



New England Fishery Management Council

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MEETING SUMMARY

Herring Committee Meeting Holiday Inn by the Bay, Portland, ME

August 24, 2009

The Herring Committee met on August 24, 2009 to continue development of catch monitoring alternatives for inclusion in Amendment 5 to the Atlantic Herring Fishery Management Plan (FMP) and discuss issues related to the Amendment 5 document structure, monitoring and reporting requirements for herring vessels and processors, observer coverage and at-sea monitoring, shoreside/dockside monitoring and sampling, electronic reporting, video-based monitoring, maximized retention, catch monitoring and control plans, and vessel monitoring system (VMS) requirements.

Meeting Attendance: Frank Blount, Rodney Avila, David Pierce, Mary Beth Tooley, Terry Stockwell, Mike Leary, Herring Committee Members (6 of 11 Committee members – Mark Gibson, Sally McGee, Jim Odlin, Doug Grout, Erling Berg not present); Dave Ellenton (Herring Advisory Panel Chairman); Lori Steele, NEFMC Staff; Amy Van Atten, (NEFMC Observer Program); Carrie Nordeen, Hannah Goodale (NOAA NERO); Al West (Bumblebee Seafoods), Jeff Kaelin (Lund’s Fisheries), Herring Advisory Panel Members; Shaun Gehan (Kelly, Drye, Warren), Ben Martens (CCCFHA), Gary Libby (Port Clyde), Patrick Paquette (Mass. Striped Bass Association), Raymond Kane, and other interested parties.

Presentation/Discussion of Management Measures Associated with Catch Monitoring Alternative 2

Shaun Gehan presented a document on behalf of the industry stakeholders who proposed Alternative 2, which includes proposed additions and revisions to help develop the details of the alternative (see **Attachment 1**). He urged the Committee to accept the proposed revisions in an effort to continue to move the alternative forward for the purposes of analysis in the Draft EIS for Amendment 5. The Committee discussed the proposal and asked several questions for clarification.

- Dr. Pierce asked for clarification regarding the proposed objective to achieve the desired CVs for bycatch estimates through a combination of at-sea and shoreside sampling. Mr. Gehan noted that the alternative emphasizes the importance of shoreside sampling for obtaining more accurate information about the species of concern identified by the Council (river herring, haddock, and herring). He acknowledged the importance of at-sea sampling for interactions with larger species and for confirming total catch estimates but felt that the best

- Dr. Pierce noted that under Item C (Measures to Address Observer Coverage), sub-options 1 and 2 do not appear to be consistent, and sub-option 2 does not really relate to observer coverage. He suggested that this section of the alternative may need further consideration. He questioned the utilization of the term “to the extent practicable” in the alternative and suggested that more definitive language be considered. He also emphasized that it is paramount that the Amendment 5 document include measures to address safety for at-sea and dockside samplers.
- Ms. Steele asked questions to clarify/confirm: (1) that other “measures that can be incorporated into any alternative” could be added to the proposed alternative (measures to address transfers at sea, for example); (2) that the alternative would rely on daily VMS reporting to monitor management area annual catch limits (ACLs) versus the current IVR system; and (3) that the alternative relies on funding and administration of the monitoring programs by the National Marine Fisheries Service (NMFS).
- Mr. Leary asked whether or not NMFS observers could perform duties related to dockside sampling. Ms. Van Atten said that while this would be a new responsibility for the observers, there are provisions in the current contracts that allow for dockside sampling, and dockside sampling duties are being incorporated into observer training for the groundfish sector program, so this is something that could possibly be incorporated for herring in the future as well.
- Gary Libby described the pilot project that his groundfish sector participated in for dockside sampling and emphasized the importance of at-sea sampling to ensure that bycatch is counted accurately.
- Ms. Goodale expressed concern about establishing new monitoring programs with no new funding sources and relying on redirecting agency resources for additional monitoring. She suggested that this approach is unlikely to be feasible. She also expressed concern about dockside monitoring provisions as they may relate to carrier vessels. Carrier vessels land pooled catches from multiple vessels, so there may be a loss of some information from these vessels (for example, the area-specific component of the catch).
- Mr. Ellenton reminded the Committee that there is already a comprehensive dockside sampling program in the herring fishery, administered by the States of Maine and Massachusetts. He also urged NMFS to continue discussions with the industry to clarify reporting issues because it is equally as important for the industry to be able to monitor the quota.
- Ms. Goodale expressed concern about some of the activities occurring in the herring fishery that the Committee/Council may not fully understand, which may be important to develop a comprehensive monitoring program that addresses all kinds of operations in the fishery. She mentioned transfers at sea and the operations of carrier vessels as two issues that could complicate the monitoring program and create the potential for loopholes if they are not fully understood and adequately addressed. She posed a question to the Committee regarding the design of the monitoring program – should the monitoring program be designed to capture all

