



Agenda item 4: Some thoughts on Protected Area Protocols (FAO)

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SIOFA-PAEWG1, Yokohama, Japan, 18-19 March 2019

Growing and Protecting New Zealand



Protected Area Protocols: acknowledging assistance from Masashi Kiyota



North Pacific Fisheries Commission

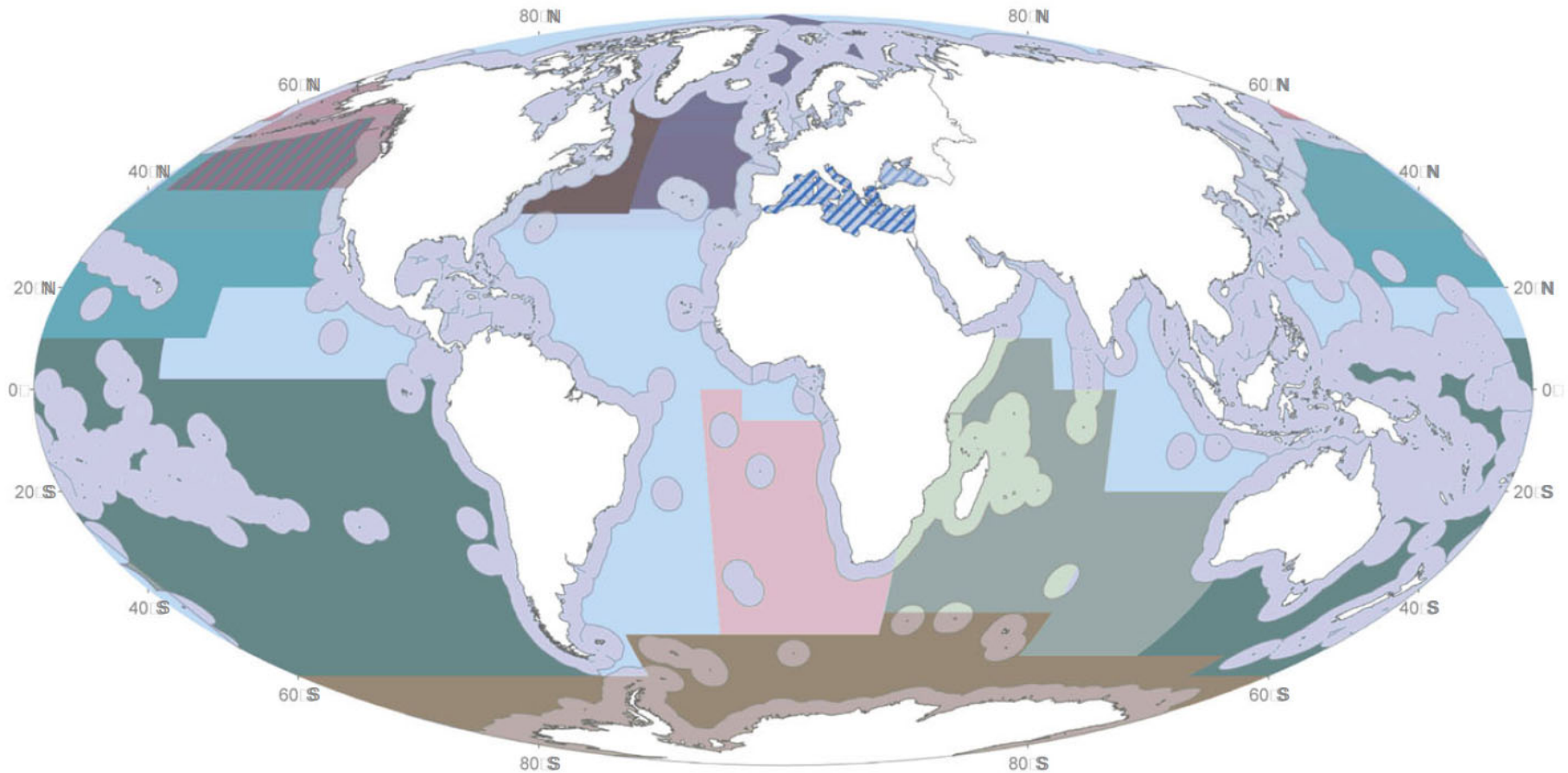
NPFC-2018-WS VME01-WP02

Updated summary comparison of VME encounter protocols
in bottom fish RFMO/As

Masashi Kiyota

Oceanic Ecosystems Group, National Research Institute of Far Seas Fisheries
Fisheries Research and Education Agency, Japan

