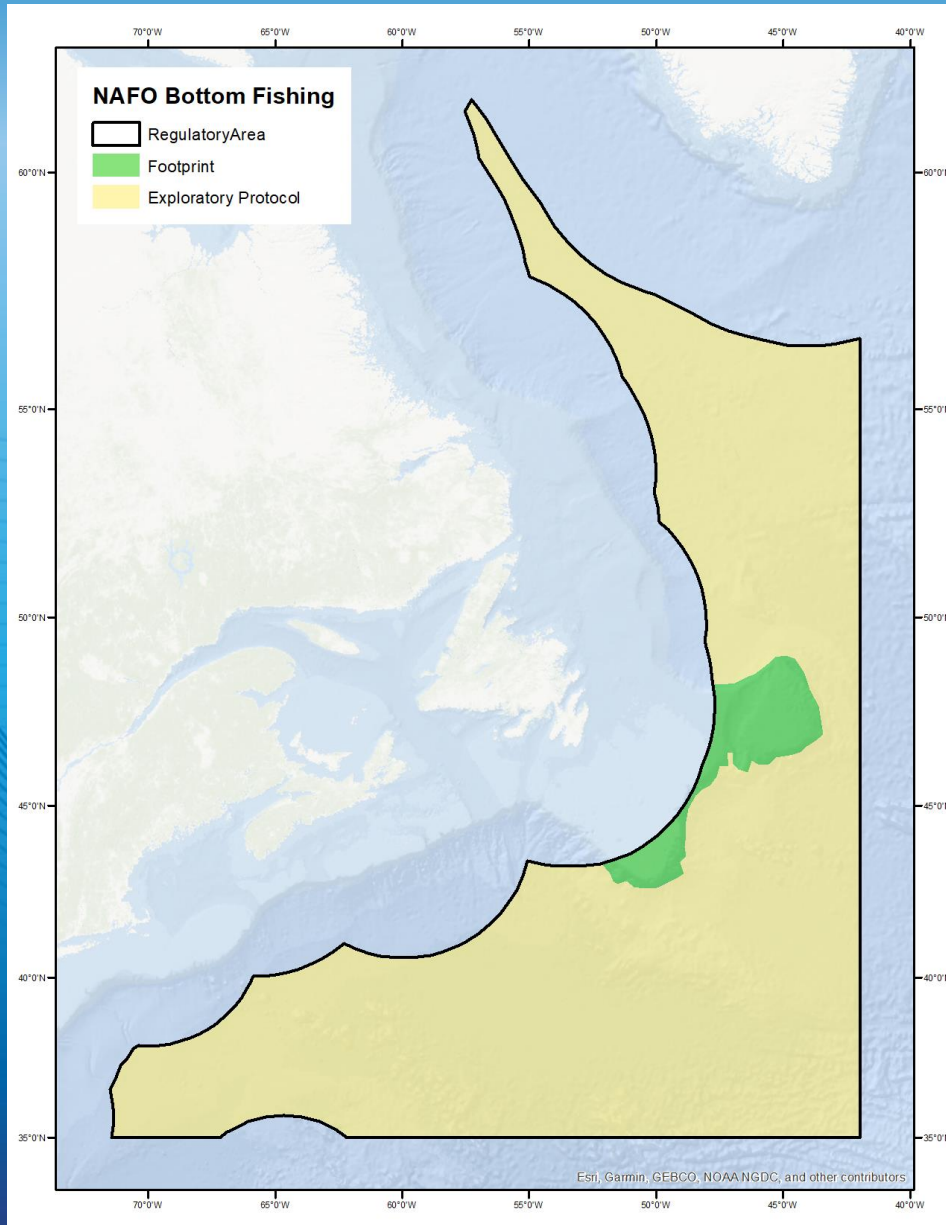


NAFO Measures to Protect VMEs

- Existing bottom fishing areas – “Footprint”
- VME Closures
- Seamount closures
- Thresholds for encounters with VMEs within Footprint (“move on” rule)