- Mr. Kane asked the Committee define monitoring and sampling and noted that the terms are often used interchangeably. Mr. Martens asked Mr. Gehan a question to clarify the use of net sensors in the proposed measures for Alternative 2. Mr. Gehan noted that while the sensors show promise and can help to improve information, they do not appear reliable enough to use for management purposes at this time.

The Herring Committee returned to the question raised by Ms. Goodale regarding the goal of the monitoring program with respect to managing fishing activities. Mr. Stockwell expressed concern about restricting activities in the fishery for the purposes of improving monitoring and felt that measures in the amendment are being designed to improve monitoring for the fishery the way it operates now and that understanding of monitoring and reporting issues has improved greatly through discussions with NMFS and the industry. Ms. Goodale reiterated that NMFS' primary concerns relate to the operation of carrier vessels and transfers at sea. Matching data streams is problematic, and the problems are confounded by trips from multiple hulls being landed from one hull (a carrier); pooled trips are coming into port under area-based TACs. With the movement towards ACLs and the need for better monitoring, the burden will be greater, and there is concern about attributing catch properly to vessels too, especially if catch shares are developed for the herring fishery in the future. Mr. Stockwell felt that most of the significant reporting issues are being addressed in the amendment, along with a Memorandum of Understanding that the State of ME has been working on with NMFS and the industry to clarify reporting issues. Dr. Pierce urged Mr. Stockwell and Ms. Goodale to continue working on these issues and report back to the Committee at the next meeting as to what may need further discussion in the amendment. Ms. Tooley felt that the concerns about reporting relate to a small number of boats and should be addressed in the amendment. She also noted that many activities in the fishery have changed/evolved in recent years, so the amendment should consider the changes and clarify requirements for carriers and other vessels engaged in the fishery.

Presentation of Draft Industry Code of Conduct (Pelagic Resource Council)

Jeff Kaelin presented a Draft Code of Conduct for the herring industry on behalf of the Pelagic Resource Council (PRC, see **Attachment 2**). He described the major elements of the draft Code of Conduct, including a reporting system for the industry to identify where bycatch events may be occurring and notify the rest of the fleet. He expressed interest in extending this system beyond just the Atlantic herring fishery as well. The industry hopes to have another captain's meeting at the end of this fishing year to finish drafting the details regarding bycatch notification and other important elements.

Mr. Kaelin also briefly described the Pelagic Resource Council (PRC), a newly-formed industry organization with a focus on improving science. He said that the organization represents a cross-section of midwater trawl, purse seine, and other gears, as well as mackerel and herring fishermen and dealers. The membership is hopeful that the organization can grow to include menhaden interests, address all issues related to pelagic fishing in the region, and generate funds to promote cooperative research and improve science.

Dr. Pierce expressed support for the continued development of the Code of Conduct and the PRC. He suggested that the industry consider further discussion about incorporating gear that would minimize bottom contact to the Code of Conduct, and adding State observers to the statements about Federal fisheries observers. He also encouraged the industry to minimize usage of the term “to the extent practicable” in the Code and recommended that the industry be more clear about identifying parameters for safe fishing operations. Mr. Ellenton and Mr. Mullen both emphasized the organization’s interest in improving science and confirming the observations of pelagic fishermen. Mr. Mullen offered his vessels to any scientists who want to take a fishing trip. Mr. Libby emphasized the importance of enforcement relative to ensuring success related to a Code of Conduct.

Amendment 5 Discussion Document

The Committee discussed the Amendment 5 Discussion Document with the intent of working to further develop the catch monitoring alternatives. Mr. Stockwell introduced a proposal to restructure the Amendment 5 document and the alternatives. He stated that some of the Committee’s difficulty developing the catch monitoring aspects of the amendment relates to the complexity of the alternatives, the number of options, and the inconsistencies from one alternative to the next. He felt that the current approach is complex, confusing, and divisive, and may continue to slow down progress on the amendment. The proposal he described would deconstruct the current (July 31) Amendment 5 catch monitoring alternatives into broader categories with various measures/options to consider and develop under each category. He emphasized the need to make the Amendment 5 alternatives Committee/Council alternatives and not stakeholder alternatives in order to move forward in a productive manner. Mr. Stockwell and Ms. Tooley presented a Draft restructured Table of Contents for Amendment 5, noting that nothing had been removed from the document, only that the measures had been re-arranged (see **Attachment 3**). The Herring Committee agreed to discuss this proposal further following the lunch break.