RFMO/As managing high seas bottom fisheries



200nm limit

Non-Tuna Regional Fisheries Management Organizations

Conv. on Cons. of Antarctic Marine Living Resources

Conv. on Cons. & Mgmt of Pollock Resources in the Central Bering Sea

General Fisheries Council for the Mediterranean

International Pacific Halibut Commission

Northwest Atlantic Fisheries Organization (NAFO)

North East Atlantic Fisheries Commission (NEAFC)

North Pacific Anadromous Fish Commission

South East Atlantic Fisheries Organization (SEAFO)

South Indian Ocean Fisheries Agreement (SIOFA)

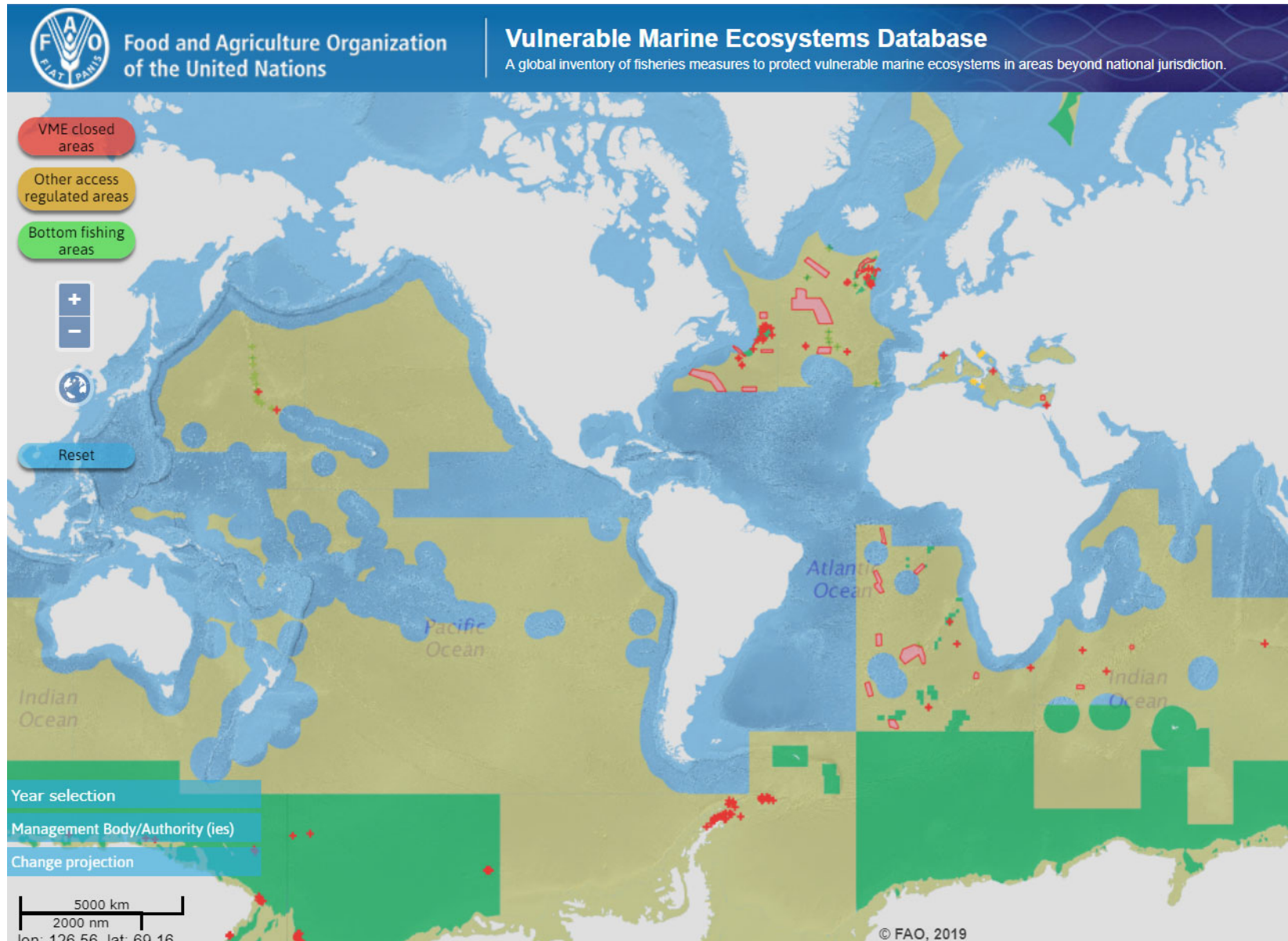
South Pacific Regional Fisheries Mgmt Org

Southwest Indian Ocean Fisheries Commission

Ban et al 2014: Conservation Letters 7: 41–54

FAO VME database

<http://www.fao.org/in-action/vulnerable-marine-ecosystems/vme-database/en/vme.html>



What I have here...

