

Mid-Atlantic Fishery Management Council
Ecosystem Approaches to Fishery Management Guidance Document
Draft Outline (4/24/12)

1. Introduction
 - a. Purpose and Need
 - b. Goals and Objectives
 - c. EAFM Definition
 - d. Rationale: Why EAFM is an improvement, enhancement or augmentation to current approaches
 - e. Scope of the EAFM Guidance Document
2. **Brief** Description of the Mid Atlantic Ecosystem
 - a. Delineating the ecosystem(s): scale and extent
 - b. Description of Oceanographic Features
 - i. Physico-chemical environment
 - ii. Habitat
 - c. Description of Biological Features
 - i. Species
 - ii. Food Web
 - d. Description of Synthetic and Integrative Ecosystem Indices
 - e. Description of Socio-economics of all Managed Species
 - i. Description of all Fleets targeting all MA species
 - ii. Description of all Ports, ex-vessel revenue in MA
 - iii. Description of jobs in MA
 - iv. Time series of value of landings of all managed species
3. Summary of Existing Managed Species, FMPs, and Management Structure
 - a. One-half to one page summary of each Managed Species and key FMP elements
 - i. Time series of survey B, assessment B, and landings
 - ii. Time series of BRPs, and performance measures relative to them
 - iii. Current OFL, ACL, ACT, actual Landings, key life history events
 - b. Summary descriptions of other Species of interest in the area, not managed by MAFMC

- i. ASMFC
 - ii. SAFMC
 - iii. NEFMC
 - iv. HMS
 - v. PS
 - c. Summary of Management Structure, Council and SSC processes
 - i. Flow charts, diagrams, and procedural descriptions
 - ii. Track information flow starting at SA outputs into SSC all the way through to Council decisions
 - d. Summary of Cross FMP Goals and Objectives
 - i. Identifying Potential cross-plan Conflicts
 - ii. Identifying Potential areas for increased efficiencies and coordination
 - iii. Identifying common themes warranting systematic consideration
- 4. Considering Potential Conflicts and Opportunities- Evaluation of and Guidance regarding Fishery on Managed Species
 - a. Cross-plan Conflicts
 - b. Forage Issue
 - c. Bycatch Issue
 - d. EFH
- 5. Considering Potential Conflicts and Opportunities- Evaluation of and Guidance regarding Fishery on other Species and Elements of the Ecosystem
 - a. Other Targeted Species (FMPs) not Managed by MAFMC
 - i. ASMFC
 - ii. SAFMC
 - iii. NEFMC
 - b. Ecosystem Component Species
 - c. Protected Species
 - i. Bycatch Issue
 - ii. Adequate Forage Issue
 - d. Highly Migratory Species
 - e. Corals
 - f. Biodiversity Issues

- g. Habitat Issues
 - h. System-level “reality checks”
 - i. Measures of Resilience
 - ii. Measures of Systemic Productivity
 - iii. System Level OY comparisons
6. Considering Potential Conflicts and Opportunities- Evaluation of and Guidance regarding External Factors on Fishery and Managed Species
- a. Multiple Ocean Uses – Preliminary Qualitative Risk Analysis
 - i. Windfarms
 - ii. Oil and Gas
 - iii. Navigation
 - iv. Tourism
 - v. Military Uses
 - vi. Pipelines and Cables
 - vii. Dredging
 - viii. Dumping
 - ix. Toxin Deposition
 - x. Eutrophication
 - xi. Coastal Zone Management Issues
 - xii. Medicine Development
 - xiii. Inherent Aesthetic Valuation
 - xiv. Other
 - b. Regional and National Economies
 - i. Market dynamics of landings
 - 1. Regional
 - 2. National
 - ii. National events that impact local processes
 - c. International Economy
 - i. Price of gas, etc.
 - ii. Market Dynamics
 - d. Fisheries Certification Issues and Drivers
 - e. Extreme weather and related events (however unlikely)
 - i. Hurricanes
 - ii. Tsunamis
 - iii. Earthquakes
 - iv. Other

7. Considering Potential Conflicts and Opportunities- Evaluation of and Guidance regarding Emerging Factors on Fishery and Managed Species
 - a. Warming coastal waters and more stochastic climate
 - i. Exiting fish stocks
 - ii. Emergent Fisheries
 - iii. Change in production
 - b. Invasive Species
 - c. Other
8. Transition Strategies
 - a. Incorporation of EAFM elements into Council's Existing FMPs
 - i. Incorporating ecosystem considerations in discussion of OYs
 - ii. Risk Analyses
 - iii. Establish Performance Measures to evaluate
 - b. Coordinate common issues and elements in the ecosystem across FMPs
 - i. Formally evaluating tradeoffs across FMPs
 - ii. Seeking analytical and regulatory efficiencies
 - c. Long term strategic plan to fully incorporate ecosystem considerations into fisheries management
 - i. State of the Ecosystem(s) Report
 - ii. From Guidance to Policy
 - iii. Spatial considerations
 - d. Fisheries in Context of Ecosystem Based Management (cf. IEAs, CMSP, etc.)
9. Conclusions and Summary
 - a. Not meant to prescribe, but rather to coordinate, synthesize and integrate
 - b. Meant to identify potential threats and risks
 - c. Meant to codify Council Priorities among given conflicts
 - d. Certainly intended to be a living document