Public Comment

Prior to lunch, the Committee took public comment on issues not related to the meeting agenda. Mr. Ellenton briefed the Committee on recent events related to a misunderstanding about days out and landing days that occurred in Maine. He expressed concern about the lack of clarity between managers and enforcement personnel regarding the days out provisions. Mr. Stockwell stated that the confusion occurred between communications with a marine patrol officer and that the State was working on resolving the issue.

Amendment 5 Discussion Document (continued)

Following the break, the Committee discussed the proposal to restructure the Amendment 5 Discussion Document and the catch monitoring alternatives. Ms. Tooley reiterated that the intent of the proposal was not to eliminate measures from consideration at this time and that all of the measures in the July 31 Discussion Document should be included in the Draft Table of Contents presented at this meeting. She and Mr. Stockwell confirmed that the intent should be, in the future, to begin to streamline the measures and pare down the number of alternatives, but that the starting point includes everything in the amendment at this time. Ms. Steele suggested a further breakdown of some of the reporting measures and an additional category of measures to

address carrier vessels and transfers at sea. Mr. Kaelin expressed support for the proposed approach. Dr. Pierce also expressed support, noting that the proposed format is more instructive and easier to understand.

Mr. Weiner asked if the Committee's intent was still to have alternatives packaged for public hearings. Ms. Tooley confirmed that the intent is ultimately to package the measures together, but to consider them in broader categories first for the purpose of streamlining and reducing redundancy. Mr. Weiner supported the approach in concept, as did Mr. Paquette and several other members of the public. Mr. Stockwell emphasized the need for the Committee to examine the individual components of a catch monitoring program and start addressing some of the cross-cutting issues and culling out some of the redundant and less feasible options. He expressed concern that the current document includes too many alternatives and options.

1. MOTION: MARY BETH TOOLEY/TERRY STOCKWELL

To adopt the draft Amendment 5 discussion document for proposed restructuring

Additional Discussion on the Motion: The Committee acknowledged that this would be a work in progress and that the current proposal needs more refining and work. Mr. Paquette expressed concern about losing measures that may be in the current (July 31) document and not reflected in the proposed Table of Contents. Ms. Tooley reiterated that none of the measures should have been eliminated at this time and that the Committee would have to review the measures and vote to eliminate anything from consideration. Ms. Steele clarified that the proposed approach does eliminate the current alternatives as they are in the July 31 Discussion Document; this approach breaks down the current alternatives into broader categories for further development. While the measures themselves are still in the document, the packages of measures that may result from this approach may look entirely different than the alternatives described in the July 31 Amendment 5 Discussion Document. The Committee confirmed that this would be the intent of the new approach.

Mr. Rudolph stated that while he is not opposed to restructuring the document, Alternative 3 was designed to be a comprehensive catch monitoring program in and of itself, and he was concerned about breaking it down and separating the components from each other. He clarified that while no specific measures have been eliminated from the document at this time, what has been eliminated is a carefully-structured maximized retention program coupled with measures to ensure compliance, like video-based electronic monitoring. Some modular pieces of Alternative 3 may not make sense to stand-alone, and he expressed concern about the implications of deconstructing the alternative and losing the big picture.

MOTION #1 PERFECTED:

To restructure the draft Amendment 5 discussion document for further development

Additional Discussion on the Motion: Mr. Kaelin expressed support for the motion and stated that he never expected the Amendment 5 alternatives to remain exactly as they were proposed by the stakeholders. Mr. Stockwell agreed to take the lead on developing a more detailed matrix based on this approach for further discussion at the next Committee meeting.

MOTION #1 CARRIED UNANIMOUSLY.

Discussion of Issues Related to Amendment 5 Catch Monitoring Alternatives

The Committee engaged in an open discussion of some of the issues related to the catch monitoring alternatives and various elements of the measures under consideration.