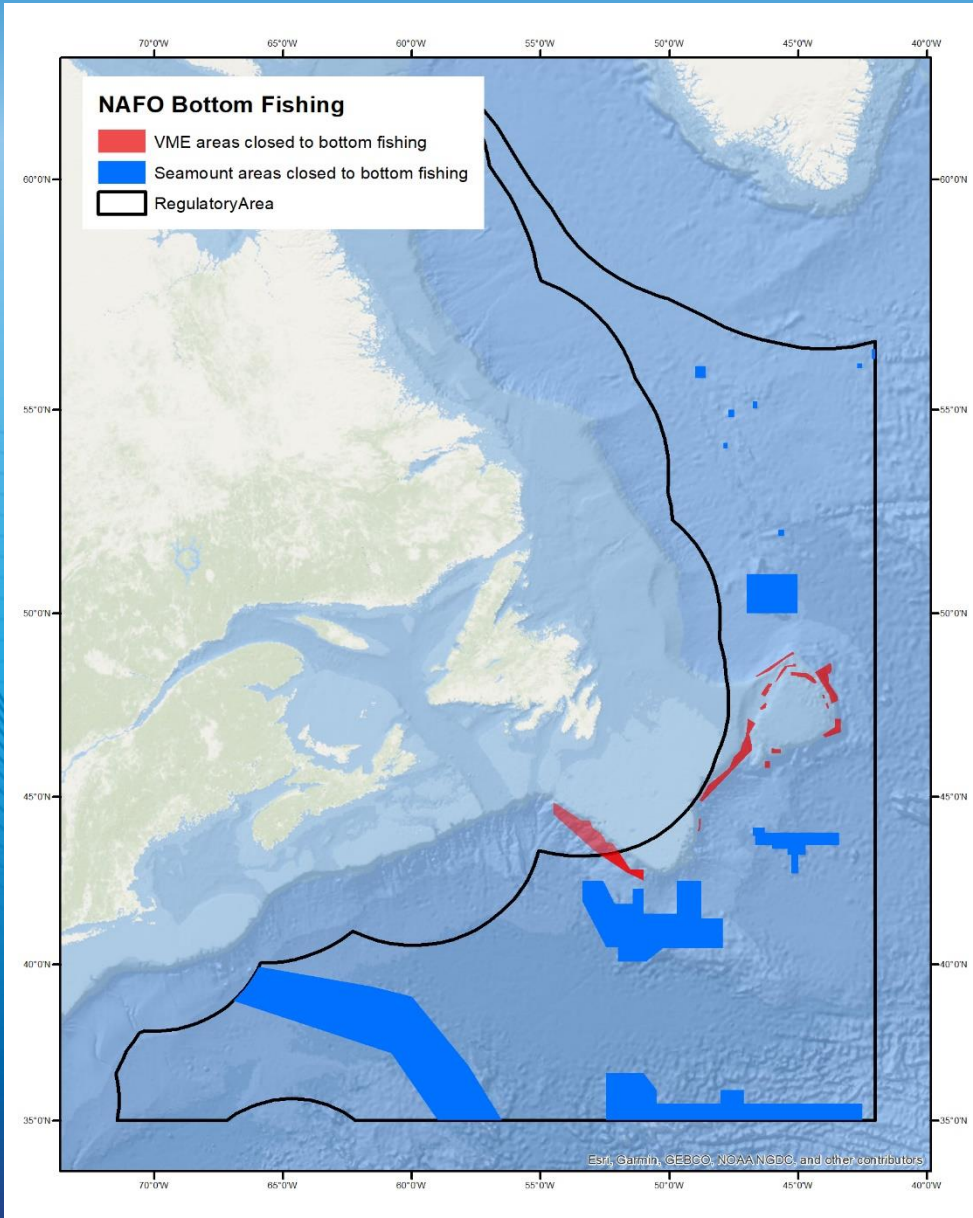


NAFO Fishing Footprint



- Adopted in 2011
- The “footprint” was determined based on the historical fishing tracks 1987-2008.
- Plans to fish outside the footprint are subject to prior Scientific Council evaluation and Fisheries Commission approval.
- Fishing outside footprint subjected to strict Exploratory Fisheries Protocol.

