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MEMORANDUM

Date: **7/30/2015**

To: **Council**

From: **Jason Didden**

Subject: **Industry-Funded Monitoring Omnibus Amendment**

Following this page, please find an updated discussion document from NMFS/GARFO (who is lead on this action) regarding the Industry-Funded Monitoring Omnibus Amendment. This Amendment, which is being done jointly with New England, considers ways to increase (and fund) observer coverage beyond the Standardized Bycatch Reporting Methodology (SBRM) and also considers specific coverage levels for the Atlantic mackerel and Atlantic herring fisheries.

At the end of the tab please also find several recent joint motions from New England's Observer and Herring Committees as well as two recent letters from industry representatives regarding this action.

Draft Discussion Document

Industry-Funded Monitoring Omnibus Amendment

Mid-Atlantic Fishery Management Council Meeting
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Prepared by NOAA's National Marine Fisheries Service

Table of Contents

The New England and Mid-Atlantic Fishery Management Councils are interested in increasing monitoring and/or other types of data collection in some fishery management plans to assess the amount and type of catch, to monitor annual catch limits, and/or provide other information for management. This increased monitoring would be above and beyond coverage required through the Standardized Bycatch Reporting Methodology (SBRM), the Endangered Species Act (ESA) or Marine Mammal Protection Act (MMPA). The amount of available Federal funding to support additional monitoring and legal constraints on the sharing of costs between the National Marine Fisheries Service (NMFS) and the fishing industry have recently prevented NMFS from approving proposals for industry-funded monitoring in some fisheries, specifically Atlantic Herring Amendment 5, Atlantic Mackerel, Squid, and Butterfish Amendment 14, and Northeast (NE) Multispecies Framework Adjustment 48.

SECTION 1: Summary of Omnibus Alternatives

The purpose of this action is to consider measures that would allow the Councils to implement industry-funded monitoring coverage in New England and Mid-Atlantic fishery management plans. This amendment would allow industry funding to be used in conjunction with available Federal funding to pay for additional monitoring to meet FMP-specific coverage targets. The concept of a monitoring *coverage target*, as opposed to a mandatory monitoring coverage level, allows NMFS to approve new monitoring programs without committing to support coverage levels above appropriated funding or before funding is determined to be available. The realized coverage in a given year would be determined by the amount of Federal funding available to cover NMFS cost responsibilities in a given year. Fishery management plans interested in coverage above SBRM would set coverage targets in an individual fishery management plan action (i.e., a framework adjustment or amendment). The realized coverage for the fishery in a given year would fall somewhere between no additional coverage above SBRM and the specified coverage target.

To streamline the development and evaluation of future industry-funded monitoring programs, this amendment considers: (1) standard cost responsibilities associated with industry-funded monitoring for NMFS and the fishing industry, (2) a process for FMP-specific industry-funded monitoring to be implemented via a future framework adjustment action, (3) standard administrative requirements for industry-funded monitoring service providers, and (4) a process to prioritize available Federal funding for industry-funded monitoring across FMPs. The scope of the amendment is limited to those fisheries that are prosecuted in the Federal waters of the Greater Atlantic Region and managed through an FMP developed by either the Mid-Atlantic or New England Council. This amendment is being done as an omnibus to ensure consistency for industry-funded monitoring programs across New England and Mid-Atlantic FMPs. **No individual FMP would be subject to an industry-funded monitoring program as a result of implementation of the omnibus portions of this action (other portions of this action affect herring and mackerel specifically, and could implement industry funded programs for these fisheries).** Rather, any FMP that wishes to develop an industry-funded monitoring

program would need to develop the program that meets the specifications of this action in a separate framework or amendment.

Standardized cost responsibilities. The action alternative would include standard cost responsibilities between NMFS and the industry for supporting monitoring programs targeting coverage above and beyond SBRM. Because there are legal requirements that dictate cost responsibilities, certain costs must be borne by NMFS. NMFS cost responsibilities would be codified into regulation for industry-funded monitoring programs developed under New England and Mid-Atlantic fishery management plans. The proposed responsibilities are already in operation in the Atlantic Sea Scallop and NE Multispecies FMPs, although the cost responsibilities are not explicitly defined in those plans.

NMFS would be responsible for funding the costs to set standards for, monitor performance of, and support industry-funded monitoring programs. These program elements would include:

- The labor and facilities costs associated training and debriefing of monitors
- NMFS-issued gear (e.g., observer or at-sea monitor computers or tablets for recording information on observed hauls)
- Certification of monitoring providers and individual monitors; performance monitoring to maintain certificates
- Developing and executing vessel selection
- Data processing
- Costs associated with liaison activities between service providers, and NMFS, Coast Guard, Councils, sector managers and other partners

Framework Adjustment Process. The action alternative would include the ability for Councils to implement industry-funded monitoring programs, including at-sea monitoring, dockside monitoring, or electronic monitoring, through framework adjustments or amendments to the relevant fishery management plan. The details necessary for the consideration of these types of industry-funded monitoring program 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 to meet coverage goals, (4) consideration of coverage waivers if coverage target cannot be met, (5) process for vessel notification and selection, (6) process for payment of industry cost responsibilities, (7) standards for monitoring service providers, and (8) any other measures necessary to implement the industry-funded monitoring program. Additional National Environmental Policy Act (NEPA) analysis would be required for any action implementing and/or modifying industry-funded monitoring programs regardless if it required a framework adjustment or full amendment.

Monitoring Service Providers. The action alternative would include standard administrative requirements for industry-funded monitoring service providers, including at-sea monitoring, electronic monitoring, and dockside monitoring. The SBRM Omnibus Amendment modified the scallop industry-funded observer service provider requirements (at 50 CFR 648.11(h) and (i)) to apply to all New England and Mid-Atlantic fishery management plans. However, the SBRM Amendment does not address service provider requirements for other types of industry-funded

monitoring programs. The action alternative would modify the SBRM observer service provider approval and certification process to be a monitoring service provider approval and certification process that would apply to all monitoring service providers for all New England and Mid-Atlantic FMPs.

Prioritization Process. The action alternative includes a prioritization process to allocate available Federal funding across FMPs to cover NMFS cost responsibilities for coverage targets above and beyond SBRM requirements. When industry-funded monitoring programs and coverage levels exist for multiple fishery management plans (e.g., if industry-funded monitoring programs are established in both the herring and mackerel plans), and when Federal funding is not sufficient to cover NMFS cost responsibilities to achieve coverage levels across the plans, the Councils and NMFS must decide how to allocate available Federal funding. Available Federal funding refers to any funds in excess of those allocated to meet SBRM or other existing monitoring requirements. The prioritization processes options outlined in the action alternative would guide the allocation of available Federal funding to cover NMFS cost responsibilities, and would determine which industry-funded monitoring programs would operate for a given year and which would not.

There are five options considered to prioritize available Federal funding across established industry-funded monitoring programs. Two of the alternatives (Omnibus Alternatives 2.1 and 2.2), termed the "discretionary alternatives," require NMFS or the Council to evaluate the design of the established industry-funded monitoring programs when deciding how to allocate funding. These prioritization processes provide the Councils and NMFS with more discretion to make trade-offs between industry-funded monitoring programs designed to meet different goals, but also require more recurring analysis and resources. The primary difference between these two alternatives is who (NMFS or Councils) would lead the prioritization process and analysis. Three of the alternatives (Omnibus Alternatives 2.3, 2.4, and 2.5), termed the "formulaic alternatives," use formulaic approaches, eliminating much of the discretion and analytical burden of the discretionary alternatives. However, the formulaic approaches may reduce the effectiveness of the resulting outcome.

The following section provides additional description of how the Federal budget for monitoring is decided each year, how the changes in the recent Greater Atlantic Region SBRM Amendment affect the future use of regional monitoring funding, the existing industry-funded monitoring programs in the Greater Atlantic Region, and why it is necessary to administer new industry-funded monitoring programs differently than current programs.

How is the Federal budget for monitoring decided each year?

