Industry-funded Monitoring
Omnibus Amendment

*Omnibus and Mackerel Alternatives*

By Aja Szumylo
Mid-Atlantic Fishery Management Council Meeting
August 11, 2015
Presentation Overview

• Recap of Omnibus Alternatives
• Mackerel alternative packages
• Update on economics [survey, RFP, costs]
• Update on MWT Portside and EM
• Update on Timeline
Discussion Points and NEFMC Committee Motions

• Most recent NEFMC Herring and Observer Policy Committee motions included in briefing book

• Will highlight relevant motions and discussion points throughout presentation
Purpose and Need

- Allow use of industry funding with federal funding to fund monitoring programs

- Establish monitoring coverage targets for the Atlantic herring and Atlantic mackerel fisheries
General Approach

• Individual FMPs specify coverage targets
  – NOT mandatory coverage levels
• Tool to approve Council’s desired levels of monitoring above statutory requirements, without NMFS commitment in years when funding is unavailable
Key results if adopted

This amendment would...

• Establish a standardized structure for industry funded programs
• Set coverage targets for herring + mackerel FMPs

This amendment would not...

• Set coverage targets for FMPs other than herring + mackerel
• Result in a guaranteed coverage level for herring + mackerel
Two sets of alternatives

• Omnibus alternatives
  – Apply to all MAFMC and NEFMC FMPs

• Herring and mackerel alternatives
  – Only apply to the herring or mackerel FMPs
OMNIBUS ALTERNATIVES
Omnibus Alternatives

• Alternative 1: No Standardized Industry-Funded Monitoring Programs (No action)
• Alternative 2: Standardized Industry-funded Monitoring Programs
  • Standardize cost responsibilities
  • Framework adjustment process for industry-funded monitoring programs
  • Standardized industry-funded monitoring service provider requirements
  • Prioritization process
**Omnibus Alternative 2:**
Standardized cost responsibilities

<table>
<thead>
<tr>
<th>NMFS (Administrative) Costs</th>
<th>Industry (Sampling) Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities and labor for training and debriefing</td>
<td>Program management and provider overhead</td>
</tr>
<tr>
<td>NMFS-issued gear</td>
<td>Salary and per diem for training and debriefing</td>
</tr>
<tr>
<td>Certification</td>
<td>Equipment</td>
</tr>
<tr>
<td>Vessel selection</td>
<td>Deployments and sampling</td>
</tr>
<tr>
<td>Data processing</td>
<td>All other costs</td>
</tr>
<tr>
<td>Compliance and safety liaison</td>
<td></td>
</tr>
</tbody>
</table>
Omnibus Alternative 2: Framework Adjustment Process

- Details of any industry-funded monitoring program (at-sea, dockside, or electronic monitoring) would be specified/modified in a framework to the relevant FMP.

- Details may include, but are not limited to:
  1. Level and type of coverage target
  2. Rationale for level and type of coverage
  3. Minimum level of coverage necessary
  4. Consideration of coverage waivers
  5. Process for vessel notification and selection
  6. Process for payment of industry cost responsibilities
  7. Standards for monitoring service providers
  8. Any other measures necessary
Omnibus Alternative 2: Monitoring Service Providers

• Industry contracts with a service provider for monitors or camera systems + review
• Sets up general service provider requirements for at-sea, dockside, and electronic monitoring service providers for all New England and Mid-Atlantic FMPs
• If Councils wish to deviate, could do so on an FMP-by-FMP basis
Omnibus Alternative 2: Prioritization Process

Reminder of Approach:

• Individual FMPs specify coverage targets
• A prioritization process used to determine actual coverage rates for each FMP based on available Federal funding
• Process addresses both New England and Mid-Atlantic FMPs
Omnibus Alternative 2: Prioritization Process

• Deliberative
  • Alternative 2.1 – NMFS-led
  • Alternative 2.2 – Council-led

• Formulaic
  • Alternative 2.3 – Proportional
  • Alternative 2.4 – Coverage Ratio-based
  • Alternative 2.5 – Coverage Ratio-based
HERRING AND MACKEREL COVERAGE TARGET ALTERNATIVES
Selection of Coverage Alternatives

How should coverage alternatives be compared?
(p. 11 of discussion document)

• Information Collected
  – Target species catch accounting
  – Non-target species catch accounting
  – Scientific information