Dr. Pierce suggested that the Committee consider adding provisions for dockside sampler safety similar to those proposed for at-sea observers. He proposed language such as “providing safe and secure access to pre-sorted fish to be provided at the first site of landing whether it’s inside a processing facility or on top of a dewatering box. Samplers should have a safe and solid workspace wherever herring or mackerel are landed.” The Committee discussed the potential for such a requirement and the challenges associated with sampling herring as they are being offloaded. Mr. Ellenton suggested that further consideration be given to how fish should be sampled when being pumped into a tanker truck and urged the Committee to develop a sampling strategy for trucks. He suggested that at some plants a component of the vat could be unloaded on the dock for sampling. Mr. Rudolph reminded the Committee that some of these issues could be addressed and flexibility could be provided to the facilities through the development of catch monitoring and control plans (CMCPs). Mr. Paquette suggested that 100% at-sea monitoring be considered to eliminate problems associated with sampling offloads. Ms. Tooley discussed the objective of the Council to achieve a 20% CV for river herring bycatch estimates and a 30% CV for haddock and herring bycatch estimates. She noted that in addition to the general goals and objectives for the catch monitoring program, this is the only specific objective identified by the Council at this time with respect to at-sea monitoring. Ms. Van Atten provided some clarification as to how coverage levels are determined when trying to achieve a specific objective like a 20% CV for river herring bycatch estimates. Ms. Tooley noted that increased levels of coverage in 2009 should generate some good additional information.

Ms. Tooley suggested that the Committee discuss the measures in the document intended to standardize and certify volumetric estimates of catch. She asked for clarification regarding the differences in these measures between Alternative 1 and 2 from the July 31 Discussion Document, in combination with the additional measures proposed for Alternative 2 (Attachment 1). Ms. Steele suggested that the new section be constructed based on two alternatives: (1) no action and (2) an alternative to standardize and certify volumetric measurements with a series of options consistent with the options proposed in Alternative 2.

- Ms. Van Atten mentioned that in the dockside monitoring section of the document, the terms monitor/observer/sampler are used interchangeably. She noted that the Magnuson-Stevens Act defines “observer” and suggested that the Committee explore the definition of dockside monitor and what legal rights and standards of conduct such an individual may be subject to.

Mr. Blount asked the Committee to consider to which vessels the proposed catch monitoring program would apply. Category A and B permit holders represent the majority of the limited access directed fishery, but the limited access Category C fleet also participates in the fishery. There are more than 2,000 open-access Category D permit holders who may land small amounts of herring incidentally. Dr. Pierce noted that many of the Category C vessels are in the southern New England and Mid-Atlantic area and stated that there would likely be an increased interest in pursuing herring by these vessels in the future, especially if the quota in Area 1A (inshore Gulf

of Maine) is reduced. He suggested that the catch monitoring program apply to all limited access herring vessels – Category A, B, and C.

2. MOTION: DAVID PIERCE/MARY BETH TOOLEY

That the catch monitoring provisions of Amendment 5 apply to Category A, B, and C herring vessels

Additional Discussion on the Motion: None.

MOTION #2 CARRIED UNANIMOUSLY.

The Committee continued to discuss issues related to requiring A, B, and C vessels to comply with the proposed catch monitoring program. Ms. Tooley suggested that the requirements for Category C vessels could be different and perhaps less onerous but felt that these vessels needed to be included in the program. Mr. Paquette wondered if the Category C vessels are responsible for some of the river herring bycatch and felt that they should be included in the program if they are. Dr. Pierce expressed concern that some measures in the amendment propose to increase the herring possession limit for Category D vessels, and that if this happens, consideration will have to be given to monitoring catch on these 2000+ vessels more closely. Ms. Tooley suggested that the Committee consider this issue with respect to the intent to accommodate only vessels in the mackerel fishery that do not have a limited access permit for herring. Dr. Pierce suggested that the Committee come back to this issue for more discussion and emphasized the need to collect more information about river herring bycatch. Mr. Kaelin felt that addressing the needs of the mackerel vessels would not result in a significant number of vessels receiving a higher trip limit; he suggested that the Committee also explore the idea of implementing a pelagic declaration instead of separate herring and mackerel declarations. Mr. Weiner expressed support for focusing the catch monitoring program on Category A and B vessels at this time since they represent more than 90% of the herring fishery. He felt that expanding the program beyond the primary vessels in the fishery at this time would water it down and compromise the ability to get better information on the majority of the directed herring fleet.

Mr. Blount asked the Committee to revisit issues regarding the intent of the monitoring program and whether or not the program should limit operations in the fishery so that monitoring is easier, or the monitoring program should be constructed to accommodate the fishery in the way it currently operates. Ms. Tooley noted that the fishery consists of a relatively small number of vessels and felt that the program should be designed to accommodate the operations of these vessels. Dr. Pierce agreed that the management strategy and monitoring program should be designed in a manner that is consistent with how the fishery currently operates. Mr. Avila and Mr. Stockwell agreed.