Each year, the White House Office of Management and Budget submits a budget request for the entire Federal government for the budget year starting in October. The budget request contains numerous funding lines and Congress makes the final determination on that request. Each of these lines is accompanied by a brief description which explains to Congress and the public how the funding in that line will be used. Funds cannot be used for activities that are not included in the description of the budget line, or as directed by Congress in appropriations bills.

How and why were funding lines changed related to SBRM?

The Court order in *Oceana* v. *Locke*, which vacated the 2007 SBRM Omnibus Amendment, found legal fault with two aspects of the process used to prioritize funding for observer coverage. First, the Court found that NMFS had too much discretion in determining whether there were sufficient resources available to fully implement the estimated number of sea days needed to achieve the coefficient of variation-based (CV-based) SBRM performance standard. Second, the Court found that NMFS had too much discretion in how observer sea days were redistributed under the prioritization process. To address these two aspects of the court order, the revised SBRM established a threshold that would be used to determine what resources are available to implement the SBRM coverage in a given year, and defines a method for distributing the available observer sea days if resources are limited.

Under the revised SBRM prioritization process, the amount of money available for the SBRM will be the funding allocated to the Region under four specific historically-appropriated observer funding lines. In fiscal years 2011-2014, the Northeast Fisheries Observers funding line made up 53 percent to 59 percent of all observer funds for the Greater Atlantic Region under these four funding lines. The Northeast Fisheries Observers funding line is now fully committed to funding SBRM. The three other observer funding lines now dedicated to SBRM are allocated among different NMFS regions, including the Greater Atlantic Region, to meet national observer program needs. The total amount of the funds allocated to the Greater Atlantic Region from these three funding lines will constitute the remainder of the available SBRM funds.

Historically, the available SBRM funding has been insufficient to fully meet the CV-based performance standard for all of the fishing modes (gear type, access area, trip category, region, and mesh group combinations analyzed under SBRM). If the available funding continues to be insufficient to meet the CV-based performance standard, the SBRM amendment establishes a non-discretionary formulaic processes for prioritizing how the available observer sea-days would be allocated to the various fishing modes to maximize the effectiveness of bycatch reporting and bycatch determinations.

What funding lines are available to fund industry-funded monitoring programs?

A number of different funding lines contribute to monitoring programs in the Greater Atlantic Region.

Some of the funding lines must be used for specific monitoring programs. With implementation of the Greater Atlantic Region SBRM amendment, NMFS no longer has the flexibility to use certain funding lines as we have in the past, as described above. In addition, there are certain funding lines specifically designated for other monitoring priorities (e.g., protected species monitoring). Thus, there are certain funding lines that will not be available to support industry-funded programs, unless there is excess funding in these lines above the amount needed to meet the designated monitoring obligations for that year.

Other funding lines that include monitoring or administrative aspects of monitoring programs in their described purpose could be used to cover NMFS costs for industry-funded monitoring programs. Until the Council establishes industry-funded monitoring programs, it will not be clear what NMFS costs might be related to these new programs, and what amount and type of administrative support will be necessary. Thus it is not possible to list the funding lines that could contribute to NMFS costs for industry-funded monitoring programs at this time. If there is not enough money to cover NMFS costs related to industry-funded monitoring programs for a given year, either NMFS or the Councils would need to prioritize which programs are funded first.

How are existing industry-funded monitoring programs administered in the Greater Atlantic Region?

The Great Atlantic Region currently administers an industry-funded monitoring program for the Atlantic Sea Scallop fishery, and will be transitioning to an industry-funded monitoring program for groundfish sectors in the NE Multispecies FMP. Additional detail about the industry-funded monitoring programs for these fisheries is provided below.

The Industry-Funded Monitoring Omnibus Amendment does not currently modify the coverage levels or allocation of funding for NMFS administrative costs for the scallop or groundfish sector industry-funded monitoring programs. The standardized structure and prioritization process considered in the Industry-Funded Monitoring Omnibus Amendment could apply to groundfish sectors and/or the scallop fishery if, in a future action, the Council desires coverage above the levels currently set by these FMPs and/or if the Council wants Federal funding prioritized for NMFS infrastructure costs associated with these programs.

Groundfish Industry-funded At-Sea Monitoring. The groundfish sector at-sea monitoring (ASM) program was first developed by the Council in Amendment 16 to the Northeast Multispecies FMP (75 FR 18262; April 9, 2010). Amendment 16 stated that the primary purpose of the groundfish ASM program was to verify area fished, catch, and discards by species on sector trips, and that minimum coverage levels must meet the CV in SBRM (i.e., a 30% CV). This CV standard is achieved through a combination of SBRM (fully-NMFS funded) and ASM (industry-funded) coverage. The groundfish ASM program was designed to be an industry-funded program, but from groundfish fishing years 2010 through 2014, NMFS was able to fully fund both the NMFS and industry cost responsibilities for groundfish ASM. Framework 48 to the Northeast Multispecies FMP (78 FR 26118; May 3, 2013) further defined specific goals and objectives for the ASM program, and also clarified that the 30% CV standard for ASM should apply at the stock level (i.e., each stock of fish for the fishery as a whole). In contrast, the SBRM CV standard for groundfish applies at the stock complex level (i.e., for all groundfish stocks in aggregate).

Again, though NMFS has paid both at-sea and infrastructure costs for ASM for groundfish sectors since 2010, groundfish sectors are responsible for covering the at-sea costs for the ASM program if NMFS is unable. In a letter to the sectors dated February 24, 2015, NMFS indicated that, due to funding changes required by the SBRM Amendment (described above), industry

would be required to cover its portion of the ASM cost responsibilities before the end of the 2015 calendar year. NMFS and industry are currently working through the logistics of transitioning to an industry-funded ASM program.

Scallop Industry-funded Observer Program. NMFS incorporated the industry-funded observer program in Framework Adjustment 11 Atlantic Sea Scallop FMP in 1999 (64 FR 31144, June 10, 1999). The program first applied to the Closed Area II scallop fishery exemption program. Six subsequent management actions addressed major aspects of the industry funded observer program:

- Framework 13 to the Scallop FMP (65 FR 37903, June 19, 2000) kept the program in place for the Closed Area I, Closed Area II, and Nantucket Lightship exemption program;
- Framework 14 to the Scallop FMP (66 FR 24052, May 11, 2001) kept the program in place for the Hudson Canyon and Virginia Beach Area Access program;
- Amendment 10 to the Scallop FMP (69 FR 35194, June 23, 2004) formally included the program for all limited access scallop fishing under the area access and open area days-at-sea programs;
- Framework 16 the Scallop FMP (69 FR 63460, November 2, 2004) established observer coverage levels to meet a 30-percent coefficient of variation (CV), (a measurement of the precision of the estimate) for Closed Area 1, Closed Area II, and the Nantucket Lightship area access fisheries;
- Secretarial Emergency Rule (71 FR 34832, June 16, 2006; extension 71 FR 69073, November 29, 2006) established a mechanism for vessels to contract directly with observer service providers to resolve legal constraints of industry paying for observer coverage; and
- Amendment 13 to the Scallop FMP (72 FR 32549, June 13, 2007) formally incorporated the emergency action industry funded observer measures into the Scallop FMP.

As monitoring needs expanded and administration of the program became more efficient, the Council and NMFS ultimately expanded the scallop industry-funded monitoring program to all access areas, open areas, and to the limited access general category individual fishing quota fleet. The Council and NMFS have made minor operational modifications to the program over the years. The Scallop FMP's program is therefore a good example of an effective industry funded program that phased in changes as program needs and administration evolved.

The need for the scallop industry-funded program has consistently been to collect catch information (kept fish and bycatch) through levels of at-sea observer coverage that could not otherwise be achieved through NMFS observer program funding alone. NMFS has, and continues to be able to pay for its costs of administering the Scallop industry-funded observer program because the coverage level is primarily set through SBRM. Prior to the implementation of the SBRM, the Council concluded that industry-funded coverage levels set to achieve a 30-percent CV performance standard would appropriately reduce variability in bycatch estimates for yellowtail flounder, other finfish, and sea turtles. When the SBRM was

first implemented, this goal for monitoring the scallop fishery was included in the SBRM coverage goals. The Scallop industry-funded observer program provides funding through the set-aside that enables the scallop fishery to pay for coverage levels that meet the SBRM coverage requirement at a minimum.

