



MAFMC Ecosystem Approach to Fisheries Management

April 6, 2016

Austin, TX

MAFMC EAFM Decision

- Council decided following National SSC IV to develop an Ecosystem *Approach* to Fisheries Management Guidance Document (PFMC approach)

EAFM Definition

- An Ecosystem Approach to Fisheries Management **recognizes** the biological, economic, social, and physical **interactions** among the components of ecosystems and attempts to achieve optimum yield taking those interactions into account.

EAFM

- Approach is to work within the existing management paradigm to address ecosystem considerations
- As opposed to Ecosystem Based Management which is more of a **revolutionary** top down approach

EAFM Goal

- To manage for ecologically sustainable utilization of living marine resources while maintaining ecosystem productivity, structure and function

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- Sustainable utilization – meets the needs of the present without compromising the ability of future generations to meet their own needs.

(Bruntland Commission, FAO 1987)

EAFM Guidance Document

- Provides an umbrella for coordination of ecosystem considerations across existing FMPs
- Non-regulatory document designed to provide policy guidance with regulatory actions taken through existing FMP structure

EAFM Guidance Document

- Development began during/after Council conducted its Visioning project
- Ecosystem related issues ranked high on the list of concerns raised by stakeholders across

EAFM Guidance Document Focus

1. Forage/low trophic level species considerations
2. Effects of climate change and variability on abundance and distribution of fish stocks; ramifications for existing management approaches/programs
3. Interactions - climate, fleets, species (predation, competition) and their effects on sustainable harvest policy

EAFM Guidance Document Focus (cont.)

4. Improve incorporation of habitat conservation and management objectives in the current management process (including water quality issues)

Social and economic considerations were integrated throughout the workshop process

Ecosystem Workshops

Purpose

- Bring together technical experts, managers and stakeholders to evaluate science and policy aspects of each issue
- Developed white papers which include recommendations for best practices to be incorporated into Council's EAFM operational guide (available at mafmc.org)

Interactions White paper

- Intent was to identify major interactions that need to be addressed
- Provide a synthesis of interactions (species, fleets, climate and habitat)

EAFM – evaluation of tradeoffs

Involves evaluation of achieving multiple (often competing) objectives relative to ecosystem services

Management of exploited forage species
good example of tradeoffs associated with special 'ecosystem' management considerations

Exploited Forage species – ecosystem service tradeoffs

- Direct harvest economic value

Versus

- Ecological “value added” by providing larger forage base within the ecosystem (presumably to benefit of higher trophic levels)

EAFM Guidance Document Limits

- Some ecosystem considerations can be addressed within existing FMPs (adjustments/additions to current assessment and management system)
- However, addressing some of the most critical ecosystem challenges will require new ways of doing business
- No knob to turn within existing system

So how are we to proceed?

- No simple answers to these questions
- Staff recommended EAFM Guidance document provide a framework for analysis of tradeoffs for major ecosystem considerations identified to date

What's currently feasible?

- Where possible EAFM team providing a **framework for evaluating** the tradeoffs

Management Strategy Evaluation

- EAFM document includes a description of elements of MSE to provide a framework for analysis that will guide future EAFM policy development
- Excellent opportunity to capitalize on NEFSC plans to expand MSE capacity
- Will require significant commitment from NEFSC and Council

Council MSE Input

Need to engage the Council at the committee level and stakeholders in developing priorities and to structure MSE analyses

Staff recommended that addressing climate change and variability initially be given highest priority for MSE analyses

Council MSE Input

Staff also recommends that EAFM Guidance Doc be considered a living document subject to revision as comprehensive MSE analyses are developed

Next Steps

First draft of MAFMC EAFM Guidance Document to be presented at April Council meeting next week in Montauk, NY

Second draft to follow in June (hopefully approval by Council, August approval at the latest)

Questions?

