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DRAFT Northeast Regional Implementation Plan of the Ecosystem- Based Fishery Management Roadmap

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Mid-Atlantic Fishery Management Council EOP Committee
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Presentation overview

- Background Review
 - EBFM Policy
 - National EBFM Roadmap
- Regional Roadmap Implementation Plan Content
 - Overview
 - Actions and Milestones
 - Next Steps

May 23, 2016, Policy Directive (01-120)

- Defines EBFM;
- Describes the benefits of EBFM;
- Discusses how EBFM relates to existing management legal authorities and requirements;
- Establishes a framework of guiding principles to enhance and accelerate the implementation of EBFM by the agency and its partners, when EBFM would further improve fisheries decision-making, provide social or economic benefits, and/or provide desired ecological outcomes; and
- Builds on the agency's (and its partners') past progress and clarify the agency's commitment to integrating its management programs for living marine resources and their habitats under changing climate, ecological, and ocean conditions.

November 16, 2016, Nat'l Roadmap (01-120-01)

Guiding Principles from Policy Directive

1. Implement ecosystem-level planning
 - Engagement Strategy
 - Fishery Ecosystem Plans
2. Advance our understanding of ecosystem processes
 - Science to Understand Ecosystems
 - Ecosystem Status Reports
3. Prioritize vulnerabilities and risks to ecosystems and their components
 - Ecosystem-Level Risk Assessment
 - Managed Species, Habitats and Communities Risk Assessment
4. Explore and address trade-offs within an ecosystem
 - Modeling Capacity for Trade-offs
 - Management Strategy Evaluations
5. Incorporate ecosystem considerations into management advice
 - Ecosystem-Level Reference Points
 - Ecosystem Considerations for Living Marine Resources
 - Integrated Advice for Other Management Considerations
6. Maintain resilient ecosystems
 - Resilience
 - Community Well Being

National Roadmap

- Recommended Actions based on Policy Statement Guiding Principles
 - Mapped to Road Map Core Components
 - Stated as Goals with Action Items and General Timeframe for Completion

National Roadmap Example

- Principles 2a and 2b:
Science to Understand Ecosystems and Ecosystem Status Reports

Recommended Actions

EBFM Policy Statement Guiding Principles	#	EBFM Road Map Core Components	Overarching Goal	Action Items	Timing
<i>Advance our understanding of ecosystem processes</i>					
	2a	Science to Understand Ecosystems	Have robust, innovative, Internationally-recognized science programs to support management	Advance resources to conduct EBFM	Continuing
<i>Conduct Science to Understand Ecosystems</i>					
				Develop capacity for NOAA Fisheries to conduct end-to-end ecosystem studies	Mid
				Conduct biennial EBFM Science & Management Conference	Mid
				Develop and maintain core data and information streams	Continuing
				A national review of the data collection programs across a wide range of disciplines, including but beyond the typical abundance and basic biological data.	Mid
	2b	Ecosystem Status Reports	Have ESRs for most of our 12 LMEs	Conduct a national review of existing ESRs to assess Fisheries Science Center (FSC) indicator information needs to identify where ESRs address similar indicators across LMEs	Short
<i>Provide Ecosystem Status Reports for each Large Marine Ecosystem</i>					
				Establish routine, regular and dynamic reporting of ESRs for each LME	Mid

Regional Roadmap Implementation Plan Purpose

- Coordinate regional science and management EBFM priorities that support sustainable fisheries management by choosing appropriate Road Map actions and describing applicable milestones over the next 5 years.
- Build collaborative relationships among the regions, centers, and Councils to ensure alignment in achieving EBFM priorities.
- Describe engagement strategies that will increase awareness, partnerships, and support for these priority actions with stakeholders.
- Provide a method to document progress implementing EBFM through annual reviews and updates.

Regional Roadmap Implementation Plan

- Northeast Region
 - Marine waters of the U.S. from Cape Hatteras, NC through Gulf of Maine
 - Four Ecological Production Units
 - Scotian Shelf
 - Gulf of Maine
 - Georges Bank
 - Mid-Atlantic Bight

Regional Implementation Plan Expected Outcomes and Benefits

- NE Center: Longstanding pioneer in ecosystem science; efforts to continue and expand
- Increased and ongoing commitment to integrating EBFM-focused principles and considerations into management
- Increased EBFM coordination and collaboration between Center, GARFO, partners

Regional Implementation Plan Actions and Milestones

Implement Ecosystem-Level Planning

- Engagement/Participation with partners and stakeholders in EBFM process
- Center (Sean Lucey) and GARFO (Mike Ruccio) points of contact established
- Hiring Ecosystem policy analyst within GARFO SFD (ca. Fall 2018)
- Ongoing and increased support to Councils' ecosystem-related working groups
- Establishment of transboundary EBFM working group
- Northeast/Southeast working group
- Coordination across NOAA offices: Habitat, Chesapeake Bay Office; Sea Grant, etc.