The observer set-aside model works well in the scallop fishery because the high value of scallops allocated to vessels that carry an observer helps compensate the vessel for the cost of the observer. The vessel receives extra pounds or days-at-sea on each observed trip that provides additional funds to pay for the observer. However, vessel owners are required to pay for the observer even if the vessel does not catch any scallops or the additional set-aside of scallops, or if there is insufficient set-aside allocated to compensate the vessel. NMFS's goal is to set a compensation rate that covers the cost of an observer, without providing financial incentive for a vessel to desire observer coverage, which would bias sampling.

Why does this action propose to consider industry-funded monitoring programs in a different way than it is considered for the NE Multispecies and Scallop FMPs?

The Councils have been increasingly interested in requiring monitoring coverage for purposes different than those for which NMFS is legally required to provide monitoring coverage (e.g, Magnuson-Stevens Fishery Conservation and Management Act (MSA), Marine Mammal Protection Act (MMPA), Endangered Species Act (ESA)). NMFS limited budget requires that NMFS prioritize resources across competing monitoring interests. The standardized process for industry-funded programs described in the Industry-Funded Monitoring Omnibus Amendment, including the prioritization process, provides a method to address the Council's identified monitoring needs within NMFS's budget limitations.

Current Range of Omnibus Alternatives

Omnibus Alternative 1 – No standardized structure for industry-funded monitoring programs (No Action)

- No standard definition of cost responsibilities between industry and NMFS;
- No standardized framework adjustment process to implement future industry-funded monitoring programs in other FMPs;
- No standardized monitoring service provider requirements; and
- No process for prioritizing available federal funding across industry-funded monitoring programs.

Omnibus Alternative 2 – Standardized structure for industry-funded monitoring programs.

- Standard definition for cost responsibilities between industry and NMFS;
- Standard framework adjustment process to implement future industry-funded monitoring programs in other FMPs;
- Standard monitoring service provider requirements; and
- Process for prioritizing available federal funding across industry-funded monitoring programs.

Omnibus Alternatives 2.1 – 2.5 are variations on the prioritization process in Omnibus Alternative 2, and consider specific options for what to do when Federal funding is not sufficient to cover NMFS's costs to support the Council's desired coverage level for a given FMP.

1. Omnibus Alternative 2.1– NMFS-led prioritization process. NMFS prepare analysis and prioritization in consultation with the Councils.
2. Omnibus Alternative 2.2 – Council-led prioritization process. Council PDT/FMAT prepares analysis and recommended priorities to NMFS.
3. Omnibus Alternative 2.3 – Proportional prioritization process. Shortfalls in Federal funding to support industry-funded monitoring would be distributed proportionally among all industry-funded monitoring programs.
4. Omnibus Alternatives 2.4 and 2.5 – Coverage ratio-based prioritization processes. The amount of funding would be allocated to each FMP by sequentially eliminating coverage in fleets that have either the highest (2.4) or lowest (2.5) ratio of projected coverage days needed in the coming year to actual days absent from port.

***See draft EA from February 2015 on MAFMC website for full description of Omnibus Alternatives.

SECTION 2. Herring and Mackerel Alternative Packages

There are two major considerations that should drive the Council's selection of industry-funded monitoring coverage target alternatives for the herring and mackerel fisheries. These considerations are information collected and program cost.

Information Collected

The first major consideration is whether an industry-funded monitoring program alternative provides the type and quality of data necessary to meet the Council's information collection goals for a fishery. We have classified the possible information collections for the herring and mackerel fisheries into 3 broad categories:

1) Target species catch accounting: Does the monitoring program under consideration provide information on landings and discards of the target species?
2) Non-target species catch accounting: Does the monitoring program under consideration provide information to determine the species composition and amount of non-target landings and discards?
3) Scientific information: Does the monitoring program provide information to support stock assessments for target and non-target species?

This document discusses various types of industry-funded monitoring currently under consideration for the herring and mackerel fisheries (Table 1). Table 2 illustrates the ability of different monitoring types to achieve a range of information collections for the mackerel fishery. Next, this document presents revisions to the current range of industry-funded monitoring alternatives to develop comprehensive monitoring alternative packages for the herring (Tables 3) and mackerel (Tables 4) fisheries. The alternative packages in Table 3 were approved by the NEFMC's Observer Policy Committee at its July 1, 2015, meeting. The packages developed by the PDT/FMAT were intended to encompass range of ways to meet the Council's desired information collections and a range program costs. Table 5 explains how the comprehensive monitoring alternative packages match the information collections for the mackerel fishery.

With all alternative packages, the No Action data collection and monitoring (MSA, MMPA, ESA) will continue regardless of any decisions made in this amendment. The alternative packages represent information that would be collected in addition to existing data collection and monitoring.

Program Cost

The second major consideration is the cost of a monitoring program. This document discusses PDT/FMAT work to evaluate fixed and operating costs for herring and mackerel vessels, and attempts to generate cost estimates for the various types of industry-funded monitoring under consideration.

Comparison of different monitoring types under consideration for the herring and mackerel fisheries

Table 1 is intended to highlight similarities and differences between the monitoring types currently under consideration for the herring and mackerel fisheries. The differences in these monitoring types will ultimately affect the type and quality of information collected through industry-funded programs for these fisheries, as well as the overall program costs.

Table 1.	NEFOP Observer	At-Sea Monitor	Electronic Monitoring	Portside Sampling
Education Requirements	Bachelor's Degree*	High School Diploma or Equivalency	None	High School Diploma or Equivalency?
Data Collected on Retained Catch	Specialized High Volume Fisheries Sampling, including fishing effort and species composition	None	Verify retention of catch	Species Composition
Data Collected on Discarded Catch	Specialized High Volume Fisheries Sampling, including fishing effort, species composition, and slippage	Species composition and slippage	Frequency of discard events	None
Biological Sampling	Age and length data	Age and length data?	None	Age and length data?
Supplemental Research Projects	Collects additional data as requested	None	None	May collect additional data as requested?
* Exceptions may be made for individuals with appropriate work experience				

Different types of reporting and/or monitoring can provide different kinds of information with varying levels of verification.

For landings, vessel trip reports and dealer purchase reports provide dual records of reported landings with the general location coming from the vessel trip report. If specific location of catch is important, vessel monitoring systems (VMS), observers, and monitors can provide independent verification of location. Portside monitoring can provide independent verification of landings but no information on location of catch. If small amounts of incidentally-caught species are typically mixed in and retained with the target species, portside sampling may be the best way to estimate/document those landings.

For discards (of targeted or incidental species), vessel trip reports provide reported discards, but independent verification of discards is often desired. Observers and monitors can provide detailed location-specific discard information, though monitors may or may not collect species composition and may limit their data collection to confirming retention and generally documenting discarding frequency. Cameras (electronic monitoring) can also confirm retention. If retention is confirmed (by whatever means), then portside sampling can provide full catch verification. Affidavits of discard/slippage events can provide details of why discard/slippage events occur. If retention is not confirmed, then portside sampling can provide independent verification of landings composition but uncertainty regarding discards will persist (assuming observer coverage is not complete).

Biological information (age/length data) can be collected by observers/monitors at sea or dockside samplers/port agents on land.

The Industry-Funded Monitoring Amendment PDT/FMAT developed Table 2 to illustrate the ability of different monitoring types (ranked high to low) to achieve a range of data needs for the mackerel fishery. This table is based on similar tables provided in the Environmental Defense Fund's Fisheries Monitoring Roadmap (Lowman et al. 2013).