• Program Cost
  – NMFS administration cost
  – Cost to industry per seaday
## Comparison of Monitoring Types (p. 12)

<table>
<thead>
<tr>
<th></th>
<th>NEFOP Observer</th>
<th>At-Sea Monitor</th>
<th>Electronic Monitoring</th>
<th>Portside Sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education Requirements</strong></td>
<td>Bachelor’s Degree*</td>
<td>High School Diploma or Equivalency</td>
<td>None</td>
<td>High School Diploma or Equivalency</td>
</tr>
<tr>
<td><strong>Data Collected on Retained Catch</strong></td>
<td>High Volume Sampling (effort, species comp)</td>
<td>None</td>
<td>Verify retention of catch</td>
<td>Species Composition</td>
</tr>
<tr>
<td><strong>Data Collected on Discarded Catch</strong></td>
<td>High Volume Sampling (fishing effort, species comp, slippage)</td>
<td>Species composition and slippage</td>
<td>Frequency of discard events</td>
<td>None</td>
</tr>
<tr>
<td><strong>Biological Sampling</strong></td>
<td>Age and length data</td>
<td>Age and length data?</td>
<td>None</td>
<td>Age and length data?</td>
</tr>
<tr>
<td><strong>Supplemental Research Projects</strong></td>
<td>Collects additional data as requested</td>
<td>None</td>
<td>None</td>
<td>Additional data as requested</td>
</tr>
</tbody>
</table>

* Exceptions may be made for individuals with appropriate work experience
Goals for Mackerel Monitoring

• **Amendment 14 Purpose A: "Implement Effective RH/S Catch Monitoring"** – ...implement monitoring programs sensitive and robust enough to spatial and temporal variability of RH/S distributions to generate good RH/S catch estimates.

• NEFMC Committee motions to revise herring monitoring goals:
  – Focus on accuracy of catch estimates in the fishery
  – Catch caps
  – Affordability

• **DISCUSSION POINT #1 (p. 27)**
## Non-target catch accounting (p. 14)

### Table 2

<table>
<thead>
<tr>
<th>Information Collected</th>
<th>Self-Reporting</th>
<th>Independent monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vessel</td>
<td>Dealer</td>
</tr>
<tr>
<td>River herring and shad catch cap monitoring</td>
<td>Used for total retained</td>
<td>Used to expand rate to all trips</td>
</tr>
</tbody>
</table>

### Ability to meet data need:

- **High**
- **Medium**
- **Low**
- **N/A**
Current Mackerel Alternatives (p. 16)

• Mackerel Alternative 1: No coverage target specified for industry-funded monitoring programs (No action)

• Mackerel Alternative 2: Coverage target specified for industry-funded monitoring programs
  – Permit-based alternatives:
    • 100% NEFOP-equivalent coverage on MWT & Tier 1 SMBT; 50% coverage on Tier 2 SMBT; 25% on Tier 3 SMBT
    • 50, 75 or 100% At-sea monitor (with river herring and shad sampling) coverage target on limited access midwater trawl and Tier 1 SMBT mackerel vessels
  – Fleet-based alternatives:
    • NEFOP-equivalent coverage on MWT Fleet to achieve a 30% CV on river herring and shad catch
    • Electronic monitoring and portside sampling on MWT Fleet
  – Other alternatives:
    • Wing vessel exempt from coverage; vessels prohibited from carrying fish
    • Allow waivers
    • Selected coverage levels expire or re-evaluated after 2 years
Suggested Range of Mackerel Alternatives (p. 17)

<table>
<thead>
<tr>
<th>Gear Type</th>
<th>MWT</th>
<th>SMBT</th>
<th>SMBT</th>
<th>SMBT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit Categories</td>
<td>All LA Tiers</td>
<td>Tier 1</td>
<td>Tier 2</td>
<td>Tier 3</td>
</tr>
<tr>
<td>Alt 1: No Action</td>
<td>SBRM</td>
<td>SBRM</td>
<td>SBRM</td>
<td>SBRM</td>
</tr>
<tr>
<td>Alt 2: Coverage Targets*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt 2.1: MSB Amend 14</td>
<td>100% NEFOP</td>
<td>100% NEFOP</td>
<td>50% NEFOP</td>
<td>25% NEFOP</td>
</tr>
<tr>
<td>Alt 2.2: Permit-Based ASM Coverage</td>
<td>25, 50, 75, 100% ASM</td>
<td>25, 50, 75, 100% ASM</td>
<td>SBRM (No Action)</td>
<td>SBRM (No Action)</td>
</tr>
<tr>
<td>Alt 2.3: Permit-Based Combination Coverage</td>
<td>EM &amp; Portside</td>
<td>25, 50, 75, 100% ASM</td>
<td>SBRM (No Action)</td>
<td>SBRM (No Action)</td>
</tr>
<tr>
<td>Alt 2.4: Fleet-Based Combination Coverage</td>
<td>EM &amp; Portside</td>
<td>SBRM (No Action)</td>
<td>SBRM (No Action)</td>
<td>SBRM (No Action)</td>
</tr>
</tbody>
</table>

