

Top 10 Myths Concerning Ecosystem Approaches to Ocean Resource Management

Steven Murawski, Ph.D.

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Myth

#1

*Ecosystem approaches to ocean
resource management are not well
defined and we do not know how to
implement them*

REALITY: Ecosystem approaches to management have been extensively defined both in terms of their purpose and characteristics i.e., NOAA's characteristics include:

- geographically specified
adaptive, collaborative
take uncertainties into account
multiple influential factors
balances diverse societal objectives
implemented incrementally and objectively
- EAM has been implemented in both formal and informal ways in
at local, national, and international levels

NOAA's Definition of Ecosystem Approaches

“An ecosystem approach to management (EAM) is one that provides a comprehensive framework for living resource decision making. In contrast to individual species or single issue management, EAM considers a wider range of relevant ecological, environmental, and human factors bearing on societal choices regarding resource use”.

Myth #2

EAM requires a “paradigm shift” in management institutions and science support.

REALITY: EAM as a management context is EVOLUTION not REVOLUTION.

- Many (most) marine resource management institutions worldwide have adopted EAM principles,
- For example, bycatch and habitat interactions are now considered in routinely in fisheries management,
- Energy exploration and extraction activities increasingly account for impacts on biota.

Myth

#3

There are no good examples of EAM in practice anywhere in the world's oceans.

REALITY: Many international, regional, and local examples where EAM principles are implemented.

- Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR)
- U.S. National Environmental Policy Act (NEPA)



Myth

#4

There is insufficient information for any area currently available to answer ecosystem questions necessary for EAM.

REALITY: EAM builds upon existing institutions and information collected for a variety of specific purposes and provides a framework to combine data for additional value.

- Incorporates new information as becomes available,
- Identifies science priorities to reduce uncertainty and improve understanding of effects of policy choices.

Myth

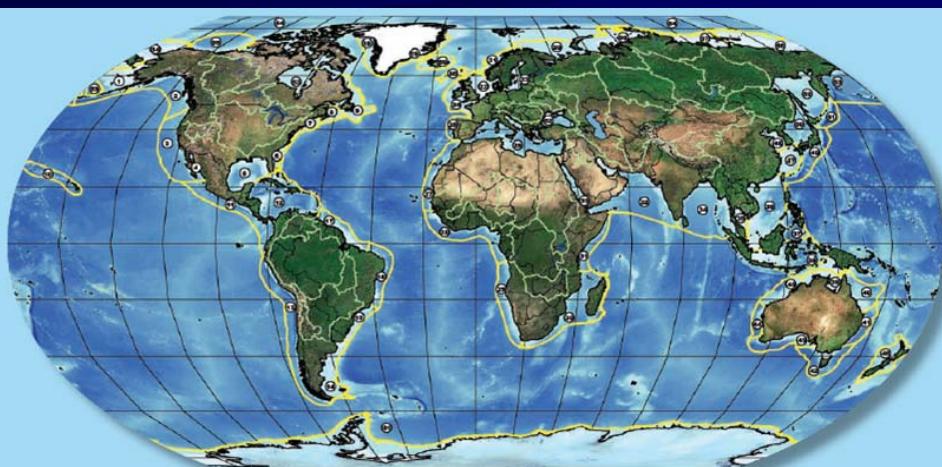
#5

EAM is too difficult to apply in multinational RMOs, and can only apply in a few developed countries in the world that have the technical and financial resources to support it.

REALITY: Regional EAM programs are being implemented in a diverse set of the world's large marine ecosystems (LMEs)

- LMEs defined by natural boundaries of coastal regions using hydrography, biodiversity, and productivity,
- LMEs overlap territorial jurisdictions and many of these efforts are in developing world (i.e. Gulf of Guinea)

LMEs of the World and Linked Watersheds



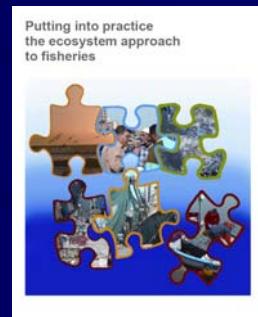
121 Countries, 17 LME programs, >\$US 650 million
Global Environmental Facility and a number of Donor Countries

Myth #6

There are no existing principles or guidelines for implementing EAM.

REALITY: Principles and guidelines for the development of EAM have been articulated by a sectoral interests for terrestrial, coastal, and oceanic systems.

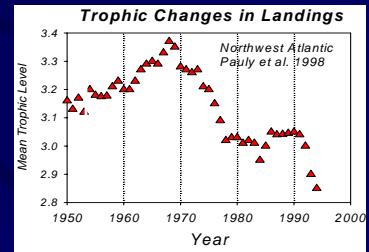
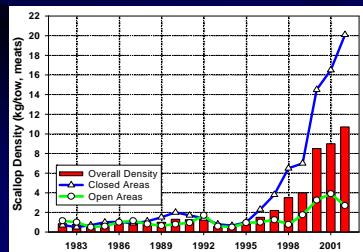
- Groups adopt principles applicable to individual sectors,
- Principles reflect management choice and degree of risk and consequences.



Myth #7

There are no appropriate management benchmarks and associated indicators of “success” in achieving ecosystem objectives.

REALITY: Ecosystems are complex with many dimensions. Suites of indicators will be chosen based on specific contexts and societal priorities.



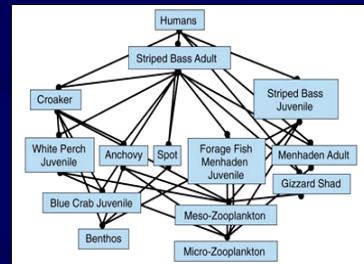
Myth

#8

A complex model of species interactions among all components of an ecosystem is necessary to guide EAM.

REALITY: The potential effects and consequences of management decisions must be considered.

- Even simple models of ecosystem function can establish a plausible subset of potential outcomes,
- Complex models are not necessary at the outset as long as a range of possible system states can be outlined.



Myth

#9

It is impossible to establish the boundaries necessary to define EAM.

REALITY: Appropriate scales for EAM are hierarchical and may change with respect to specific problems.

- The scope of the problem will determine the size of the area to be managed.
- The larger the system, the increased number of governmental entities that must collaborate.

Myth

#10

Marine Protected Areas (MPAs)
are an essential component of
EAM.

REALITY: EAM ≠ MPA

- MPAs are just one of several ecosystem and fishery management tools,
- Other tools include harvesting restrictions, extraction quotas, activity prohibition areas, gear prohibitions, etc.