Ms. Goodale raised issues associated with transfers at sea and questioned whether these issues complicate the development of a comprehensive monitoring program. She noted that with the current quota monitoring system, the IVR reports are supplemented with dealer reports because of problems trying to match databases. The more certain NMFS can be that the mismatches are not due to reporting issues, the more accurate the monitoring program can be. Ms. Tooley highlighted recent problems with quota monitoring in Area 2, and Ms. Goodale agreed to investigate these issues further.

Mr. Blount raised the issue of funding for the proposed catch monitoring program and asked for Committee input. Ms. Tooley suggested that as a first step, the Committee should look at how the current catch monitoring program is funded (observer coverage, dockside sampling). With the development of the annual SBRM Report, she felt that it will be important for the Council to establish priorities for observer funding. She also mentioned that the Science Center is launching a dockside monitoring program for groundfish for which funding has increased significantly. She said that the industry is working on securing long-term funding for the current dockside monitoring program supported by the States of Maine and Massachusetts. She reminded the Committee to consider possible funding through the research set-aside but felt that the amendment is not developed well enough yet to have a thorough discussion of how the catch monitoring program will ultimately be funded. Ms. Steele reminded the Committee that it will be important to consider funding sources for new programs that may be implemented in the Amendment 5 catch monitoring program because the NMFS Regional Office has indicated that the Agency does not currently have the resources to support new information collection programs.

Mr. Ellenton emphasized that the industry is already facing economic hardship and cannot bear the burden of onerous catch monitoring requirements at this time. He emphasized that the industry currently receives no funding to support information collection and that the research set-aside is being utilized to support important research that should not be eliminated to fund catch monitoring instead. He expressed concern about imposing a price increase on the lobster fishery to cover the costs of monitoring the herring fishery. He also reminded the Committee of how difficult it has become for the industry to operate in a profitable manner since the implementation of Amendment 1 and expressed significant concern about the potential cuts the industry may be facing with the 2010-2012 fishery specifications. Mr. Libby also expressed concern about raising the price of lobster bait to cover the costs of the monitoring program and acknowledged the potential difficulties associated with resolving issues related to funding.

Other Business

The Herring Committee revisited the questions it developed at the August 6, 2009 meeting for the Scientific and Statistical Committee (SSC) to address when developing recommendations for acceptable biological catch (ABC) for the 2010-2012 fishing years. After further discussion, the Committee agreed by consensus to forward the following list of questions to the SSC (after review by the Council's Executive Committee):

- 1. Can the SSC reconcile its guidance to the Herring PDT about accounting for the retrospective pattern in setting the ABC with the recommendation of the Retrospective Working Group in January 2008 that a strong retrospective pattern is grounds to reject the assessment model as an indication of stock status or the basis for management advice? If the assessment is to be used to form the basis of management advice, is it robust enough for a three-year TAC setting process?**
- 2. Is it appropriate to use the age-structured ASAP model when considering the significant disagreement between the three primary labs that age herring?**
- 3. Since the stock is not considered to be overfished and overfishing is not occurring, what value of F would be appropriate to use in 2010?**

- 4. Would it be appropriate to use the TRAC assessment results with a higher M to address previous recommendations, and if so what would be the implications of a higher mortality rate, and would there be an effect on those reference points?**
- 5. Given that the herring resource is composed of smaller spawning components and the mixing ratios and migratory patterns remain somewhat uncertain, how does the Committee prevent double counting scientific uncertainty?**
- 6. What is the impact of the uncertainty related to the 2005 year class? What was the impact of the Canadian catch of the 2005 year class on stock abundance? Would the assessment be improved by adding age 1 fish caught in both the New Brunswick weir fishery and the U.S. fishery?**
- 7. The reasons for eliminating the winter survey from the assessment model appear unclear. Does the SSC agree with the elimination of the winter survey from the updated assessment?**

ATTACHMENT 1-
Streamlined Alternative 2 With Analysis

I. Amendment 5's two primary goals (paraphrased from Amendment 5): Two important elements of the fishery (*i.e.*, at-sea and dockside) must be adequately documented to improve catch monitoring and ensure that data are as complete and accurate as possible. The objective is to improve reporting and to ensure real-time TAC monitoring of the area TACs.

1. Improve at-sea catch monitoring: Focus on both total catch and bycatch – everything that enters the net and is either pumped aboard the fishing vessel or discarded at sea.