Table 2. Mackerel Matrix		Ability to meet data need: ☐ High ☐ Medium ■ Low ■ N/A								
		Self-Reporting			Independent monitoring					
Information Interests		**Vessel**	**Dealer**	**Affidavits**	**VMS**	**NEFOP Observers**	**Cameras**	**Portside**	**At-sea monitors**	**At-sea monitors**
									With sampling for species comp	Without sampling for species comp
Total mackerel catch accounting [ACL monitoring]	Verifying retained	Vessels report by species	Dealer reports by species		Can verify location fishing activity	Verifying location of fishing activity	Confirms retention (no discard estimate)	Species comp data	Verifying location of fishing activity	Confirms retention (no discard estimate)
	Quantifying discards	Vessels report by species			Can verify location fishing activity	Species comp data Estimates amount of discards	Confirms retention (no discard estimate)		Species comp data	Confirms retention (no discard estimate)
Non-target catch accounting	River herring and shad catch cap monitoring	Used for total retained		Can help with details of why slippage occurs	Can verify location fishing activity	Species comp data Estimates amount of discards	Confirms retention (no discard estimate)	Species comp data	Species comp and estimates of discarded catch	Confirms retention (no discard estimate)
Scientific information	Stock assessments for mackerel	VTR only	Dealer reports by species			Collect age, length data		Collect age, length data	Collect age, length data for discards only	
	Stock assessments for non-target species	VTR only	Dealer reports by species			Collect age, length data		Collect age, length data	Collect age, length data for discards only	

Current Range of Herring Alternatives

Table 3. Possible Range of Herring Alternatives			
Gear Type	**Purse Seine**	**MWT**	**Bottom Trawl**
Permit Categories	**A and B**	**A - E**	**A and B**
Herring Alternative 1: No Action	SBRM	SBRM	SBRM
Herring Alternative 2: Coverage Targets for IFM Program	Requires selection of sub-options (1-4) and coverage alternatives (2.1-2.4).		
Sub-Option 1: *Wavier Allowed*	Allows waivers to be issued if coverage is unavailable due to funding or logistics. Not selecting this sub-option means coverage levels selection in 2.1-2.4 would be mandatory.		
Sub-Option 2: *Wing Vessel Exemption*	Exempts wing vessels from IFM coverage targets, provided the vessel does not carry fish.		
Sub-Option 3: *2 year Sunset*	Requires coverage targets to expire 2 years after implementation.		
Sub-Option 4: *2 year Re-evaluation*	Requires coverage levels to be re-evaluated 2 years after implementation.		
Sub-Option 5: *25-mt monitoring threshold*	Exempt trips that land less than 25 mt of herring from monitoring requirement.		
~~**Herring Alternative 2.1:** Herring Am 5~~	~~100% NEFOP~~	~~100% NEFOP~~	~~100% NEFOP~~
Herring Alternative 2.2: Permit-based ASM Coverage	[50,75, 100%] ASM	[50,75,100%] ASM	[50,75,100%] ASM
Herring Alternative 2.3: Permit-based Combination Coverage	[50,75,100%] ASM	100% EM/Portside	[50,75,100%] ASM
Herring Alternative 2.4: Fleet-based Combination Coverage	SBRM (No Action)	100% EM/Portside	SBRM (No Action)
Herring Alternative 2.5: Am 5 Groundfish Closed Area Coverage (Sub-options do not apply)	N/A	100% NEFOP	N/A
Herring Alternative 2.6: New Groundfish Closed Area Coverage	N/A	[same as Category A+B monitoring requirement]	N/A

[NOTE: Committee recommended that Herring Alternative 2.1 be moved to considered but rejected]

Current Range of Mackerel Alternatives

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. The coverage alternatives below include options to either allow waivers, which would allow vessels to fish if monitoring coverage were not available due to logistics or funding, or to not allow waivers, which would limit effort to match the specified coverage target if monitoring coverage were not available due to logistics or funding.

Permit-based alternatives:

- 100% NEFOP-equivalent coverage on limited access midwater trawl & Tier 1 small-mesh bottom trawl (SMBT); 50% coverage on Tier 2 SMBT; 25% on Tier 3 SMBT
- 100% At-sea monitor (with river herring and shad sampling) coverage target on limited access midwater trawl and Tier 1 SMBT mackerel vessels
- 75% At-sea monitor (with river herring and shad sampling) coverage target on limited access midwater trawl and Tier 1 SMBT mackerel vessels
- 50% 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 Percentage Coverage on Midwater Trawl Fleet to achieve a 30% CV on river herring and shad catch (2013 estimate is 51-61% coverage necessary)
- 100% NEFOP-equivalent coverage on Midwater Trawl Fleet
- Electronic Monitoring and Portside Sampling on Midwater Trawl Fleet

Other alternatives/Options:

- Allow a wing vessel to be exempt from monitoring coverage. These vessels would be prohibited from carrying fish.
- Allow waivers, which would allow vessels to fish if monitoring coverage were not available due to logistics or funding, or prohibit waivers, which would limit effort to match the specified coverage target if monitoring coverage were not available due to logistics or funding.
- Selected coverage levels expire in 2 years after implementation.
- Re-evaluation of coverage levels 2 years after implementation.

Suggested Revisions to Mackerel Alternatives

Table 4. Possible Range of Mackerel Alternatives				
Fishery	**Mackerel**			
Gear Type	**MWT**	**SMBT**	**SMBT**	**SMBT**
Permit Categories	**All LA Tiers**	**Tier 1**	**Tier 2**	**Tier 3**
Mackerel Alternative 1: No Action	SBRM	SBRM	SBRM	SBRM
Mackerel Alternative 2: Coverage Targets for IFM Program	Requires selection of sub-options (1-4) and coverage alternatives (2.1-2.4).			
Sub-Option 1: *Wavier Allowed*	Allows waivers to be issued if coverage is unavailable due to funding or logistics. Not selecting this sub-option means coverage levels selected in 2.1-2.4 would be mandatory. This means that, if funding is unavailable, a trip would not be able to sail. If funding is available, vessels would have to acquire coverage in order to sail.			
Sub-Option 2: *Wing Vessel Exemption*	Exempts wing vessels from IFM coverage targets, provided the vessel does not carry fish.			
Sub-Option 3: *2 year Sunset*	Requires that coverage levels expire 2 years after implementation.			
Sub-Option 4: *2 year Re-evaluation*	Requires that coverage levels be re-evaluated 2 years after initial implementation.			
Mackerel Alternative 2.1: MSB Am 14	100% NEFOP	100% NEFOP	50% NEFOP	25% NEFOP
Mackerel Alternative 2.2: Permit-based ASM Coverage	[50,75,100%] ASM	[50,75,100%] ASM	SBRM (No Action)	SBRM (No Action)
Mackerel Alternative 2.3: Permit-based Combination Coverage	100% EM/Portside	[50,75, 100%] ASM	SBRM (No Action)	SBRM (No Action)
Mackerel Alternative 2.4: Fleet-based Combination Coverage	100% EM/Portside	SBRM (No Action)	SBRM (No Action)	SBRM (No Action)

Table 5. Possible Mackerel Information Collections		MAK Alt 1	MAK Alt 2.1	MAK Alt 2.2	MAK Alt 2.3	MAK Alt 2.4
		No Action (SBRM coverage only)	100% NEFOP on MWT and Tier 1 SMBT 50% NEFOP on Tier 2 SMBT 25% NEFOP on Tier 3 SMBT	ASM (50, 75, or 100%) on MWT and Tier 1 SMBT	EM/PRT on MWT ASM (50, 75, or 100%) On Tier 1 SMBT	EM/PRT on MWT Vessels
Total herring catch accounting [ACL monitoring]	Verifying retained	• VTR Reports • Dealer Reports • VMS catch reports • NEFOP observer coverage verifies location of fishing activity	Information on location of fishing activity Species composition data	Confirms retention No species composition data on retained catch	ASM - Confirms retention EM/PRT - Confirms retention; species composition data	Confirms retention Species composition data
	Quantifying discards	• VTR Reports • VMS catch reports • NEFOP observers	Discard estimate Species composition of discarded catch	Estimate and species composition data for discarded catch	ASM - Discard estimate; species composition data od discarded catch EM – Flags discarding	Flags discarding
Non-target catch accounting	Haddock catch cap monitoring [ACL monitoring]	• VTRs used for total retained • VMS catch reports • NEFOP observers collect species comp data and estimate discards • Affidavits detail why slippage occurs	Species composition data to track catch against catch caps Data on both retained and discarded catch	Estimate and species composition data on discarded catch	ASM – Estimate and species composition data on discarded catch EM/PRT - Species composition data on retained catch	Confirms retention Species composition data to track catch against catch caps
	River herring and shad catch cap monitoring	• VTRs used for total retained • VMS catch reports • NEFOP observers collect species comp data and estimate discards • Affidavits detail why slippage occurs	Species composition data to track catch against catch caps Data on both retained and discarded catch	Estimate and species composition data on discarded catch	ASM – Estimate and species composition data on discarded catch EM/PRT – Species composition data on retained catch	Confirms retention Species composition data to track catch against catch caps
Scientific information	Stock assessments for mackerel	• VTR reports • Dealer data • NEFOP observers collect age/length data	Age and length data	Age and length data on discarded catch	ASM - Age and length data on discarded catch EM/PRT - Age and length data	Age and length data on retained catch
	Stock assessments for non-target species	• VTR reports • NEFOP observers collect age/length data	Age and length data	Age and length data on discarded catch	ASM - Age and length data on discarded catch EM/PRT - Age and length data	Age and length data on retained catch
	Spawning information	• VTR reports • NEFOP observers collect age/length data	Age and length data	Age and length data on discarded catch	ASM - Age and length data on discarded catch EM/PRT- Age and length data	Age and length data on retained catch