- CCAMLR (Antarctic)
- NAFO (NW Atlantic Ocean)
- NEAFC (NW Atlantic Ocean)
- SEAFO (SE Atlantic Ocean)
- GFCM (Mediterranean Sea)
- SPRFMO (S Pacific Ocean)
- NPFC (NW and NE Pacific Ocean)

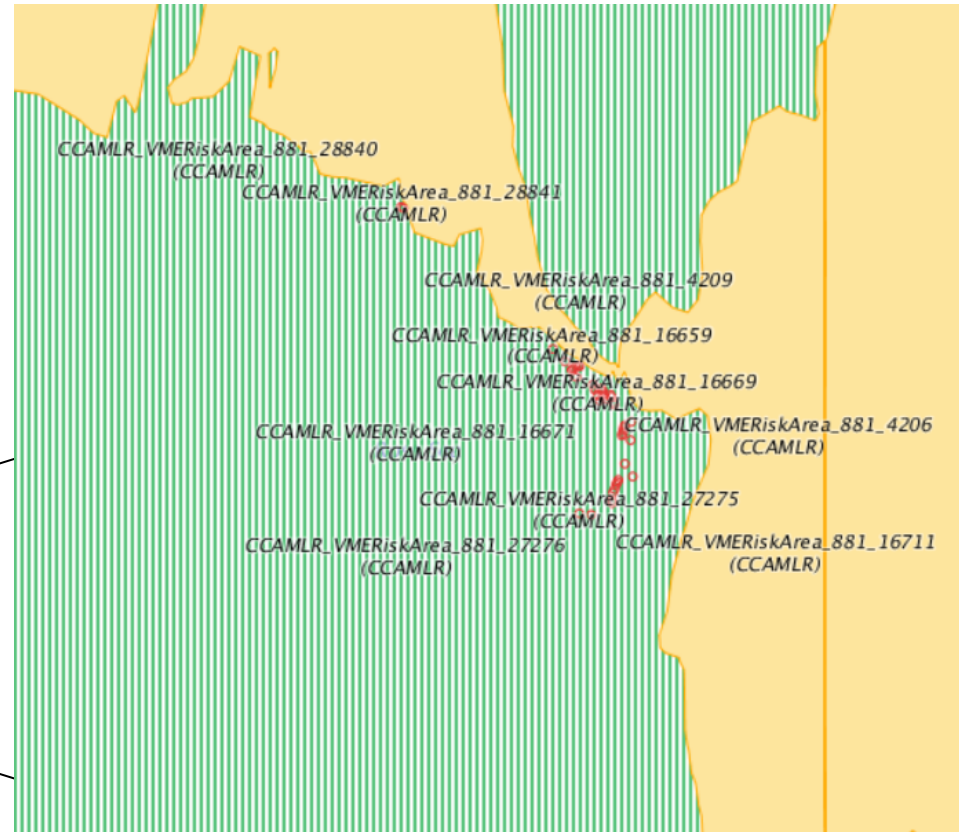
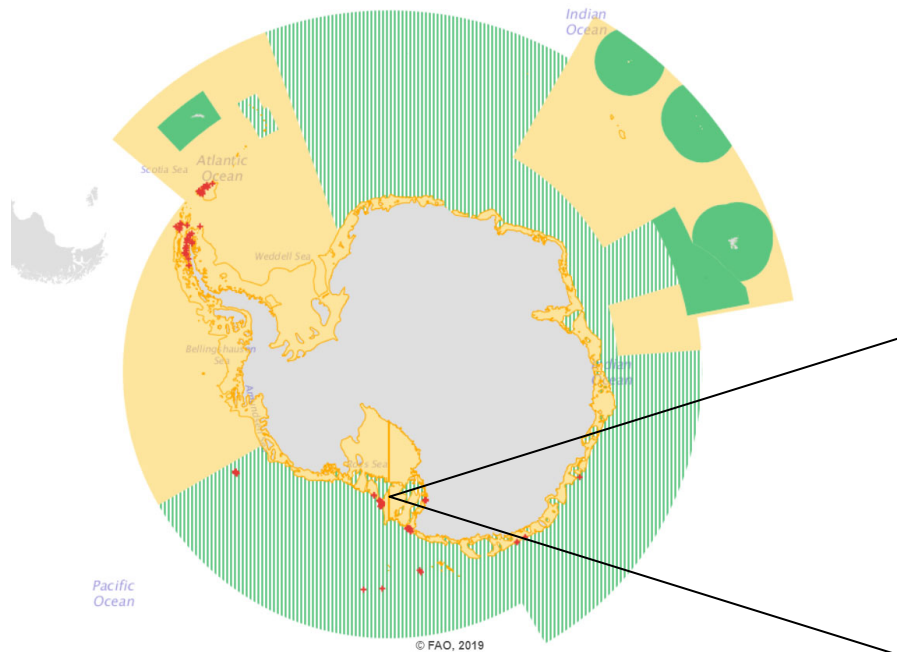
- Key aspects for each **highlighted**

