



**NOAA
FISHERIES**

Headquarters

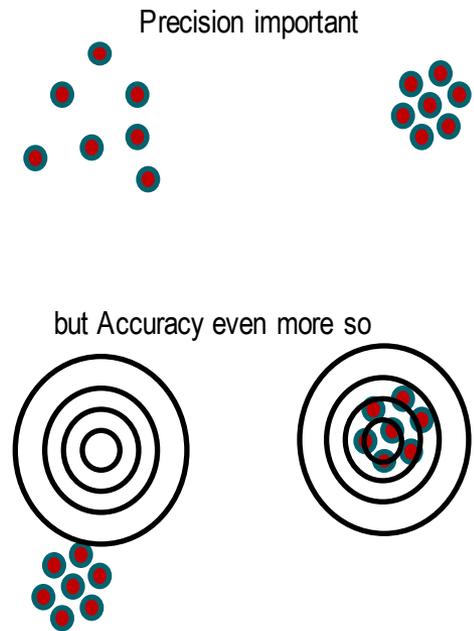
Ecosystem-Based Fisheries Management (EBFM) Policy

Kirsten Larsen
NMFS Habitat Science Team Lead

Artificial Reef Workshop: June 9, 2016

Why EBFM

- Advice is increasingly wrong
- Reduced funding, Prioritization
- Increased Stability
- Address Tradeoffs



Levels	Scientific Advice	Management Framework
EBM Ecosystem Based Management	 <p>Fisheries Development Energy Eco Tourism Oil & Gas</p> <p>Conservation Marine Sanctuaries Aquaculture Etc</p>	
EBFM Ecosystem Based Fisheries Management	 <p>Climate Habitat Predator</p>	
EAFM Ecosystem Approach to Fisheries Management	 <p>Climate Habitat Predator</p>	
SS Single Species		

Why an EBFM Policy Statement?

- Clarify, solidify, and document NOAA Fisheries' commitment to EBFM
- Establish a framework of guiding principles to enhance and accelerate the implementation of EBFM within NMFS



Key Issues:

- Relate EBFM to existing legal authorities and requirements for LMR management
- Identify elements of a systematic approach

©2007 AmericanMemorabilia.com

Policy Components

- Policy Statement
- Background
- Purpose of and Need for Policy
- Definition of EBFM
- Context of EBFM
- Benefits
- Guiding Principles
- Legal Authorities and Mandates
- NOAA Fisheries Responsibilities



NOAA Fisheries' EBFM definition

a systematic approach to fisheries management in a geographically specified area that contributes to the resilience and sustainability of the ecosystem; recognizes the physical, biological, economic, and social interactions among the affected fishery-related components of the ecosystem, including humans; and seeks to optimize benefits among a diverse set of societal goals

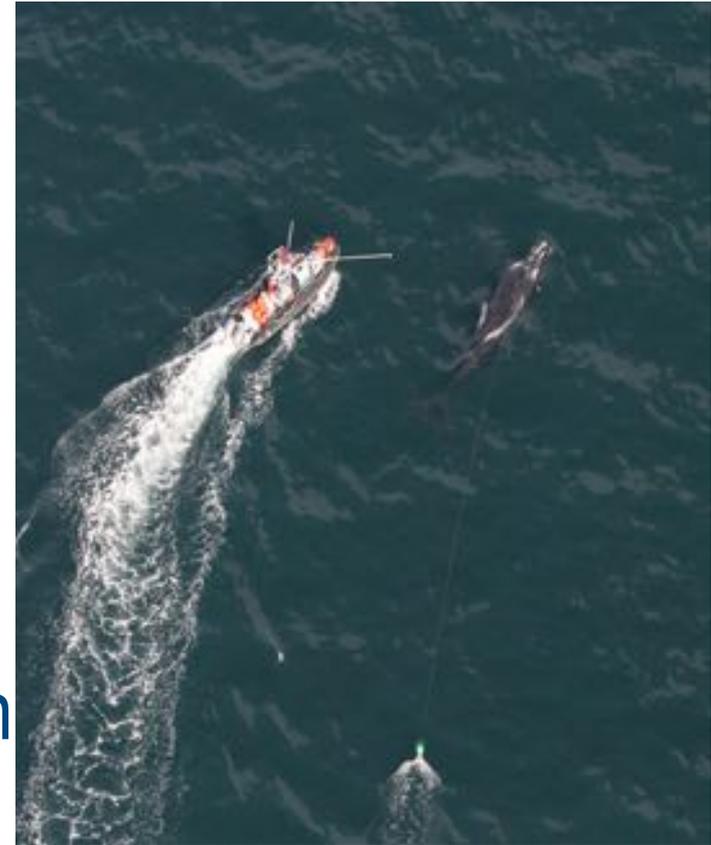
Benefits of EBFM

- Facilitates trade-offs between different stakeholder priorities, balancing social and ecological needs.
- Provides more information to management decisions, which should improve our ability to sustainably manage fisheries.
- Contributes to an increased ability to predict likely outcomes of management actions.
- Provides more stability of ecosystem level measures and translates into better regulatory stability and business plans.



NOAA Fisheries Mandates

- Magnuson-Stevens Fishery Conservation and Management Act
- Endangered Species Act
- Marine Mammal Protection Act
- National Aquaculture Act
- National Environmental Protection Act



Policy Statement

NOAA Fisheries strongly supports implementation of Ecosystem-Based Fisheries Management (EBFM) to better inform and enable better decisions regarding trade-offs among and between fisheries (commercial, recreational, and subsistence), aquaculture, protected species, biodiversity, and habitats.

Recognizing the interconnectedness of these ecosystem components will help maintain resilient and productive ecosystems (including the human communities on which they depend), even as they respond to climate, habitat, ecological, and other environmental changes.

EBFM Guiding Principles

Outcome

6. Maintain Resilient Ecosystems

What is our advice?

5. Incorporate ecosystem considerations into management advice

What are our options?

4. Explore and address trade-offs within an ecosystem

What are our priorities?

3. Prioritize vulnerabilities and risks of ecosystems and their components

What is the foundational science we need?

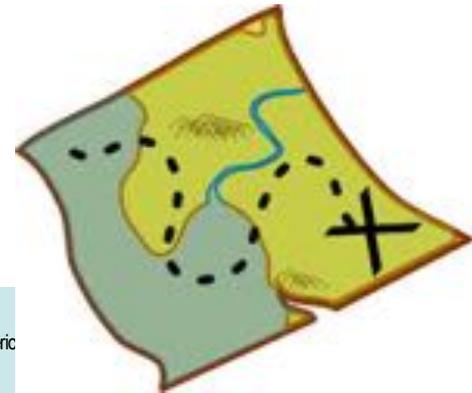
2. Advance our understanding of ecosystem processes

What are our objectives?

1. Implement ecosystem-level planning

Road Map

- Intended to guide the implementation of the EBFM Policy over the next 5-years
- Describes recommended Actions to address each of the Policy's six Guiding Principles for near-term work
- Intended to build on current efforts
- Draft Road Map will be available for informal comment period summer 2016



Artificial Reefs

Examples around world of using for ecosystem rehabilitation

- physical protection of sensitive ecosystems,
- the addition or replacement of habitat complexity,
- the provision of a settlement substrate,
- the replacement of a damaged socio-economic resource.



Thank you

<http://www.st.nmfs.noaa.gov/ecosystems/ebfm/index>