2. Dockside landings monitoring: Focus on accurate and real-time accounting of landings and incidental catch – all fish brought to port and offloaded from the vessel, either to a processing plant, a bait truck/dealer, other fish dealers, or to be disposed of as bycatch.

It should be noted that most of the included elements assist in achieving both goals.

II. Options for Improving Quota Monitoring, Reporting, and Compliance

1. Proposal to Improve Accounting of Landed Catch

A. Vessel-Based Requirements:

- i. Certification of volumetric capacity of vessel holds on mid-water trawls, pair trawls, purse seiners, Atlantic herring carrier vessels, otter trawl vessels; or**
- ii. NMFS-approved catch weighing alternative.**

This applies to all Category A and B herring permit holders and any registered herring carrier vessels. Any Category A or B vessel without hold capacity, or which chooses not to hold or land Atlantic herring during the course of the fishing year, may apply for a Letter of Exemption from the NMFS Regional Administrator.

Sub-Option: Apply requirement to all limited access vessels (Category A, B, & C).

[Details discussed below. The Letter of Exemption is proposed to accommodate purse seine vessels that do not carry or land any fish.]

B. Notification to NMFS within six hours of landing of time and place of landing (current requirement for Category A & B vessels, would be a new requirement for Category C vessels, if included, and Atlantic herring carrier vessels). [**Note:** Options for altering pre-trip and pre-landing reporting requirements are found in **Alternative 2.3.3** in the Draft Amendment 5 document.]

C. Verification of catch weights upon landing.

Vessels would utilize volumetric catch weights, or other authorized method, to report final landed weight in the VTR.

Sub-option: Independent verification of landed catch weights to meet a Council-established target level of precision for overall catch (*e.g.*, a 90 or 95 percent confidence interval). Independent catch weighing would be conducted by:

- i. Observers** (on observed trips);
- ii. Port Agents/Sea Samplers** (in ports where NMFS agents are stationed)
- iii. State agents** (such as state agents participating in dockside sampling programs)
- iv. State or federal dockside monitors/samplers**

Note: If a dockside monitoring program is established, these dockside catch-weighing measures could be subsumed as part of that program. The intent, however, is that this be a standalone requirement to improve accuracy of landed catch throughout the fishery, including sectors of the fishery for which full dockside monitoring is limited or where coverage is less than optimal.

2. Measures to Improve Catch/Quota Monitoring

A. Require electronic daily VMS reporting for limited access vessels (Category A, B, & C) when engaged on a reported herring trip. Weekly IVR reporting, as currently required, for weeks when no fishing occurs (*i.e.*, negative reports). [**Note: Option 3, Section 2.3.1.3.3**, relating to VTR and VMS provisions.] Reports include estimates of amount of herring retained and discarded, and amounts and types of other discarded species.

Sub-option 1: Require Atlantic herring carrier vessels to carry VMS and report daily. A final VTR would continue to be required.

Sub-option 2: Reporting of landings for catch accounting and dockside sampling:

Alternative 1: Modified Current Reporting System. [Suggested improvements or clarifications to the current system.]

Alternative 2: Primary Catch Reporting Duties By Vessel Landing Fish. Catcher vessels must report herring all transferred to (1) authorized carriers; (2) non-herring vessels; (3) at-sea herring processors; and/or (4) Canadian fish tenders; as well as any herring that it lands directly. Transfers from other limited access herring vessels should be reported by the vessel that ultimately lands the herring. Atlantic herring carriers file VTR identifying total landed weight at first point of landing, and each subsequent point, if offloaded at multiple locations.

The objective is to create a consistent and clear reporting system that will ultimately allow all landings and catch reports to be cross-checked and verified, while eliminating duplicative reporting and the potential for double counting. The basic principal is that the primary responsibility for reporting landed herring falls to the vessel – limited access herring vessel or carrier – that brings the fish to shore, and that weights be taken and any dockside sampling occur at the first port of landing. The only exceptions are (1) transfers to Canadian transport vessels, the amount transferred to be reported on the catcher vessel’s VTR, and (2) transfers at sea to non-herring vessels for use as bait, which should be reported by both the transferring and receiving vessels.

