# VME's and EBSA's:
## Protection and Use of Special Marine Places

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# Structure of overview

- WHAT criteria can identify the “special places” in the oceans?
- WHERE did the policy interest come from?
- WHY does there seem to be such redundancy or complexity of efforts?
- HOW can we move forward effectively AND coherently?

# CBD Criteria Annex 1 Cop IX/20

- **Uniqueness or rarity**
  - *Area contains either (i) unique ("the only one of its kind"), rare (occurs only in few locations) or endemic **species**, populations or communities, and/or (ii) unique, rare or distinct, **habitats or ecosystems**; and/or (iii) unique or unusual geomorphological or oceanographic **features***
- **Special importance for life-history stages of species**
  - *Areas that are required for a population to survive and thrive.*

# CBD Criteria Annex 1 Cop IX/20

- **Importance for threatened, endangered or declining species and/or habitats**
  - *Area containing habitat for the survival and recovery of endangered, threatened, declining species or area with significant assemblages of such species.*
- **Vulnerability, fragility, sensitivity, or slow recovery**
  - ***Areas** that contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery.*

# CBD Criteria Annex 1 Cop IX/20

- **Biological productivity**
  - *Area containing species, populations or communities with comparatively higher natural biological productivity.*
- **Biological diversity**
  - *Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity.*
- **Naturalness**
  - *Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation.*

# VME Criteria – FAO text

- **Uniqueness or rarity** – … loss could not be compensated for by other similar areas. These include:
  - Habitats that contain endemic species.
  - Habitats of rare, threatened, or endangered species that occur only in discrete areas.
  - Nurseries or discrete feeding, breeding, or spawning areas.
- **Structural Complexity** … complex physical structures created by **significant concentration of** biotic [**and abiotic]** features. … processes are usually highly dependent on these structured systems… high diversity,… dependent on the structuring organisms.

# VME Criteria – FAO text (2)

- **Functional significance of the habitat** – discrete areas or habitats that are necessary for the survival, function, spawning/reproduction or recovery of fish stocks, particular life-history stages (e.g. nursery grounds or rearing areas), or of rare, threatened or endangered marine species.
- **Fragility** – an ecosystem that is highly susceptible to degradation by anthropogenic activities.
- ***Life-history traits of component* species that make recovery difficult** – ecosystems that are characterized by populations or assemblages of species with one or mor eof the following characteristics:
  - slow growth rates;
  - late age of maturity;
  - low or unpredictable recruitment; or • long-lived.. .

# Comparison of Criteria

| CBD EBSMAs | FAO VME |
|---|---|
| Uniqueness or rarity | Uniqueness / rarity |
| Special importance for life history stages of species | Functional significance of habitat |
| Importance for threatened, endangered or declining species and/or habitats | Fragility |
| Vulnerability, fragility, sensitivity or slow recovery | Life history attributes of species |
| Naturalness | |
| Biological productivity | Structural Complexity |
| Biological diversity | |

# How do they perform?
## (CBD “Ottawa workshop” 2009)

It is also concluded that **there are no inherent incompatibilities between the various sets of criteria** that have been applied nationally and by various IGOs (FAO, IMO, ISA) and NGOs (for example, BirdLife International and Conservation International). Consequently, most of the scientific and technical lessons learned about applications of the various sets of criteria can be generalized. Moreover, some of the sets of criteria can act in complementary ways, because unlike the CBD criteria some of the criteria applied by other UN agencies include considerations of vulnerability to specific activities.

# Why TWO systems?

- Why do we have CBD & FAO? Why do we have RFMOs and Regional Seas organizations in the same area?
- Separate but PARALLEL histories
- Different pathways to international policy frameworks from shared roots in WSSD
  - (Probably even earlier roots but a decade is long enough to understand current context)

# Roots in **WSSD** – Plan of Implementation 2002

- 32. In accordance with chapter 17 of Agenda 21, promote the conservation and management of the oceans through actions at all levels, … to:
- (a) Maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction; […]
- (c) Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use and watershed planning and the integration of marine and coastal areas management into key sectors;

# UN Resolution 58/240 (2003) Oceans & Law of the Sea

- 54. *Reaffirms* the efforts of States to develop and facilitate the use of diverse approaches and tools for conserving and managing **vulnerable marine ecosystems**, **including the establishment of marine protected areas,** consistent with international law and based on the best scientific information available, and the development of representative networks of such marine protected areas by 2012;

# UNGA Resolution 58/14: Sustainable Fisheries

46. *Requests* the Secretary-General, in close cooperation with [FAO], and in consultation with States, [RFMO/As] and other relevant organizations, in his **next report concerning fisheries** to include a section outlining current risks to the marine biodiversity of **vulnerable marine ecosystems** including, but not limited to, seamounts, coral reefs, including cold water reefs and certain other sensitive underwater features, related to fishing activities, as well as detailing any conservation and management measures in place at the global, regional, subregional or national levels addressing these issues;

# CBD Pathway – Ancient History

Ad Hoc Open-Ended Working Group on Protected Areas: Montecatini, Italy 2005

- Calls for action to “consider ecological criteria for the identification of potential areas for protection in marine areas beyond the limits of national jurisdiction.”