VMEs - Current NAFO closures

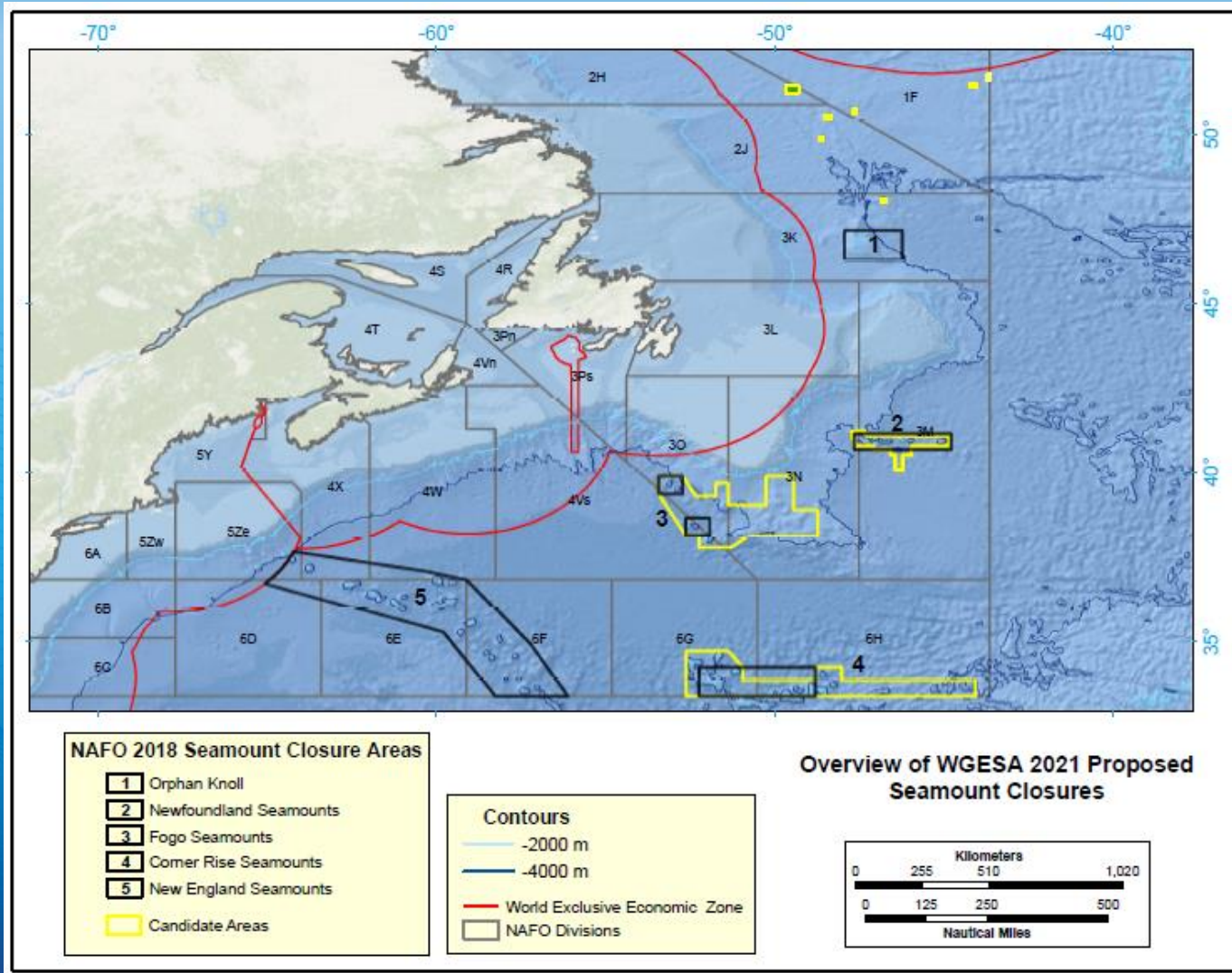


14 closed areas (VME protection areas)

12 seamount areas where bottom fishing is prohibited – all seamounts at fishable depth (i.e. shallower than 4000 metres) are now closed.

