

**40th ANNUAL MEETING OF NAFO - SEPTEMBER 2018****Recommendations from the WG-EAFFM
to forward to the NAFO Commission and Scientific Council**

The NAFO Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) met in August of 2018 (COM-SC Doc. 18-03) and agreed on the following recommendations from the WG-EAFFM to the NAFO Commission and Scientific Council:

The WG-EAFFM **recommends** that:

- In relation to the evaluation of impact of scientific trawl surveys on VMEs in closed areas, Contracting Parties consider possible options for non-destructive regular monitoring within closed areas, bearing in mind cost implications and the utility of data collected for provision of advice.

In relation to implementation of the Ecosystem Approach Roadmap, WG-EAFFM continue to make progress on the Ecosystem Approach Roadmap, acknowledging the general concepts of Ecosystem Production Potential (EPP) as a useful step towards implementation of EAFFM.

The Scientific Council continue to refine its work under the ecosystem approach road map, including testing the reliability of the ecosystem production potential model and other related models, and to report on these results to the WG-EAFFM to further develop how it may apply to management decisions.

- WG-EAFFM work to reconsider the terminology used in the Ecosystem Summary Sheets in order to avoid potential confusion with standard terminology in fisheries management, as well as considering their potential ability to inform management decisions.
- In relation to the area #14, the Scientific Council include it in its review of closed areas in 2020, irrespective of the decision on continuing or not this closure after 2018, which remains to be considered by the Commission.
- In relation to the assessment of significant adverse impacts (SAI), SC maintain efforts to assess all of the six FAO criteria, including the three FAO functional SAI criteria (Article 18 of the FAO international Guidelines for the management of deep-sea fisheries in the High Seas) which could not be evaluated in the current assessment.
- In relation to FAO three letter codes for VME indicator species, the existing taxa list in Annex I.E. Part VI of the NCEM be updated with the FAO ASFIS codes as listed in Annex 4 of this report.

The Scientific Council review the proposed revisions to Annex I.E. Part VI as reflected in COM-SC EAFFM-WP 18-01, and to compare the consistency of the list of taxa in that Annex to the VME species guide with a view to recommend updates, as necessary.

The Secretariat to work with the FAO to develop new ASFIS codes, as necessary, for those taxa listed in Annex 1.E Part VI.

Annex 4. FAO ASFIS 3-alpha FAO codes of VME indicator species
(from COM-SC Doc 18-03)

The following table lists the current NAFO VME Indicator Species as found in Annex I.E Part VI. of the NAFO CEM with the available ASFIS 3-Alpha codes.

Benthic Invertebrate VME Indicator Species					
Common name of taxonomic group	Known Taxon	Family	Phylum		
Large-sized sponges (SPO)	<i>Iophon piceum</i> (WIP)	Acarnidae	Porifera		
	<i>Stelletta normani</i>	Ancorinidae			
	<i>Stelletta</i> sp. (WSX)	Ancorinidae			
	<i>Stryphnus ponderosus</i>	Ancorinidae			
	<i>Axinella</i> sp.	Axinellidae			
	<i>Phakellia</i> sp.	Axinellidae			
	<i>Esperiopsis villosa</i> (ZEW)	Esperiopsidae			
	<i>Geodia barretti</i>	Geodiidae			
	<i>Geodia macandrewii</i>	Geodiidae			
	<i>Geodia phlegraei</i>	Geodiidae			
	<i>Mycale (Mycale) lingua</i> (YHL)	Mycalidae			
	<i>Thenea muricata</i>				
	<i>Polymastia</i> spp. (ZPY)	Pachastrellidae			
	<i>Weberella bursa</i>	Polymastiidae			
	<i>Weberella</i> sp. (ZWB)	Polymastiidae			
	<i>Asconema foliatum</i> (ZBA)	Rossellidae			
	<i>Craniella cranium</i>	Tetillidae			
	Stony corals (CSS) (known seamount species may not occur in abundance in the NRA)	<i>Lophelia pertusa</i> (LWS)		Caryophylliidae	Cnidaria
		<i>Solenosmilia variabilis</i> (RZT)		Caryophylliidae	
		<i>Enallopsammia rostrata</i> (FEY)		Dendrophylliidae	
<i>Madrepora oculata</i> (MVI)		Oculinidae			
Small gorgonian corals (GGW)	<i>Anthothela grandiflora</i> (WAG)	Anthothelidae	Cnidaria		
	<i>Chrysogorgia</i> sp. (FHX)	Chrysogorgiidae			
	<i>Radicipes gracilis</i> (CZN)	Chrysogorgiidae			
	<i>Metallogorgia melanotrichos</i>	Chrysogorgiidae			
	<i>Acanella arbuscula</i>	Isididae			
	<i>Acanella eburnea</i>	Isididae			
	<i>Swiftia</i> sp.	Plexauridae			
	<i>Narella laxa</i>	Primnoidae			
Large gorgonian corals (GGW)	<i>Acanthogorgia armata</i> (AZC)	Acanthogorgiidae	Cnidaria		
	<i>Iridogorgia</i> sp.	Chrysogorgiidae			
	<i>Corallium bathyrubrum</i>	Coralliidae			