3. Measures to Improve Estimates and Accounting of Catch and Discards:

A. Measures to Improve At-Sea Monitoring & Observer Safety. [Note: These represent a modification of measures set forth in Sections 2.3.4.2.1 & .2 of draft Amendment 5.] **Include all measures A-J with the following exceptions or modifications:**

- **Eliminate sub-option 2.3.4.2.2(H)** (requirement to bring all fish aboard the vessel for sampling). This can be a safety hazard for mid-water and pair trawl vessels, and problematic for purse seine and herring carrier vessels, as noted by the PDT and Enforcement Committee.
- **Option 1: Eliminate sub-option 2.3.4.2.2(I)** (which states: “Requirement that observers be allowed to view the codend after pumping, prior to pump removal.” Purse seines do not have codends – the appropriate terminology would be “bunt” – and this could prove problematic for many vessels. Also, it is not likely that this provision will yield much useful information, as the level of unpumpable fish is extremely small.

Option 2: Modify sub-option 2.3.4.2.2(I): Establish protocols to allow, to the extent possible and practicable, observers to view the codend or bunt after pumping, before removal of the pump.

- **Modify Sub-option 2.3.4.2.2(J)** (stating: “Determine (and apply) minimum portion of a slipped catch that would be required to be pumped on board a vessel to ensure complete sampling”). **To the extent practicable, assist the observer in obtaining samples from any haul to be released that are commensurate with the volume of fish in the codend or seine.**

B. Require vessel operators to complete an affidavit providing details on a released haul (Amendment 5, Section 2.3.1.4.1). The sworn report will include:

- Reason for release
- Whether or not the haul or set was made for determining species composition or marketability (*i.e.*, whether it was a “test tow”)
- Estimate of the quantity and species composition of the released haul
- Location and time of the event

- Methodology for determining volume

When observers are present, the observer and authorized vessel personnel will work in cooperation to identify these elements. NMFS should provide guidance for completing the required elements of the affidavit appropriate to each major type of gear used in the fishery.

C. Observer coverage for all Category A & B vessels to achieve a 20 percent cv for estimations of stocks of concern (river herring), and 30 percent cv for stocks that are not overfished (herring and haddock) (Amendment 5, Section 2.3.4). [Note: Current analysis only reflects levels necessary to meet these objectives for mid-water and pair trawls. Needs to be supplemented to reflect levels necessary to achieve these levels for other major gear types (purse seine, otter trawls, and, perhaps, stop seines and weirs).]

Sub-option 1: Include this requirement for all limited access vessels, including Category C vessels.

Preferred Sub-option 2: Achieve target levels of precision for species of concern using combination of at-sea and dockside sampling.

D. Dockside Catch Sampling Program Alternatives:

- i. Create Standardized Dockside Monitoring (DSM) Protocols and Reporting Forms.** Intent is to include applicable elements from the Objectives, Responsibilities, Notification Requirements, and Sampling Design analysis as set forth in **Sections 2.5.3.4 and 2.5.3.5** of Draft Amendment 5. That is, a DSM sampling design would be established to provide accurate estimations of catch and bycatch (in combination with at-sea observation) for all major elements of the fishery. NMFS would determine levels of coverage similar to the SBRM approach. Analysis would have to include, at a minimum, coverage of purse seine vessels, bottom trawl vessels, and other major gear types comparable to that included for mid-water and pair trawls.
- ii. Establish a DSM Program as an Integrated State/Federal Program.** The current state port sampling program will continue under a common set of protocols and reporting forms, as specified in paragraph (i) above. NMFS would utilize observers to conduct dockside sampling on observed trips. In addition, NMFS would have the option to transfer observers from at-sea to port sampling, so long as at-sea coverage levels can be set to achieve an overall level of precision and accuracy of at least 30 percent cv, and a combined at-sea and dockside level of 20 percent cv for species of concern (river herring).

E. Electronic Vessels Monitoring

- i. Alternative 1: Require, on a phased-in schedule (i.e., either in year 2 or 3 following implementation of Amendment 5), the use of passive vessel monitoring systems that can, at a minimum, measure the instance of released tows (on trawl vessels) or sets (on purse seine vessels) on**

unobserved vessels, unless the Regional Administrator determines that the technology is either not sufficient or impracticable. Members of the mid-water and pair trawl and purse seine sectors would be responsible for working with NMFS to develop and test systems that can passively monitor major vessel systems and report this data, via VMS or otherwise.