CCAMLR Protocols



CCAMLR

Commission for the Conservation of Antarctic Marine Living Resources



- Closed areas and protocols specified in Conservation Measure 22/07 (2013): *encountering potential vulnerable marine ecosystems*

- Very many small Risk Areas already closed (plus MPA);

<http://www.fao.org/in-action/vulnerable-marine-ecosystems/vme-database/en/vme.html>

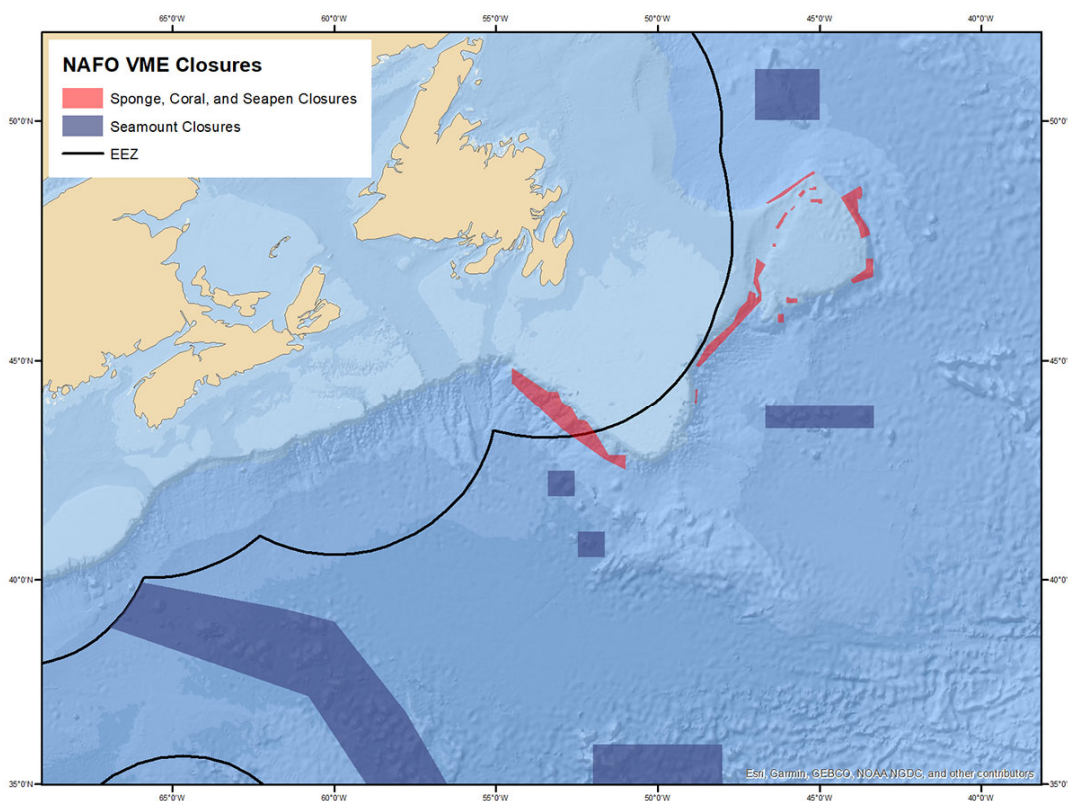
CCAMLR Protocols

CM22-07 (2013)

Following a VME encounter:

- Master hauls lines, sets no further lines, immediately reports to the Secretariat and Flag State (Article 4);
- Secretariat notifies Risk Area (radius 1 nm from mid-point of line segment) as closed. All vessels cease setting lines that intersect with the Risk Area (Article 6-ii);
- Risk Area remains closed until reviewed by Scientific Committee and management actions are determined by Commission (Article 9);
- After 5 notifications in a VME fine-scale rectangle, Secretariat notifies the coordinates of that rectangle;
 - Fishing may continue the rectangle (Article 7);
- Registered VMEs can be permanently closed by Commission (CM22-09 (2012))