	<i>Corallium bayeri</i>	Coralliidae	
	<i>Keratoisis ornata</i> (KRY)	Isididae	
	<i>Keratoisis</i> sp.	Isididae	
	<i>Lepidisis</i> spp. (QFX)	Isididae	
	<i>Paragorgia arborea</i> (BFU)	Paragorgiidae	
	<i>Paragorgia johnsoni</i> (BFV)	Paragorgiidae	
	<i>Paramuricea grandis</i>	Plexauridae	
	<i>Paramuricea placomus</i>	Plexauridae	
	<i>Paramuricea</i> spp. (PZL)	Plexauridae	
	<i>Placogorgia</i> sp.	Plexauridae	
	<i>Placogorgia terceira</i>	Plexauridae	
	<i>Calyptrophora</i> sp.	Primnoidae	
	<i>Parastenella atlantica</i>	Primnoidae	
	<i>Primnoa resedaeformis</i> (QOE)	Primnoidae	
	<i>Thouarella grasshoffi</i>	Primnoidae	
Sea pens (NTW)	<i>Anthoptilum grandiflorum</i>	Anthoptilidae	Cnidaria
	<i>Funiculina quadrangularis</i> (FOJ)	Funiculinidae	
	<i>Halipterus</i> cf. <i>christii</i>	Halipteridae	
	<i>Halipterus finmarchica</i> (HFM)	Halipteridae	
	<i>Halipterus</i> spp. (ZHX)	Halipteridae	
	<i>Kophobelemnnon stelliferum</i> (KVF)	Kophobelemnidae	
	<i>Pennatula aculeata</i> (QAC)	Pennatulidae	
	<i>Pennatula grandis</i>	Pennatulidae	
	<i>Pennatula</i> sp.	Pennatulidae	
	<i>Distichoptilum gracile</i> (WDG)	Protoptilidae	
	<i>Protoptilum</i> sp.	Protoptilidae	
	<i>Umbellula lindahli</i>	Umbellulidae	
	<i>Virgularia</i> cf. <i>mirabilis</i>	Virgulariidae	
Tube-dwelling anemones	<i>Pachycerianthus borealis</i> (WQB)	Cerianthidae	Cnidaria
Erect bryozoans (BZN)	<i>Eucratea loricata</i> (WEL)	Eucrateidae	Bryozoa
Sea lilies (Crinoids) (CWD)	<i>Trichometra cubensis</i>	Antedonidae	Echinodermata
	<i>Conocrinus lofotensis</i> (WCF)	Bourgueticrinidae	
	<i>Gephyrocrinus grimaldii</i>	Hyocrinidae	
Sea squirts (SSX)	<i>Boltenia ovifera</i> (WBO)	Pyuridae	Chordata
	<i>Halocynthia aurantium</i>	Pyuridae	