

Ecosystems Pilot Project

Status report


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Ecosystems Committee

Chad Demarest
Ecosystems Project Leader

The Project







 **Recap**

 **What did we learn?**

 **Future directions**

Project recap

-  **What is the pilot project?**
-  **What is an ecosystem approach to management?**
-  **What is a fishery ecosystem plan?**
-  **How might all this nonsense actually change management?**

The Pilot Project

What is the pilot project?

 **Attitudes and values survey**

 **Stakeholder workshops**

 **Inventory of technical needs**

The Pilot Project

What was it's objective?

“NMFS currently is developing a policy that would require regional FEPs.

This pilot project would provide a timely way to gather public input regarding the objectives and goals to be accomplished through the introduction of FEPs.

The intent of the FEPs is to provide a framework for organizing information about the structure and function of ecosystems and for developing ways to enhance decision making when goals of single-species or fishery-by-fishery management approaches conflict.”

EAM Defined

What is an ecosystem approach to management?

An ecosystem approach to management is a geographically specified and adaptive process which (a) takes account of ecosystem knowledge and uncertainties, (b) considers multiple external influences, and (c) strives to balance diverse societal objectives

NOAA Ecosystems Principals Advisory Panel (1999)

EAM Defined

Or it could be...








Ecosystem-based management considers all the components of the ecosystem (biological, chemical and physical) and their interactions. This includes an appreciation of natural ecosystem dynamics *AND* it explicitly recognizes that man is part of the system and seeks to include stakeholders in setting management goals.

European Fisheries Ecosystem Plan Project (2004)



EAM Defined







But it should probably follow these principles...

-  Objectives are a matter of societal choice
-  Management should be decentralized to lowest possible level –*subsidiarity*–
-  Consider effects on adjacent ecosystems
-  Need to manage in an economic context, focusing on:
 -  Reducing market distortions that adversely affect ecosystem structure, function and biodiversity
 -  Align incentives to promote conservation and sustainable use
 -  Internalize costs and benefits within a given ecosystem



EAM Defined

Con't...

-  Maintaining ecosystem services (structure and function) should be a primary objective
-  Focus on appropriate spatial and temporal scales
-  Set long-term objectives for management
-  Recognize that change is inevitable (the steady-state myth)
-  Consider all forms of relevant information, including indigenous and local knowledge
-  Seek to involve all relevant sectors of society and scientific disciplines

What is an FEP?



Strategic document



Sets over-arching goals



Addresses trade-offs between competing fisheries



Defines:



Spatial boundaries



Management units











May support, not supplant, FMPs

Eight steps to an FEP

- 1) Determine the stakeholders
- 2) Define the spatial boundaries
- 3) Characterize the structure and function of the ecosystem, including ecological and monetary economies
- 4) Define long-term objectives
- 5) Define indicators of health/success
- 6) Determine robust, flexible paths for realizing objectives
- 7) Monitor and assess impacts of decisions relative to long-term objectives
- 8) Determine impacts of decisions on adjacent ecosystems

Change

How might management change?

-  Shift from species-based to area-based management
-  Explicitly set spatially-based objectives with a focus on stakeholder input
-  Internalize costs and benefits of both fisheries and fisheries management
-  Broader metrics for success, including indicators of ecosystem structure and function
-  Longer time horizons, less individual actions
-  Simpler regulatory structure
 -  more flexibility for fisherman
 -  greater margin of error for regulatory effectiveness

What did we learn?



Objectives for the project



Project components







Preliminary conclusions



Our project objectives





Collect data on issues fundamental to FEP development

-  Stakeholders and stakeholder interaction
-  Area-based management
-  Management units
-  Objectives, indicators and tools



Inform the big and small picture

-  Narrow focus: Ecosystems approaches to fisheries management
-  Broad focus: Ecosystems approaches to marine resource management

Project components



Jurisdictional issues paper



Marine pollution paper



Stakeholder workshops













Stakeholder survey

Jurisdictional issues

Offshore LNG





 Under Energy Policy Act 2005, FERC has the lead

 Deepwater MOU:

-  DOC – NOAA and NOS
-  DOC – Utilities and Energy, Corps of Engineers
-  DOE – Office of Fossil Energy
-  DHS – US Coast Guard
-  DOI – MMS and US F&WS
-  DOS
-  DOT – MARAD and RSPA
-  EPA
-  FERC
-  CEQ




Jurisdictional issues

Marine aquaculture

-  Multi-agency permitting process not well defined
-  Permits required from: NOAA Fisheries, COE, EPA, F&WS
-  NOAA Fisheries currently lead as per MCFMC
-  Aquaculture bill would make DOC (NOAA) lead agency, exempts from MFCMA

Jurisdictional issues

Wind engery

-  DOI (MMS) lead agency as per Energy Policy Act of 2005
-  MMS must consult with USCG
-  COE must issue Sec 10 permit, conduct “public interest review” beyond NEPA responsibilities

Jurisdictional issues

A coordinated approach to marine resource management in federal waters would require cooperation with no fewer than 14 Agencies.



This does not account for:



Military traffic



Commercial shipping



Sand mining/dredging



State activities

Marine pollution



Stakeholder workshops







Workshop results:

-  Stakeholder saturation/reach
-  Range of views presented
-  Commonality/emergent themes

What does the Ctte want to know?






Survey

Fishery stakeholders:

-  Are not young (q. 1-4)
-  Are active in their fishery 'community' (q. 2-2)
-  Find it hard to participate in management (q. 2-6)
-  Don't think management is good for the long-term health of the ecosystem (q. 2-8)
-  Like the idea of area-based management (q. 2-9, 2-AP8)
-  Don't think the horsepower/size restrictions work very well in theory or in practice (q. 2-10, 11)




Survey

Fishery stakeholders (con't):

-  Prefer output controls for the groundfish fishery (q. 2-13)
-  Think that preserving biodiversity contributes to a healthy fishery (q. 2-15)
-  Believe that current fishery management practices negatively impact the ecosystem (q. 2-16)
-  Believe that pollution is bad for the fisheries (q. 2-17)
-  Fear non-visionary ecosystem-based management (q. 2-17) ...*at least one does*

Survey

Fishery stakeholders (con't):

-  Would probably make some changes to the herring fishery (q. 2-18)
-  Do not think tradeoffs are adequately addressed under current management (q. 2-19)
-  Don't much trust federal or state agencies to manage marine resources (q. 2-21)

**Need to know what is interesting to the
Ctte / Council**







Preliminary conclusions

Ecosystems approaches may offer improvements by providing:

1. Stronger focus on area
 - a) Productivity
 - b) Management objectives
 - c) Governance
2. Mechanisms for addressing trade-offs
3. Increased emphasis on non-fishing impacts (esp. pollution)

Preliminary conclusions

Potentially actionable items include:

-  Defining terms (eg. EAM, fishery stakeholder, etc.)
-  Delineating ecosystem boundaries
-  Changing management units
-  Changing management threshold definitions (eg. overfishing/overfished, optimum yield)
-  Increasing the Council's role in broader marine resource management issues
-  Others?

Future directions

Where does the Ctte think the Council should go from here?

-  Ecosystems Ctte?
-  FEP?
-  Recommendations?
-  Questions?
-  Future work?