NAFO Protocols



- Many large areas already closed
- Closed areas specified in Article 17 of NAFO's Conservation & Enforcement Measures
- NAFO COM Doc. 19-01 Serial No. N6901

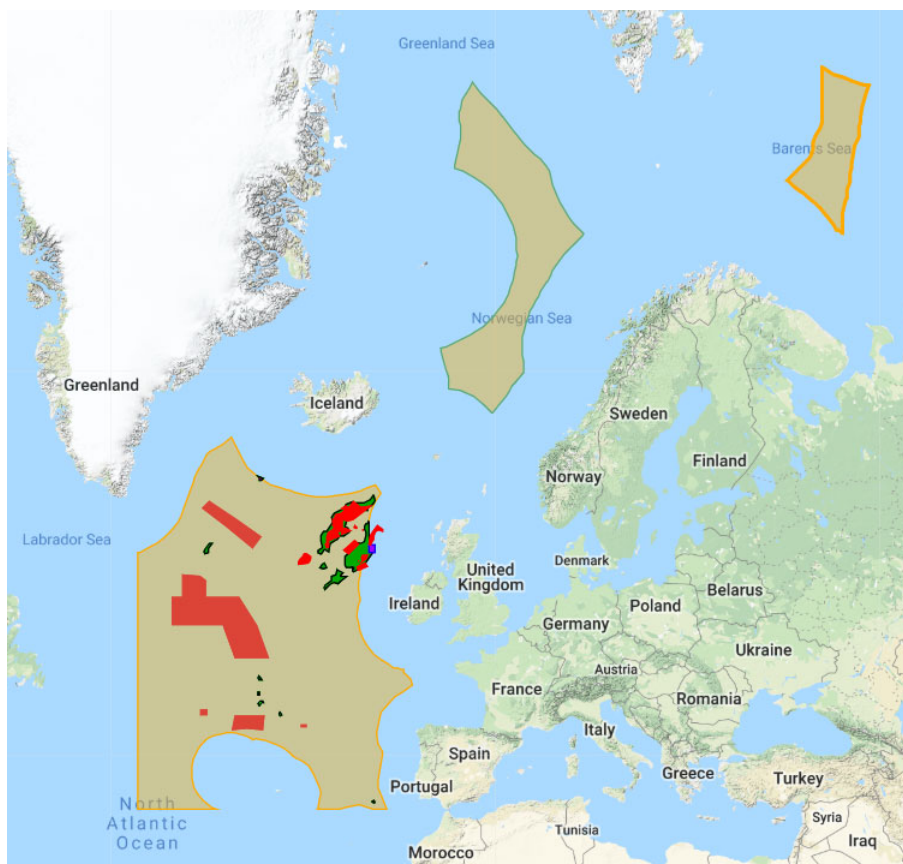
<https://www.nafo.int/Fisheries/VME>

NAFO Protocols

Following a VME encounter:

- Fishing master reports the encounter, ceases fishing, moves at least **2nm from the endpoint** of the tow/set;
- Executive Secretary requests all Contracting Parties to implement and maintain a **temporary closure of 2 nm radius** around the encounter location outside of footprint (Article 22.3, c, d);
- Executive Secretary reports annually to Scientific Council on details of all single & multiple encounters and exploratory fishing (Article 22.3, b);
- SC analyses all information and **advises Commission on the need for action**, using FAO guidelines as a basis (Article 22.4, a-c)

NEAFC Protocols



- Many large areas already closed;
- Closed areas and protocols specified in Recommendation 19 2014: *Protection of VMEs in NEAFC Regulatory Areas as Amended by Rec 09:2015*

https://www.neafc.org/managing_fisheries/vmec

NEAFC Protocols:

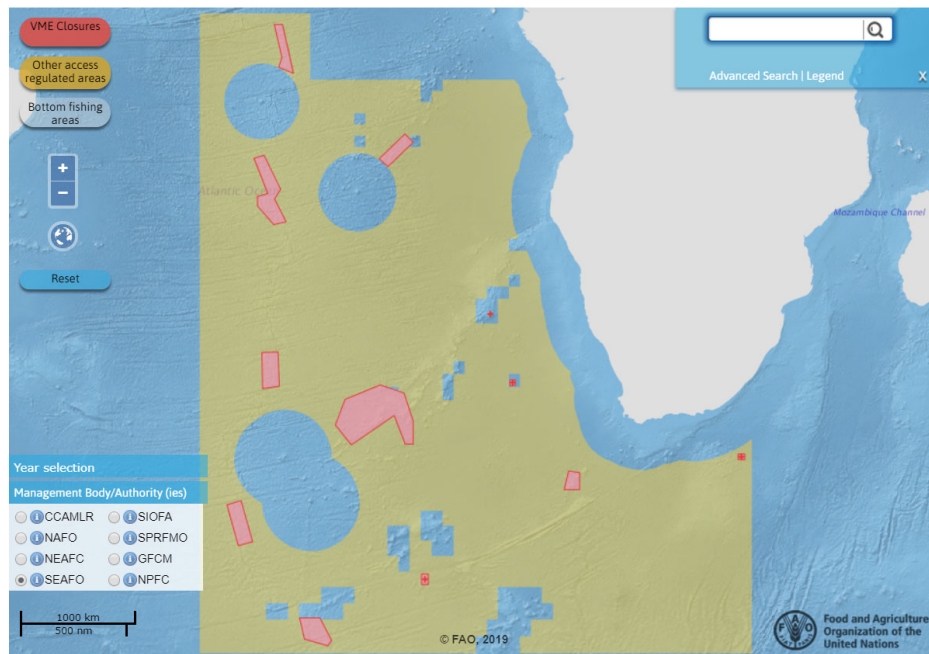
Rec 19-2014 (amended by Rec 9-2015)

Following a VME encounter:

- Master ceases fishing, moves **at least 2nm**, reports the encounter to the Executive Secretary (Article 8.1, b-iii);
- Executive Secretary informs CPs & ICES, implements **temporary closure** in those areas (Article 8.2);
- **Sea bed mapping using echo-sounders or multi-beam conducted and submitted to ICES** (Article 8.3);
- Permanent Committee on Management and Science considers closure and any ICES advice (Article 8.4);
- If PECMAC advises likely VME, CPs requested to maintain temporary closure until Commission has acted;
- **If the PECCMAS concludes no VME, CPs may re-open** the area to their vessels (Article 8.4)

<http://extwprlegs1.fao.org/docs/pdf/mul165665.pdf>

SEAFO Protocols



- Many large areas already closed;
- Closed areas and protocols specified in Conservation Measure 30/15: *Bottom Fishing Activities and Vulnerable Marine Ecosystems*

<http://www.seafo.org/Management/VME-Protection>

SEAFO Protocols

CM30-15

Following a VME encounter:

- Master ceases fishing, moves at least 2nm from end of trawl tow, defining a **buffer area 2 nm radius**, 1 nm for other gears (Articles 8.1 b-i and b-ii);
- Master reports to CP, Executive Secretary (Article 8.1, b-iii);
- Executive Secretary implements **temporary closure** if outside existing fishing areas (Article 8.2);
- **Sea bed mapping using echo-sounders or multi-beam conducted, submitted to Scientific Committee** (Article 8.3);
- SC evaluates mapping and advises Commission (Article 8.4);
- SC examines temporary closure: if sufficient **evidence of VME, CPs maintain closure until Commission has acted**;
- **If insufficient evidence of VME, CPs may re-open the area to their vessels.**