Currently **372,201 km²** of the NAFO RA is closed to bottom fishing.*

Revision of NAFO Seamount closures in 2021

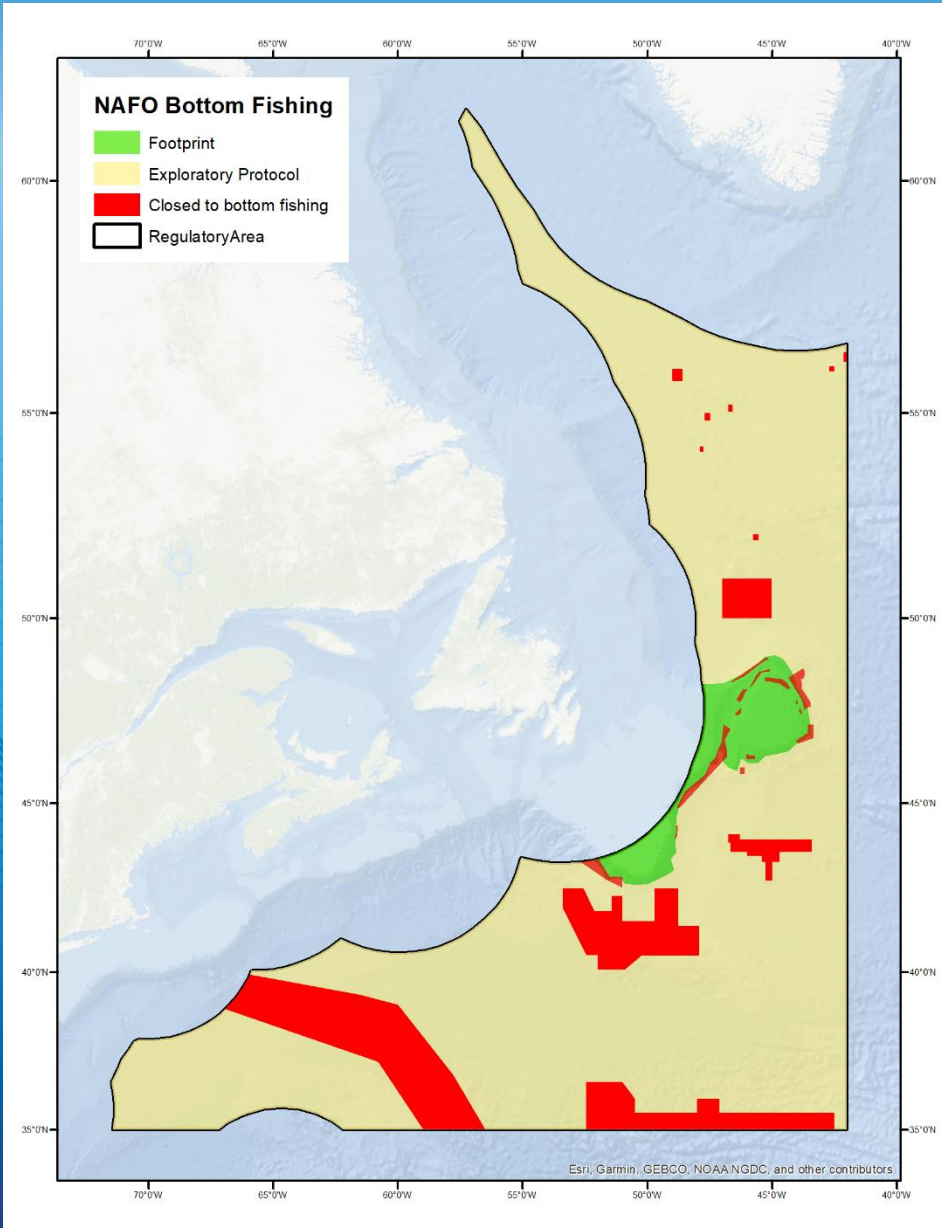


Area Restrictions on Bottom Fishing

Bottom fishing is prohibited within the boundaries of the VME and seamount closures.

Approximate % of NRA:

- VME/Seamount closures – 14.0%
- Exploratory area – 81.6%
- Fishable area – 4.4%



Closing Remarks

- Over the past 15 years, NAFO also has worked to develop its measures to protect VMEs and seamounts from bottom fishing based on the 2008 FAO Deep-Sea Fisheries Guidelines and the work of its Scientific Council
- Measures can only be imposed on NAFO-managed fisheries – NAFO has no legal competency to impose measures on other ocean activities (e.g. deep sea mining, oil and gas activities)
- Nevertheless these closures should be taken into account by other ocean actors.

THANK YOU

For more information on NAFO, please consult:

www.nafo.int