Ottawa Workshop 2006 – The phrase “EBSA” and initial criteria emerged

Azores Workshop 2007 – Completed criteria and initial guidance on application

# CBD Pathway – Modern History

COP IX/20 – ADOPTS criteria and notes properties of networks. "*decides* to convene an expert workshop, in order to provide scientific and technical guidance … the identification of areas beyond the national jurisdiction, which meet the scientific criteria in annex I to the present decision [also biogeographic classification]

Ottawa Workshop 2009 – Did it.

# CBD Pathway - COP X/29

- 32. *Encourages [long list] …*to cooperate, on a regional or subregional basis, to identify and adopt, according to their competence, appropriate measures for conservation and sustainable use in relation **to ecologically or biologically significant areas, …** including by establishing representative networks of marine protected areas … based on best scientific information available, and to inform the relevant processes within the United Nations General Assembly;

*35. …* facilitate availability and inter-operability of the best available marine and coastal biodiversity data sets

36: … to organize a series of regional workshops, … with a primary objective to facilitate the description of ecologically or biologically significant marine areas through application of scientific criteria in annex I of decision IX/20 **as well as other relevant compatible and complementary nationally and inter governmentally agreed scientific criteria,** as well as the scientific guidance on the identification of marine areas beyond national jurisdiction, which meet the scientific criteria in annex I to decision IX/20;

39 … to establish a repository for scientific and technical information and experience [with 32-36]

# FAO Ancient History

- 2003-2005: Focus on guidelines for application of an **ecosystem approach to fisheries**
- 2006 – **UNGA 61/105**
  - 80: to sustainably manage fish stocks and **protect vulnerable marine ecosystems**, including seamounts, hydrothermal vents and cold water corals, from destructive fishing practices
  - 83 (*b*) To **identify vulnerable marine ecosystems** and determine whether bottom fishing activities would cause significant adverse impacts to such ecosystems and the long-term sustainability of deep sea fish stocks, *inter alia*, by improving scientific research and data collection and sharing, and through new and exploratory fisheries;
  - [also important management subparagraphs]

This changed focus from EAF to VMEs

# FAO Modern History

- 5 Expert Consultations on aspects of implementing 61/105; Bangkok (2007)
  - 15 … four categories of impacts relevant to the conservation and management of deep-sea fisheries:
    - impacts on target species;
    - impacts on bycatch species, both retained and discarded;
    - impacts on habitats such as cold-water corals and seamounts; and
    - broader food web/trophodynamic impacts on deep-sea ecosystems.
  - Discussed PROPERTIES of VMEs but did not proposed criteria for specific areas

# FAO Deep-Sea Fishery Guidelines 2008

Two weeks of difficult negotiations:

15. The vulnerability of populations, communities and habitats **must be assessed relative to specific threats**. Some features, particularly those that are physically fragile or inherently rare, may be vulnerable to most forms of disturbance, but the vulnerability of some populations, communities and habitats may vary greatly depending on the type of fishing gear used or the kind of disturbance experienced.

42: A marine ecosystem should be classified as vulnerable based on the characteristics that it possesses. The following list of characteristics should be used as criteria in the identification of VMEs.

# Pusan Progress Review 2010
# Overall Conclusions - 1

- RFMOs/As have all taken actions to assess the presence of VMEs and protect them from SAIs.
- Almost all efforts have focused on identifying areas with "significant concentrations" of corals and sponges, and in a few cases seamounts. Very little work has been done with other VME criteria.
- In almost all cases RFMOs/As have noted that the absence of clear standards for how to interpret "significant concentrations" has impeded progress on identification of VMEs
- Incomplete information on distribution, abundance and species composition of corals and sponges specifically, but more generally of all the ecosystem features that may meet the VME criteria, also impedes progress
- In all cases the RFMOs/As have been able to assemble enough information to make at least partial progress

# Overall Conclusions - 2

- Management measures used to protect VMEs have been almost exclusively closures of areas considered to have significant concentrations of corals and sponges (and in a few cases, seamounts). There is some exploratory work with other mitigation measures, but such work is in early stages.
- There are numerous gaps remaining in the implementation of the International Guidelines, many arising from either the focus on corals and sponges at the expense of attention to other VME criteria and from the lack of operational guidance on how to interpret "significant concentrations".
- There are also numerous opportunities for activities to increase progress. Most of these involve collaborative efforts among RFMOs/As, and usually with FAO playing a major role in facilitating the collaborations. Development of a global database on known VMEs (and the criteria they meet), and sponsoring Expert meetings for provision of "best practice" guidance would be roles that should return particularly high benefits.

# WHERE TO FROM HERE?

- Both RFMOs and CBD/Regional Seas are holding expert meetings to identify “special areas”
- FAO and CBD working together on a GEF proposal for high seas biodiversity.
  - Major focus on identification of special areas
  - Also interest in mitigation measures and what are sustainable uses of those areas
  - Geographic foci under discussion
- Interest in common repository, but currently agencies working in parallel

# OSPAR/NEACF meeting 09/2011 was a precedent setting cooperative effort

Consider this a path to a viable future.

We all need to share ‘Lessons Learned” on:

- Compatibility of the criteria *should* pose few problems, but experience is important
- Pay attention to degree to which threats to ecosystem features influence your discussions (not the same role in the two frameworks)
- Pay attention to how readily agreement reached on how results are stored, accessed, and used.
- Can the experts from different “roots” put personal risk tolerances aside and stick to information and criteria?