Updates to IFM Economic Analysis for Herring and Mackerel Vessels

A previous version of the discussion document included analyses of the economic impacts of herring and mackerel coverage target alternatives. Those analyses were based on trip cost data collected via NEFOP and showed the impact of the alternatives on net revenues (gross revenues less trip costs). Because the observer program collects a limited amount of cost data, industry participants expressed concern that the impact estimation may not reflect the true impacts. In response, Jason Didden, staff of the Mid-Atlantic Fishery Management Council, offered to administer a survey of herring and mackerel vessels to collect more detailed cost information.

The survey asks vessel owners about all of their fishing costs incurred in 2014. In addition to the observer collected costs (fuel, food, oil, ice, water, supplies, bait, and damage) the cost survey collects information on the cost of repairs/maintenance, insurance, payments to crew, and mooring/dockage. These data will be used to update the impact analyses. Data will be averaged across vessel types, in terms of vessel characteristics and primary species caught, to profile representative vessels. The cost profiles of representative vessels, as adjusted by the estimated observer costs of each alternative, will be used to illustrate economic impacts. Surveys were sent to approximately 18 vessel owners (representing about 26 vessels) in the herring and/or mackerel fisheries. Surveys were sent in May and information was submitted for 16 of the 26 vessels.

RFP for cost estimates for the Herring/Mackerel ASM and Portside Monitoring Program

The Mid-Atlantic Council graciously agreed to fund a Request for Funding Proposal (RFP) to generate cost estimates for the herring and mackerel portside and at-sea monitoring programs. A similar RFP was used to solicit electronic monitoring cost estimates for an example midwater trawl fleet and program design. The RFP was released on May 14, 2015, and is included in the appendix. The program cost estimates would have been used to analyze the economic impacts of industry-funded portside and at-sea monitoring programs on limited access herring and mackerel permit holders.

In order to maintain confidentiality of the individual service providers providing portside and at-sea monitoring program cost estimates, the RFP stipulated that the project would not be funded unless at least three acceptable applications were submitted. The Mid-Atlantic Council only received two applications from service providers, so the PDT/FMAT was unable to use this method to generate cost estimates for the herring and mackerel portside and at-sea monitoring programs. Instead, the PDT/FMAT will instead use cost information from publicized estimates of industry cost responsibilities for the portside monitoring program, and the industry cost responsibility for the groundfish at-sea monitoring program, to complete the economic analysis of the various herring and mackerel coverage target alternatives.

Estimate of industry cost responsibilities associated with herring and mackerel monitoring types

This discussion document is focused on industry cost responsibilities. The full analysis for this action will include estimates for both NMFS and industry cost responsibilities.

Table 6.	NEFOP	ASM	EM	Portside
Per Seaday Cost to Industry	$816	$710 (max)	[PENDING]	$106

Description of assumptions used to generate estimates of industry cost responsibilities

NEFOP Observer Cost Estimate. The $818 per seaday industry cost responsibility related to NEFOP-type observer coverage is based on at-sea monitoring costs from October 2012 through May 2014 averaged across the three service providers. The program elements and activities covered in this cost would include, but are not limited to, costs to the provider for deployments and sampling (e.g., travel and salary for observer deployments and debriefing), equipment, costs to the provider for observer time and travel to a scheduled deployment that doesn't sail and was not canceled by the vessel prior to the sail time, and provider overhead (see cost responsibility description in appendix for additional details).

Herring/Mackerel At-Sea Monitor Cost Estimate. The $710 per seaday industry cost responsibility related to the proposed herring/mackerel at-sea monitoring program is based on the current seaday rate for the groundfish at-sea monitoring program. As described in the Draft Discussion Document re. Options for Industry-Funded Monitoring in the Herring Fishery, the design of the herring/mackerel at-sea monitoring program may result in a lower seaday rate than the groundfish at-sea monitoring program rate. In the absence of an estimate specific to the herring/mackerel at-sea monitoring program, the PDT/FMAT determined that using the groundfish at-sea monitoring seaday rate was most appropriate.

Herring/Mackerel Midwater Trawl Portside Monitor Cost Estimate. In the absence of an estimate specific to the herring/mackerel midwater trawl portside monitoring program, this document provides a cost estimate of $106 per seaday based on publicized estimates for other dockside monitoring programs (see below). In particular, the estimate is influenced by the industry costs for the NE Multispecies dockside monitoring program. The industry costs of a dockside monitoring program are generally broken into several components: Program management and overhead costs of the provider company; travel costs for the monitor to travel from home or office to offload port, for non-principle ports; and hourly salary for the monitor, including, in some instances, waiting time at the dock.

The Fisheries Monitoring Roadmap (Lowman et al., 2013) provides per seaday rates of $51 and $82 for dockside monitoring for the British Columbia Hook and Line Groundfish fishery and the Pacific Groundfish (non-whiting) IFQ fishery, respectively. The average cost per pound of groundfish landed for the NE Multispecies groundfish dockside monitoring program range ranged from $0.006 - $0.12 per pound for all sectors. The average cost *per landing event*

ranged from $36.87 - $212.32 for all sectors. The average cost per pound landed and per trip is inversely related to the average pounds landed – that is, larger trips are less expensive to monitor, by pound, than smaller trips. This was due to several factors, including that larger trips typically landed in a principle port (no roving monitor required and, depending on the location, no travel costs) and much of the cost of providing a monitor is fixed, due to the logistics of having monitors present while vessels land their catch (e.g., insurance, administrative costs).

Herring/Mackerel Midwater Trawl Electronic Monitoring Cost Estimate. NMFS has been working to generate cost estimates for a midwater trawl electronic monitoring program. The methodology used to generate the cost estimate is currently under external review.

SECTION 3: Further development of EM and Portside Monitoring Alternatives

Part I: Electronic Monitoring Used to Confirm Retention on Midwater Trawl Trips

Under alternatives that include electronic monitoring, herring and mackerel permit holders using midwater trawl gear would be required to install EM equipment, and maintain the equipment on board for the duration of the fishing year. Though the system would have to be installed on the vessel year-round, it would only need to be turned on during declared herring or mackerel trips using midwater trawl gear.

Video imagery would be used to confirm retention on midwater trawl trips to ensure that all catch is available to be sampled portside for a given trip. Video footage would be recorded around haulback, based on gear sensors, or for the full duration of the trip using a wide angle camera.[1] For analysis purposes, haulback would be defined as the time gear sensors document the start of gear deployment to some set amount of time (e.g., 30 minutes) after the time gear sensors sense the end of deployment, in order to ensure that all catch has been transferred into the hold. In addition, one wide angle camera would remain on for the duration of the trip to monitor for discard compliance.

Initially, video footage would be used to verify retention of catch for portside sampling and evaluate possibility of using EM to verify compliance with discard reporting requirements and consequence measures. Footage would not initially used to identify species, nor estimate the amount of catch released if a haul were slipped. The Councils or NMFS may expand the uses of video footage to include species identification or quantification of released catch in the future if video imagery proves useful for these purposes. Such an expansion would be done via a framework amendment.