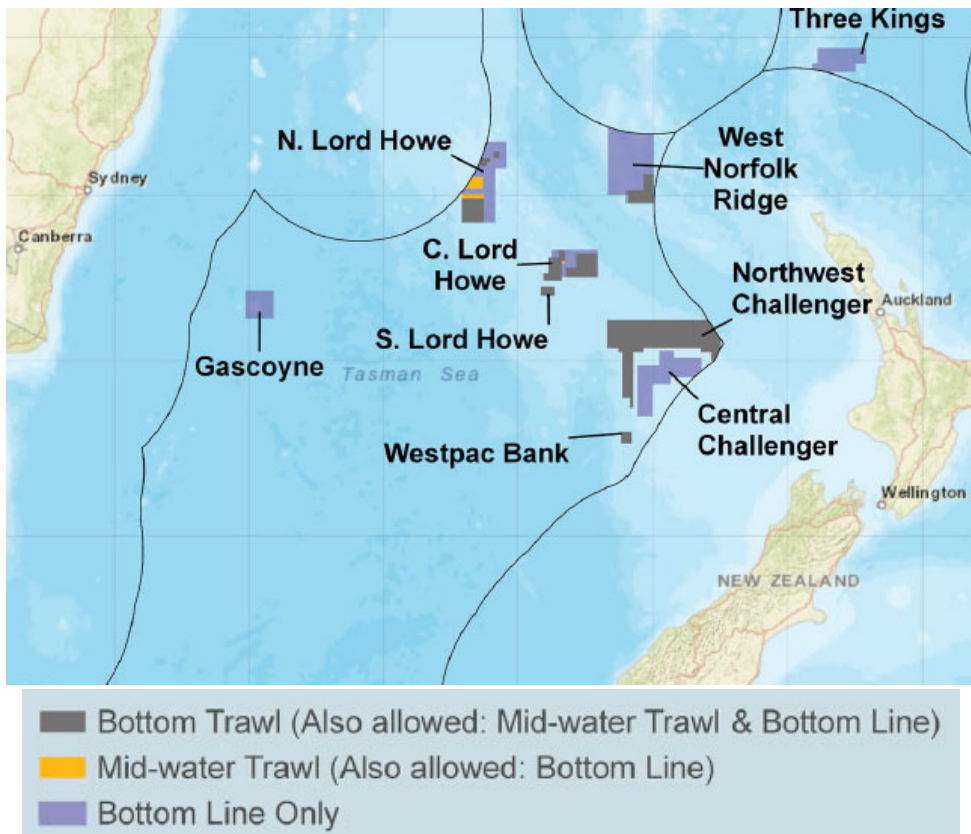
GFCM Protocols



- Some areas already closed;
- **Fishing deeper than 1000 m prohibited** by GFCM/2005/1;
- Area closures specified in GFCM/30/2006/3;
- No specified protocols?

[https://gfcmlib.sharepoint.com/CoC/Decisions%20Texts/REC.CM GFCM 30 2006 3-e.pdf](https://gfcmlib.sharepoint.com/CoC/Decisions%20Texts/REC.CM%20GFCM%2030%202006%203-e.pdf)

SPRFMO Protocols



- Bottom fishing restricted to method-specific bottom fishing management areas;
- All other areas closed to bottom fishing;
- Management areas carefully designed to provide very high protection for VMEs **at a regional scale**
- Closed areas and protocols specified in CMM-03-2019: *Bottom Fishing*

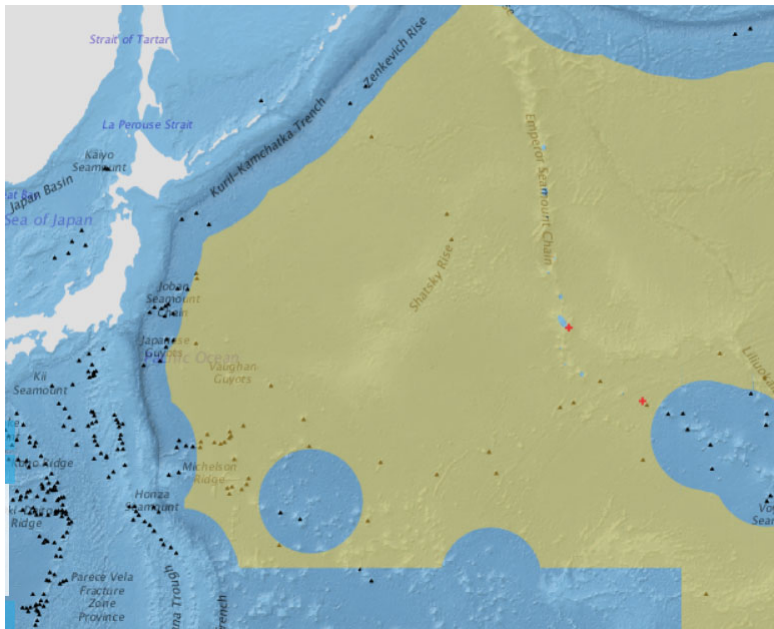
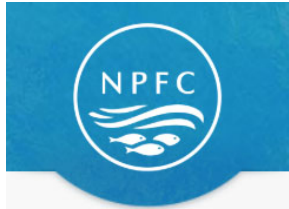
<http://www.sprfmo.int/assets/Fisheries/Conservation-and-Management-Measures/2019-CMMs/CMM-03-2019-5Mar2019.pdf>

SPRFMO Protocols

Following a VME encounter:

- Master ceases fishing within **1 nm of trawl track** (Article 28a);
- Reports to Member and Secretariat in accordance with specified guidelines (Article 28b, Annex 7);
- Secretariat **suspends fishing in encounter area**, notifies Members (Article 30);
- **Member submits to Scientific Committee a detailed comparison** of the encounter with model predictions, and **suggested actions to prevent SAIs on VMEs** (Article 32);
- SC reviews all encounters and **determines whether any were unexpected** based on VME habitat suitability models, and advises Commission (Article 33);
- **Commission determines management actions** for each encounter area (Article 34).