Regional Implementation Plan Actions and Milestones

Implement Ecosystem-Level Planning

- Support development of Fishery Ecosystem Plans
- Different approaches by Mid-Atlantic (Ecosystem Approaches to Fisheries Management) and New England Council (Fishery Ecosystem Plan for Georges Bank)
- Ongoing support to both Councils on existing and new efforts
- Contribute to efforts as Atlantic States Commission develops ecosystem approaches
- Coordination through GARFO Ecosystem Fishery Policy Analyst
- Project to catalog how ecosystem considerations are being incorporated in current regional management efforts

Regional Implementation Plan Actions and Milestones

Advance Understanding of Ecosystem Processes

- Conduct Ecosystem Science
- Align resources to conduct EBFM in conjunction with regional and national strategic plans (e.g., National Climate Science Strategy and Stock Assessment Improvement Plans)
- Continued development of models for end-to-end ecosystem studies
- Develop and maintain core data and info streams (i.e., surveys, food habits, oceanography); finalize Fishery-Dependent Data Initiative
- Provide routine, regular, and dynamic ecosystem status reports for each LME (annual Status of Ecosystem (SOE) reports to the Council); Center reference document on SOE indicator development

Regional Implementation Plan Actions and Milestones

Prioritize Vulnerabilities and Risk to Ecosystems and their Components

- Identify cumulative risk across LMRs, habitats, ecosystem functions, and communities; vulnerability to human and natural pressures
- Several systematic risk assessments complete (climate vulnerability, index-based Mid-Atlantic, habitat vulnerability and assessment prioritization); additional planned
- Support Council habitat-related activities
- Ecosystem-related terms of reference in assessments, ABC control rules; climate change considered in habitat evaluation, Section 7 consultations
- Fishing community resiliency workshops; next steps being developed

Regional Implementation Plan Actions and Milestones

Explore and Address Ecosystem Trade-offs

- Bio and economic modeling and management strategy evaluation (MSE) to analyze trade-offs and provide ecosystem-wide advice
- Simulation testing of multi-model inference
- Develop review processes for ecosystem models
- Develop system-level MSEs
- Explore and develop ecosystem-based harvest control rules

Regional Implementation Plan Actions and Milestones

Incorporate Ecosystem Considerations into Management Advice

- Wide variety of development related to ecosystem management
- Evaluate and explore estimating and using aggregate group harvest limits, eco production measures, and/or other ecosystem reference points
- Develop ecosystem control rules that measure cross-pressure and cumulative impacts
- Develop and track stock status indices for when ecosystem considerations are in use
- Support development of ecosystem terms of reference in assessments, ABC control rules, scientific and technical committee review processes

Regional Implementation Plan Actions and Milestones

Incorporate Ecosystem Considerations into Management Advice

- Wide variety of development related to ecosystem management
- Explore use of ecosystem-level information in habitat and protected resource-related reviews (e.g., protected resource recovery near- and long-term during potential food web changes)
- Finalize and implement National Bycatch Reduction Strategy
- Evaluate ecosystem effects of aquaculture development

Regional Implementation Plan Actions and Milestones

Maintain Resilient Ecosystems

- Evaluate measures of ecosystem and community resiliency
- Track ecosystem reference points through the State of the Ecosystem reports
- Develop additional evaluations of ecosystem-related goods and services
- Calculate annual socio-economic indicators as a measure of community health

Regional Implementation Plan Next Steps

Public roll out of draft plan

- May CCC in Sitka: Preliminary presentation of draft plans
- June - September 2018 – Draft implementation plans presented for full Council review and made available for public comment.
- October 2018 – Revision of regional and headquarters implementation plans based on input received.
- November 2018 – Review of final plans by Regional Leadership (RA, SD, and Council ED/Executive Committee) and headquarters plan review by HQ Office Directors, NMFS Leadership Council, and CCC.
- December 2018 – Review, approval, and public release of final plans.

To submit comments on the Regional EBFM Roadmap
Implementation Plan:

nmfs.ne-ebfm@noaa.gov

We look forward to your comments on this draft plan.

Please consider the following questions:

- Given the activities in the plan, which align well with Council priorities?
- Are any Council priorities not reflected in the plan?
- Are there specific times within the Council process that engagement on EBFM would be useful?

Questions?

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National EBFM Policy and Roadmap: <https://www.fisheries.noaa.gov/insight/ecosystem-based-fisheries-management>

Regional Implementation Plan: <https://www.fisheries.noaa.gov/national/ecosystems/ecosystem-based-fishery-management-draft-implementation-plans>

To submit comments on the Regional EBFM Roadmap until September 30: nmfs.ne-ebfm@noaa.gov