Equipment

The EM system installed by a NMFS-approved contractor would be comprised of video camera(s), recording equipment, and other related equipment with the following components and capabilities:

- Video cameras. Video cameras would need to be mounted to provide a clear, unobstructed, well illuminated views of the area(s) where the midwater trawl gear is retrieved prior to being placed in the hold. There would need to be a sufficient number of cameras with sufficient resolution for NMFS, the USCG, and other authorized

[1] NEFOP is reviewing observer data to see how often vessels pump fish out of the hold, either to another vessel or into the water. Those data will help inform whether footage can be recorded just around haulbacks or if it needs to be collected throughout the trip.

officers/designees to determine that all catch was brought aboard the vessel after haulback. The EM system must be capable of initiating video recording at the time gear retrieval starts, and record all periods of time when the gear is being retrieved and until catch is placed in the hold or discarded.

- GPS receiver. A GPS receiver would be required to document coordinates, velocity, and heading data.
- Hydraulic and drum rotation sensors. Hydraulic sensors would be required to continuously monitor the hydraulic pressure. Drum rotation sensor would be required to continuously monitor drum rotations.
- EM control box. The system would need to include a control box that receives and stores the raw data provided by the sensors and cameras. The control box would need to contain removable hard drives and storage systems adequate to record data for the full duration of a trip (i.e., the longest expected trip length for the vessel).
- EM systems monitor. A wheelhouse monitor would be necessary to provide a graphical user interface for the harvester to monitor: 1) the state and performance of the control box, 2) information on the current date and time synchronized via GPS, 3) GPS coordinates, 4) current hydraulic pressure reading, 5) presence of a data disk, 6) percentage used of the data disk, 7) and video recording status.

NMFS would announce specifics about this equipment list, as well as any additional design requirements for the EM system, during the rulemaking and implementation process. Industry will be responsible for contracting with a NMFS-approved provider for technical and maintenance services.

Individual vessel monitoring plans (IVMPs)

IVMPs would serve as a clear plan for discard documentation, installation and maintenance, protocols for data storage and transfer, and other important information regarding a vessel's EM system. Each vessel operator/owner would be responsible for working with NMFS or a NMFS-approved contractor to develop an IVMP, and would be required to keep the IVMP aboard the vessel at all times. NMFS would specify IVMP requirements in the regulations. IVMPs contents may include, but are not limited to, information on the locations of EM system components; contact information for technical support; instructions on how to conduct a pre-trip system test; instructions on how to verify proper system functions; location(s) on deck where fish retrieval should occur to remain in view of the cameras; procedures for how to manage EM system hard drives; catch handling procedures; periodic checks of the monitor during the retrieval of gear to verify proper functioning; reporting procedures. The IVMP should minimize, as much as possible, any impact on the current operating procedures of the vessel, and should help ensure the safety of the crew. The IVMP would be reviewed bi-annually or upon adjustment by NMFS or a NMFS-approved contractor.

Data transfer

After completing a fishing trip, the vessel owner or operator would be required to mail or transmit the removable EM system hard drive(s) containing all data to NMFS or a NMFS-approved contractor, according to instructions provided by NMFS. The method of transfer that would be allowed under the EM program will be developed during implementation. Prior to departing on a subsequent trip, the vessel owner or operator would be required to install a replacement EM system hard drive(s) to enable data collection and video recording. The vessel owner or operator would be responsible for contacting NMFS or NMFS-approved contractor if they have requested but not received a replacement hard drive(s) and for informing NMFS or NMFS-approved contractor of any lapse in the hard drive management procedures described in the IVMP.

Retention requirements

Initially, this alternative would maintain the status quo retention requirements for the midwater trawl fleet. Vessels would continue to operate under the regulations and possession limits for any fisheries for which they possess permits. There is currently a prohibition on slippage on observed trips taken by vessels holding limited access herring and mackerel permits. There are also some statutory measures under the ESA and MMPA that dictate retention of protected species.

Future options for retention requirements include maximized retention and optimized retention. Under maximized retention, a vessel would be required to land all fish, including target and non-target species, excluding protected and/or prohibited species. Optimized retention could require retention of target species, but allow some discarding of certain non-target species (such as dogfish). There are a number of challenges with these retention options (such as defining the list of species to which the program would apply, how non-permitted/unmarketable landings would be handled) that can be revisited in a future action once the program has been in operation for some period of time. NMFS may use the IVMPs in lieu of regulatory changes to adjust retention requirements.

Review of EM Video Footage

Video footage of haulback events would be subsampled at some predetermined percent of review (e.g., 10 percent, 25 percent and 50 percent of haulback events), and compared to released catch affidavits or VMS reports describing slippage events that occurred on given trips. Relatively high rates of review may be required to confirm slippage is not happening at all because they are relatively rare. The rate of review will be determined by NMFS during implementation in cooperation with Council staff, but is not specified in this action because it may be more appropriate for managers of the data to determine the optimum and most cost effective rate to achieve the management goal.

Compliance measures

Review subsampling could be increased based on compliance results. For example, if a vessel is found to have undocumented slippage events during haulback on more than a specified number of trips during a fishing year, then the vessel could be subject to 100 percent haulback review for all subsequent fishing trips at the fishermen's expense for the remainder of the season and the next season, or until NMFS has determined that review levels can return to the original specified level.

Part II: Portside Sampling Used to Verify Amount and Species Composition of Landed Catch on Midwater Trawl Trips

Under alternatives that include portside sampling, herring and mackerel permit holders using midwater trawl gear would be subject to portside sampling requirements for declared herring and mackerel trips using midwater trawl gear. Portside sampling would be used to verify the amount and species composition of catch in the herring and mackerel fisheries and help track catch against catch caps for haddock and river herring/shad.

Sampling Design

The sampling design for portside sampling alternatives would be based on existing portside sampling programs for the herring fishery, administered by the states of Massachusetts and Maine, and consistent with NEFOP sampling methodology. Midwater trawl vessels returning from a declared herring or mackerel trip would be sampled portside during the offload. The level of sampling for midwater trawl trips is still being determined, but it would either be 100 percent of midwater trawl trips or another specified percentage of midwater trawl trips. It is anticipated that basket samples would be collected from the vessel's dewater box at specified intervals throughout the duration of the offload. Basket samples would be sorted and weighed by species and extrapolated to the represent the total trip based on vessel hail weight. Actual weights could be verified against the vessel trip report and/or dealer data. Age and length data could be collected consistent with NEFOP sampling methodology.

Landing Ports

Midwater trawl vessels returning from declared herring or mackerel trips would be required to land catch in specific ports. In past years, the midwater trawl fleet has landed catch in Maine (Portland, Rockland, Vinalhaven, Prospect Harbor, Jonesport, Milbridge), New Hampshire (Newington), Massachusetts (Boston, Gloucester, New Bedford), Rhode Island (Point Judith, North Kingston), and New Jersey (Cape May). The list of specific landing ports and the details of offloading requirements in those ports would be developed as part of this amendment. Alternatives that include portside sampling are not intended to restrict the landing and offloading behavior of midwater trawl vessels. Certain logistics, including weather patterns that influence the timing and location of landing, and infrastructure limitations at certain landing ports, may prevent the program from achieving 100 percent coverage in the initial year, even if funding is not an issue.

Vessel Responsibilities

Midwater trawl vessels would be responsible for offloading catch consistent with offloading requirements and contracting with a service provider to arrange a portside sampler to sample catch from declared herring and mackerel trips.

Service Provider Models

The service provider models for portside sampling are still being developed. Potential models include a formalized Federal/state agreement to administer the portside sampling program for midwater trawl vessels, such as training, scheduling, guidelines for data collection, data processing, and data reports, with service providers only being responsible for the actual data collection. Another potential model would require service providers to administer the entire portside sampling program for the midwater trawl fleet as well as the actual data collection. The availability of Federal funding to help administer the program dictates what type of observer service provide model would be used. The type of service provider model would affect industry cost responsibilities. If Federal funding is available to help administer the portside sampling program, then the industry would only be responsible for paying the costs associated with service providers collecting the portside sampling data. If Federal funds are not available to help administer the program, then service provider costs of administering the program and collecting the data would be passed along to the industry.