*Includes Sub-Options: (1) Waiver Allowed, (2) Wing Vessel Exemption, (3) 2 Yr Sunset, and (4) 2 Yr Re-Evaluation
## Revised Range of Herring Alternatives (p. 15)

<table>
<thead>
<tr>
<th>Gear Type</th>
<th>Purse Seine</th>
<th>MWT</th>
<th>Bottom Trawl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit Categories</td>
<td>A and B</td>
<td>A - E</td>
<td>A and B</td>
</tr>
<tr>
<td>Alt 1: No Action</td>
<td>SBRM</td>
<td>SBRM</td>
<td>SBRM</td>
</tr>
<tr>
<td>Alt 2: Coverage Targets*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alt 2.1: Herring Amendment 5</td>
<td>100% NEFOP</td>
<td>100% NEFOP</td>
<td>100% NEFOP</td>
</tr>
<tr>
<td>Alt 2.2: Permit-Based ASM Coverage</td>
<td>25, 50, 75, 100% ASM</td>
<td>25, 50, 75, 100% ASM</td>
<td>25, 50, 75, 100% ASM</td>
</tr>
<tr>
<td>Alt 2.3: Permit-Based Combination Coverage</td>
<td>25, 50, 75, 100% ASM</td>
<td>EM &amp; Portside</td>
<td>25, 50, 75, 100% ASM</td>
</tr>
<tr>
<td>Alt 2.4: Fleet-Based Combination Coverage</td>
<td>SBRM (No Action)</td>
<td>EM &amp; Portside</td>
<td>SBRM (No Action)</td>
</tr>
<tr>
<td>Alt 2.5: Am 5 Groundfish Closed Area Coverage</td>
<td>SBRM (No Action)</td>
<td>100% NEFOP</td>
<td>SBRM (No Action)</td>
</tr>
<tr>
<td>Alt 2.6: New Groundfish Closed Area Coverage</td>
<td>SBRM (No Action)</td>
<td>[Same as Category A+B]</td>
<td>SBRM (No Action)</td>
</tr>
</tbody>
</table>

*Includes Sub-Options: (1) Waiver Allowed, (2) Wing Vessel Exemption, (3) 2 Yr Sunset, (4) 2 Yr Re-Evaluation, and (5) 25 mt threshold*
DISCUSSION POINT #2

• Does Council support repackaging of alternatives?
• How to proceed with the Amendment 14 preferred coverage alternative?
• Applicability of alternatives?
  – NE Committees motion to address “operational differences” in fleet
  – Amendment 14 intended coverage for trips that land over 20,000 lb mackerel
  – Include 25mt threshold proposed for herring FMP?
  – Some other threshold?
Herring/Mackerel Economics Survey (p. 19)

• Expanded economics survey in response to concern about previous illustration of economic impacts

• Survey instrument collects cost of:
  – Observer collected costs (fuel, food, oil, water, supplies, bait, damage)
  – Repairs/maintenance
  – Insurance
  – Payments to crew
  – Mooring/dockage

• 16 out of 26 vessels provided responses
RFP for Herring/Mackerel (p. 19)

- MAFMC RFP to get cost estimates for herring/mackerel portside and at-sea monitoring programs
- Similar RFP used to solicit EM costs
- Only received 2 applications
- Instead going to use public estimates for other, similar programs
## Estimate of Industry Cost Responsibilities (p. 20-21)