NPFC Protocols



- Some areas already closed;
- Closed areas and protocols specified in Conservation & Management Measures for bottom fisheries:
CMM2018-05 (NW Pacific),
CMM2017-06 (NE Pacific),
(including Annex 2 of both)

<https://www.npfc.int/active-conservation-and-management-measures>

NPFC Protocols:

CMM2018-05 (NW Pacific), CMM2017-06 (NE Pacific), Annex 2

Following a VME encounter:

- Master ceases bottom fishing and moves **no less than 2 nm, so that additional encounters with VMEs unlikely**;
- All encounters reported to the Secretariat, who **notifies other Members so that appropriate measures can be adopted** (Article 4G of CMM2018-05 and 3j of CMM2017-06);
- Subsequent protocols via assessment of SAIs on VMEs...

NPFC Protocols:

CMM2018-05 (NW Pacific), CMM2017-06 (NE Pacific), Annex 2

5. Assessment of SAIs on VMEs or marine species

5. Each member ... is to conduct assessments to establish if bottom fishing activities are likely to produce SAIs in ... VMEs. Such an impact assessment is to address ...
6. Impact assessments are to consider ... the information in these **Standards & Criteria**, relevant information from similar ... fisheries, ecosystems;
7. Where an assessment concludes that the area does not contain VMEs or SAIs are not likely, **assessments are to be repeated when there have been significant changes to fishery, other activities or natural processes**

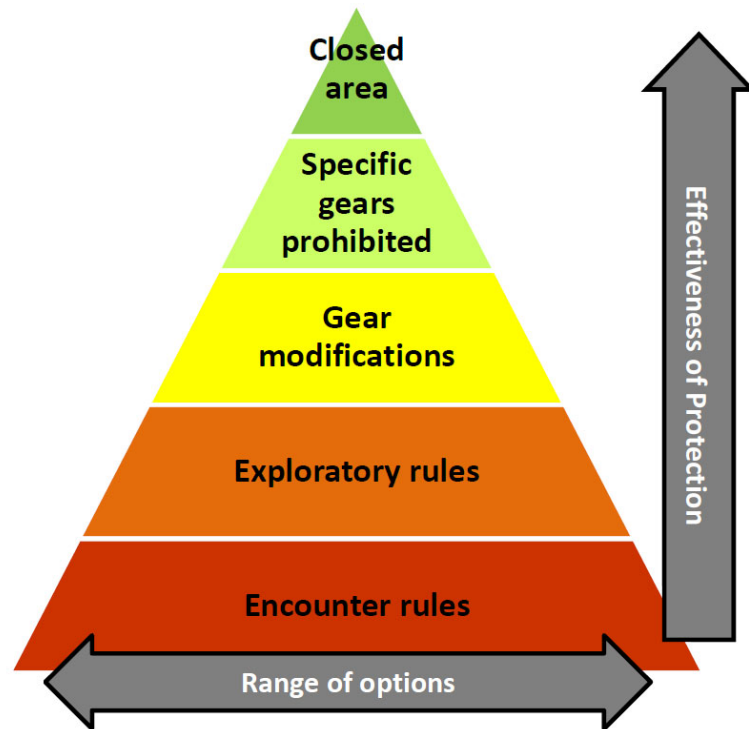
6. Proposed CMMs to prevent SAIs

As a result of the assessment in 5, if it is considered that fishing is likely to cause SAIs on VMEs or marine species, the member ... is to adopt CMMs to prevent SAIs. **The member ... is to clearly indicate how such impacts are expected to be prevented or mitigated by the measures.**

What's “missing” here?

- Published protocols are nearly all “reactive” to encounters by fishing vessels;
- But most RFMO/As have large VME closures based on (e.g.) surveys, features, precaution;
- Few formal protocols on how to designate such areas;
- Some guidance on information requirements contained in BFIAAs (SPRFMO, SIOFA) or in scientific standards & criteria (NPFC);
- I suggest closures generally based on proposals and papers to SC or equivalent bodies who advise their Commissions?

Hot off the press...



<https://publications.europa.eu/en/publication-detail/-/publication/0f2b559b-4610-11e9-a8ed-01aa75ed71a1/language-en>



Specific Contract No. 8
FRAMEWORK CONTRACT
EASME/EMFF/2016/008

Scientific Approaches for the Assessment and Management of Deep-Sea Fisheries and Ecosystems in RFMOs and RFBs

FINAL REPORT



Acknowledgments

- To FAO for their invitation and support of this workshop;
- To Masashi Kiyota for access to his excellent summary;
- To National Research Institute of Fisheries Science and SIOFA for hosting