SECTION 4: Decision points for the Council

1. The NEFMC's Observer Policy Committee made a motion defining the problem statement for the herring portion of this action as follows:

   "*The public questions the accuracy of catch (landings and discards) estimates in the [herring and mackerel] fisheries; and there is a need to adequately estimate catch of incidental species for which catch caps apply. There is a need to develop a program that addresses an affordable monitoring program for the fishery.*"

   Does the Council support specifying that monitoring to address accuracy of catch (landings and discards) estimates and estimated the catch of incidental species for which catch caps apply (i.e., the river herring and shad catch cap on the mackerel fishery), as well as the affordability of the monitoring program are of primary importance when considering mackerel monitoring coverage targets in this action?

2. Does the Council support the revised range of mackerel alternatives presented on p. 17 of this document? Specific points of discussion include:

   a. The NEFMC Observer Policy Committee approved a motion to move Herring Alternative 2.1 (100% NEFOP-level observer coverage on Category A and B Herring Permit Holders) to Considered but Rejected. Herring Alternative 2.1 mirrored the alternative previously disapproved in Herring Amendment 5. Mackerel Alternative 2.1 (100% NEFOP-level coverage on all limited access midwater trawl and Tier 1 small-mesh bottom trawl; 50% NEFOP-level coverage on Tier 2 small-mesh bottom trawl; and 25% NEFOP-level coverage Tier 2 small-mesh bottom trawl) mirrors the alternative previously disapproved in MSB Amendment 14. How does the Council desire to move forward with Mackerel Alternative 2.1?
   b. To help address the affordability of monitoring, the NEFMC Observer Policy Committee approved a motion that industry-funded monitoring requirements would only apply to trips landing 25 mt or more of herring. Amendment 14 intended the additional monitoring coverage requirements to only apply to trips that intend to land greater than 20,000 lb of mackerel. Does the Council continue to support applying industry-funded monitoring coverage to trips that land greater than 20,000 lb of mackerel? Should the PDT/FMAT analyze other thresholds (i.e., the 25 mt threshold described in sub-option 5 on p. 15)?

3. The Council passed a motion at the June meeting that "*before implementation of any electronic monitoring/camera program in the jurisdiction of the MAFMC, the Council recommends to the agency that a Council-approved pilot program be conducted with the affected fishery.*"

The NEFMC Observer Policy Committee approved a motion that prior to the implementation of any electronic monitoring programs, the Agency/Council develop a pre-implementation plan to be conducted with the affected fisheries. Does the Council support this approach in lieu of a pilot program?

If not, the PDT/FMAT seeks clarification from the Council on the scope/scale of a pilot electronic monitoring program. For example, how many vessels should a pilot include? What should the duration of a pilot program be? What are the markers of a successful pilot program? Can programs conducted in similar fisheries (i.e., similar fisheries, gear types, or program models [audit vs full/maximized retention]) in other regions constitute a pilot program?

Revised Timeline

Timeline	Meeting/Deadline	Action
Early September 2015		Revised EA complete for release
September 29 – October 1, 2015	NEFMC Meeting	NEFMC selects preferred alternatives
October 6 – 8, 2015	MAFMC Meeting	MAFMC selects preferred alternatives
October/November 2015		30-day comment period on draft EA
January 2016	NEFMC Meeting	NEFMC takes final action
February 2016	MAFMC Meeting	MAFMC takes final action
March/April 2016		EA finalized, proposed rule drafted
April 2016		Proposed rule publishes with 30-day comment period
May 2016		Comment period ends, final rule drafted
June 2016		Final rule publishes
July 2016		Final rule effective
January 2017		Herring/Mackerel coverage alternatives effective (coincides with start of 2017 fishing year)

New England Fishery Management Council
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E.F. "Terry" Stockwell III, *Chairman* | Thomas A. Nies, *Executive Director*

DRAFT MOTIONS

Joint Observer Committee/Herring Committee

Sheraton Four Points, Wakefield, MA

July 1, 2015

1. MOTION – TOOLEY/KAELIN

That the problem statement for the herring and mackerel components of this action is as follows: The public questions the accuracy of catch (landings and discards) estimates in the fishery; and there is a need to adequately estimate catch of incidental species for which catch caps apply. There is a need to develop a program that addresses an affordable monitoring program for the fishery.

MOTION CARRIED 14/0/1.

2. MOTION - KAELIN/GROUT

That the Herring and Observer Committees recommend to the Council that, before implementation of any electronic monitoring/camera Program, that a Council-approved pilot program be conducted with the affected fishery and that all components of the equipment meet/exceed ABYC (American Boat and Yacht Council) standards.

MOTION TO AMEND – TOOLEY/ALEXANDER

That the Herring and Observer Committees recommend to the Council that before implementation of any electronic monitoring/camera Program, the Agency/Council develop a pre-implementation plan to be conducted with the affected fisheries.

MOTION TO AMEND CARRIED 14-0-1.

MAIN MOTION AS AMENDED CARRIED 13-0-2.

3. **MOTION GIBSON/BALZANO**

   Develop a herring monitoring option that accommodates operational differences and monitoring affordability within herring permit categories A and B.

   MOTION CARRIED 11-0-4.

4. **MOTION: TOOLEY/HUGHES**

   That this action only consider permit-based alternatives for herring

   MOTION PERFECTED:

   To support the permit-based approach for requiring additional observer coverage and ASM requirements (versus fleet-based options), with the exception of Herring Alternatives 2.5 (Groundfish Closed Areas).

   (Intent is to not consider requirements for observer coverage/ASM by SBRM fleet in the herring monitoring options)

   PERFECTED MOTION CARRIED 6-3-5.

5. **MOTION GROUT/ ALEXANDER**

   To move Herring Alternative 2.1 (Herring Amendment 5 alternative) to considered but rejected

   MOTION CARRIED 11-2-2.

6. **MOTION: KAELIN/TOOLEY**

   To recommend that the requirement for 100% observer coverage be repealed for the groundfish closed areas

   MOTION PERFECTED

   To include an option that would apply herring IFM requirements fishery-wide without additional/different requirements in the year-round groundfish closed areas

   MOTION CARRIED 13-2.

7. **MOTION: HUGHES/ALEXANDER**

   That a 25% option be added to Herring Alternative 2.2 Permit-Based A and Herring Alternative 2.3 Permit-Based B (possible range of herring alternatives on p. 14 of Discussion Document)

   MOTION CARRIED 10-4-1.

8. MOTION: HUGHES/TOOLEY

To consider a 25 mt threshold for trips to which the herring IFM requirements would apply

MOTION PERFECTED

To consider a 25 mt Atlantic herring threshold for trips to which the herring IFM requirements would apply (as an option)

MOTION CARRIED 8-1-3.

9. MOTION GROUT/KAELIN

To approve the range of herring monitoring alternatives on p. 14 of the IFM Discussion Document, as modified by the Joint Observer/Herring Committee, for further analysis in the Draft EA for the Omnibus IFM amendment

MOTION CARRIED 12-0-1.

Seafreeze Ltd.
100 DAVISVILLE PIER
NORTH KINGSTOWN, RI 02852
TEL: 401-295-2585

June 30, 2015

Dear Herring/Observer Committee Members,

Please find below a detailed explanation of how our vessels fish, and how the proposed industry-funded observer options affect our operations in a disproportionate manner.

Our trips tend to be "multispecies" trips. We declare into squid, herring and mackerel every trip from the end of November/beginning of December through April, because we work on all those species simultaneously during that season. Our trips are typically longer than the average "herring/mackerel" trip, and we are often looking for multiple species at once. Not all small percentages of species in a trip indicate "bycatch" or catch of a non-targeted species. A lot of the time, it indicates that we went looking for a certain species, made a tow, didn't find enough to work on, and went looking for something else.