<table>
<thead>
<tr>
<th>Table 8</th>
<th>NEFOP</th>
<th>ASM</th>
<th>EM</th>
<th>Portside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per seaday cost to industry</td>
<td>$816</td>
<td>$710 (max)</td>
<td>[PENDING]</td>
<td>$106</td>
</tr>
</tbody>
</table>
Electronic Monitoring (EM) and Portside Sampling (p. 22)

- May be a more cost effective way to monitor herring and mackerel fisheries
- Coverage would initially focus on MWT fleet
  - Fewer than 20 vessels
  - ME to NJ
  - Harvests majority of herring (73%) and river herring and shad in herring and mackerel fisheries (57%)
  - Discard less than 5% of catch at sea
EM Alternative

• Electronic Monitoring used to:
  – Verify retention of catch for portside sampling
  – Possibly used to verify compliance with discard reporting requirements (i.e., released catch affidavits)

• Sampling design
  – Carry EM for duration of fishing year
  – EM video footage recorded throughout entire trip or around haulback
  – EM video footage sampled (either 100% or less than 100%) to verify retention
  – Hard drives for storing EM data will need to be switched out between fishing trips
Individual Vessel Monitoring Plans

• NMFS would specify IVMP requirements in regulation
• Each vessel would develop its own IVMP
• IVMPs would be approved and reviewed bi-annually or upon adjustment
• IVMPs would address:
  – Discard documentation
  – Equipment operation and configuration
  – Catch handling protocol
  – Data storage/sampling/transfer protocols
Retention Requirements

• Upon implementation, MWT fishery continues to operate as it has in the past
• Through IVMPs, NMFS can develop and modify retention requirements
• Maximized and optimized retention are options for retention requirements
• NMFS can define retention, if necessary, after NMFS determines camera capabilities
DISCUSSION POINT #3 (p.27):

• June MAFMC motion recommending pilots for EM for Mid-Atlantic fisheries
• July Herring/Observer Policy Committee motion recommends a “pre-implementation plan”

• Does the MAFMC support the pre-implementation approach in lieu of a pilot program?
• If not, seeking clarification on the scope/scale of EM pilot programs
Portside Sampling Alternative

• Portside sampling used to:
  – Verify amount/species composition of catch in the herring and mackerel fisheries
  – Help track catch against caps for RH/S and haddock

• Sampling would occur in specific ports

• Service provider model would be developed during implementation
Portside Sampling Alternative (p. 25)

Sampling design

– Sample MWT trips in port
– Methodology consistent with NEFOP protocols
– Basket samples taken at specific intervals
– Baskets sorted and weighed by species
– Species composition of sub-samples extrapolated to total catch based on vessel hail weight
– Actual weights verified against VTR
– Age and length data could also be collected
## Timeline

<table>
<thead>
<tr>
<th>Dates</th>
<th>Meeting/Deadline</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2015</td>
<td>Herring and Observer Policy Committee Meetings</td>
<td></td>
</tr>
<tr>
<td>September 11, 2015</td>
<td>NEFMC Briefing book deadline</td>
<td>Revised EA complete for release</td>
</tr>
<tr>
<td>September 29 – October 1, 2015</td>
<td>NEFMC Meeting</td>
<td>NEFMC selects preferred alternatives</td>
</tr>
<tr>
<td>October 6 – 8, 2015</td>
<td>MAFMC Meeting</td>
<td>MAFMC selects preferred alternatives</td>
</tr>
<tr>
<td>October/November 2015</td>
<td></td>
<td>30-day comment period on draft EA</td>
</tr>
<tr>
<td>January 2016</td>
<td>NEFMC Meeting</td>
<td>NEFMC takes final action</td>
</tr>
<tr>
<td>February 2016</td>
<td>MAFMC Meeting</td>
<td>MAFMC takes final action</td>
</tr>
<tr>
<td>March - June 2016</td>
<td></td>
<td>EA finalized, proposed rule and final rulemaking</td>
</tr>
<tr>
<td>January 2017</td>
<td></td>
<td>Final rule effective</td>
</tr>
</tbody>
</table>
Questions?
Discussion points (p. 27)

• Discussion point #1
  – Refinement of mackerel monitoring goals

• Discussion point #2
  – Council support for revised range of mackerel alternatives
  – Amendment 14 alternative [Mackerel Alt 2.1]?
  – Applicability of mackerel alternative

• Discussion point #3
  – Pre-implementation plan for EM in lieu of pilot
  – If not, clarification on scope/scale of EM pilot