We need the flexibility to maintain our style of fishing. Additionally, because we are freezing on board, our daily catching/processing capacity is limited, and our overhead costs higher than a fresh boat. Our high overhead, combined with the length of our trips and a per day observer cost, means that we would pay a higher amount per trip for considerably fewer pounds of product than a fresh boat. We should not get punished for a style of fishing we have maintained for 30 years just because we fish "differently" from other vessels.

<u>2014 F/V Relentless Herring/Mackerel Trips</u>

12/30/13-1/11/14; 13 Days
Herring - 17.56%
Loligo - 81.52%
Illex - .92%

1/15/14-1/24/14; 10 Days
Bluefish - .03%
Butterfish - .36%
Loligo - 97.67%
Illex - 1.45%

1/29/14-2/9/14; 12 Days
Butterfish - 90.76%
Loligo -9.24%

2/17/14-2/27/14; 11 Days
Butterfish- 72.55%
Mackerel - 27.32%
Loligo - .13%

3/4/14-3/12/14; 9 Days
Butterfish- 8.72%
Mackerel - 23.03%
Loligo - 67.97%
Illex - .25%

3/17/14-3/20/14; 4 Days
Butterfish - 77.11%
Loligo - 22.89%

3/23/14- 3/27/14; 5 Days
Herring - 95.5%
Mackerel - 4.5%
Total: 287,503

4/2/14-4/14/14; 13 Days
Bluefish -.13%
Butterfish - 29.2%
Herring - 46.5%
Mackerel -6.6%
Scup- .06%
Loligo - 17.51%

11/22/14-12/8/14; 15 Days (came into dock in middle of trip, probably for weather or mechanical issues, but did not offload)
Butterfish - 3.66%
Herring - 83.72%
Mackerel - .05%
Loligo - 8.7%
Illex- 3.87%

12/12/14-12/18/14; 7 Days
Herring - 99.98%
Mackerel - .02%

12/21/14-12/24/14; 4 Days (Shortened trip because of Christmas)
Herring - 99.47%
Mackerel- 5.1%
Loligo -.02%

Total: 252,678

12/27/14-1/3/15; 8 Days
Butterfish - 1.2%
Mackerel - .26%
Herring - 98.1%
Loligo - .44%

2014 F/V Persistence Herring/ Mackerel Trips

12/26/13-1/11/14; 17 Days
Butterfish - 56%
Mackerel -.02%
Loligo - 42.9%
Illex - 1.12%

1/27/14-2/6/14; 11 Days
Butterfish - 99.21%
Mackerel - .78%
Loligo - .01%

2/8/14-2/13/14; 7 Days
Butterfish -100%

2/16/14-2/28/14; 13 Days
Butterfish - 67.16%
Mackerel - 32.61%
Loligo - .23%

3/3/14-3/13/14; 11 Days
Butterfish - 69.58%
Herring - .8%
Mackerel- 29.19%
Loligo - .4%

3/15/14-3/20/14; 6 Days
Butterfish - 23%
Loligo - 77%

3/22/14-3/27/14; 6 Days
Butterfish - 2%
Herring - 94%
Mackerel - 3.75%
Loligo - .14%
Total: 232,556

11/3/14-11/17/14; 15 Days

Butterfish - 4.5%
Whiting - .2%
Mackerel - 25.64%
Loligo- 63.16%
Illex - 6.1%

11/21/14-12/8/14; 18 Days
Butterfish- 37.25%
Herring - 55.25%
Mackerel- .04%
Loligo- 5.88%
Illex - 1.55%

12/11/14-12/18/14; 8 Days
Herring - 100%

12/20/14-12/24/14; 5 Days (Shortened trip because of Christmas)
Butterfish - 88.92%
Loligo - 11.08%

Because we are freezing on board, we also process discards and bycatch differently than other vessels. All catch is taken aboard and hand sorted on a conveyer belt as the product is being packaged for freezing. All discards/unwanted bycatch are hand sorted and placed in discard baskets next to the conveyor belt. Therefore, observers are not taking "samples" of the catch and extrapolating for an overall discard rate. They are taking accurate measurements of all discards, and able to do a full accounting of all species, including river herring/shad. All other product is hand packaged at the conveyor belt, and observers have the opportunity to view every 25 lb box of product.

Therefore, we believe that vessels freezing on board should be placed in a separate category from other vessels. In addition to our vessels, other vessels in the Mid Atlantic have freezing capabilities and occasionally operate as freezer vessels. We would request that a separate category be created for vessels operating in this manner.

Furthermore, we tend to have high observer coverage on our vessels. Prior to every trip, we are required to call and notify for a squid observer, a herring observer, and a mackerel observer. Our currently high levels of coverage show that there are extremely low bycatch rates for our vessels and our style of fishing. There is no reason we should have to pay high observer costs to prove what we have already been proving.

Observer Coverage for This Past Herring/Mackerel Season, Nov. 2014-April 2015, F/V Relentless

Trip 655 11/21/14-11/25/14; Observer (forced to come in in middle of trip for weather/mechanical problems, but did not offload; counts as one trip for dealer report; counts as two trips for NEFOP purposes)
Trip 656 11/28/14-12/8/14; Observer
Trip 657 12/12/14-12/18/14; No Observer
Trip 658 12/21/14-12/24/14; Observer
Trip 659 12/27/14- 1/3/15; No Observer
Trip 660 (660 A) 1/10/15-1/13/15; Observer (For trip 660, weather problems, had to come to dock, but did not offload; counts as one trip for dealer report; counts as multiple trips for NEFOP purposes)
Trip (660 B) 1/19/15-1/24/15; Observer
Trip (660 C) 1/28/15-2/8/15; No Observer
Trip 661 2/16/15-2/24/15; No Observer
Trip 662 3/6/15-3/17/15; No Observer
Trip 663 3/21/15-3/30/15; No Observer
Trip 664 4/4/15-4/15/15; Observer

This is 50% observer coverage. Based on NEFOP observer data, (excluding the last trip, for which I was unable to get the data), we had an average of 3.5% discards per trip, all species, throughout this high observer coverage. These discards include species such as skates, dogfish, sculpins, etc. The average river herring/shad discards were 0.13% per trip.

June 23 2015

Capt. Robert. Ruhle
F/V DARANA R

NEFMC

Dear Council Members,

As an active Herring fishery participants I would like to state our stance on the Observer coverage issue. Our operation is small in comparison to the enormous capacity of other vessels within this fishery. Maximum volume for our vessel is 5 trucks, or 2000 boxes. Generally we fish (weather permitting) and work directly with the buyer to fulfill his needs on a daily basis , so not all trips or even half of our trips are a full boat. Translation is 1 or 2 trucks per trip is not a lot of profit. If we have to carry / pay for observers every day we fish the economic burden would make our operation no longer viable. Treating all participants within this fishery the same given the vast differences in the associated economics will put the entirety of the small boat fleet out of business. How can a small vessel continue to fish if the daily cost of an observer is equal or greater than stock for the day? I have been an active participant in the Herring fishery in both New England and the Mid Atlantic for over 25 years and it remains one of the cleanest fisheries on the east coast. We have been a participant in multiple bycatch avoidance and sampling programs since there inception. We have also been involved in the Study Fleet program since 2010. Perhaps it's too late in the game to offer up any suggestions, but why couldn't vessels involved in the Study Fleet be granted an exemption from the forthcoming observer coverage? Study Fleet is an audited NMFS program, (Study Fleet personnel make frequent trips to compare catch / discard estimates against those reported) Vessels within the program could be assigned an CV , and based on the CV for a given vessel dictates the amount of observer coverage. (those with constant accurate catch/discard estimates would require lower level of coverage while those with inaccurate or fluctuating estimates would have a higher level) The tow / trip information associated with the Study fleet is far superior to that of an observer report , with true GPS mapping of tows and water temp data. As a 4th generation fisherman from a family with long standing ties to both management and fisheries science, the thought of telling my son that he will not be able to continue our family legacy is heartbreaking. But the fact remains that under the current onslaught of unfounded regulations and management schemes, it seems doubtful that the fishing industry will survive at all.

Thank you for taking this into consideration.

Capt. Robert. Ruhle

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F/V DARANA R

Wanchese N.C.