Systems to be monitored in order to achieve the objective of measuring incidences of released tows:

- Net reels (deployment and retrieval) for mid-water trawlers, winches on purse seine vessels **[QUESTION: is this the right system to monitor on purse seiners? If not, what?]**
- Pumps
- Codend or seine release mechanism
- GPS

****PLEASE GROUNDTRUTH THIS FOR ME.****

- ii. **Alternative 2: Establish a new priority for use of the research set-aside to test applications of passive monitoring systems for mid-water, bottom trawl, and purse seine vessels. Add allowance to require the use of such systems to the list of items that can be implemented by framework action.**

4. Other recommended measures to improve monitoring program and catch accounting.

A. Take estimated herring discards “off the top” in setting annual TAC setting process, subtract estimated discards from the Annual Catch Limits based on the best available information of discard rates, such that the Annual Catch Limit is equivalent to a total allowable landings. Accounting for discards in this manner reduces management uncertainty.

B. NMFS would work with the industry to develop a protocol for estimating weight and species composition of any catch released at sea.

C. Encourage the development of a Code of Conduct by/for the herring fishing industry for the purse seine, midwater, and pair trawl sectors.

Catch Monitoring Alternative 2 - Analysis

This alternative was approved by the Committee and Council for further consideration/development at the January and February 2009 meetings.

I. Measures to Improve Accounting of Landed Catch

• Volumetric Catch Measurements or Certified Catch Weighing Alternative

This alternative will include management measures that require standardization and/or certification of volumetric measurements used to estimate catch. The measures under consideration are described below.

- As a condition of obtaining the limited access permit, limited access herring vessels and Atlantic herring carriers (as defined in 50 C.F.R. § 648.4(a)(11)), Category A/B vessels would be required to contract a marine surveyor to certify the vessel's fish hold for volumetric capacity. Schematics and conversion charts for each fish hold would be submitted to NMFS at the time of renewal of the limited access permit. NMFS would provide the schematics and conversion charts (and calibration tables) to the dockside monitors and observers. Each vessel would retain on board a customized measuring stick for the fish hold, or have the fish hold appropriately marked, so that the dockside sampler or observer on observed trips may estimate the total weight of the catch on board. With a known weight of fish per unit of volume, a relatively simple calculation can be performed to determine the amount of fish in the hold (using calibration tables). Alternatively, any Category A or B vessel may propose an alternative catch weighing plan suitable for the individual vessel, so long as such alternate method can be shown to provide catch weight estimates at least as precise as volumetric measurement (*e.g.*, weighing the catch on a certified scale). The intent of this alternative is to provide a substitute means for vessels to comply when hold calibration and measurement as described above would either impose a serious hardship or less accurate results compared to other methods.

The requirement for calibrated fish holds or an alternative catch weighing plan applies to any Atlantic herring carrier vessels as defined in 50 C.F.R. 648.2, and operating in accordance with the provisions found in 50 C.F.R. § 648.4(a)(10)(ii).

Discussion

To the extent that the hold contains non-target species, total catch estimates of herring estimated by this methodology will exceed total catch of herring. The dockside sampling program called for in this alternative will provide estimates of any such non-target catch that can be used to refine the estimated herring catch. Estimates of herring catch can also be compared to vessel trip and dealer reports for further calibration. Any small estimation error from this process would tend to over-estimate herring catch, creating a conservation neutral or even positive bias under this ACL-limited fishery. The inclusion of Atlantic herring carriers will provide opportunities for improving catch weighing and catch monitoring for harvests made by a number of limited access herring vessels that are aggregated aboard a single carrier vessel. It should be noted that much of this activity occurs in Area 1, where the need for accurate catch monitoring is arguably the greatest.

- All herring vessels (A, B, C, or D) that do not have holds suitable for calibration and measurement as specified above would be subject to an alternate catch weighing system. For any such vessels with a New England multispecies permit, all catch of herring would be weighed or accounted for as all other groundfish under that FMP. For all other vessels, catch shall be weighed at the first point of landing by either volumetric measures (such as certified trucks, as specified in section ___ above), calibrated scales, or standardized totes. NMFS certified port agents, sea samplers, or observers shall, where practicable, confirm and record all such weights, except that exceptions may be created for *de minimus* landings (*i.e.*, those less than 2000 pounds) and that verification of landed weights in remote locations may be verified by random checks.
- Captain and crew will work with observers and shoreside samplers to confirm volume and weight of fish whenever possible. Electronic logbooks will be cross-checked with dealer reports for accuracy.
- All vessels, regardless of availability of an observer, port agent, sea sampler, or state agent to independently verify the landed weight, will be required to utilize the catch weighing methodology (volumetric or alternative) upon landing to confirm final landed weight. These reported landed weights will be compared to dealer reports to insure accuracy.

II. Measures to Improve Catch/Quota Monitoring

The intent of these measures is to move towards as close to 100% catch weighing as practicable and necessary in order to meet the objective of improving the long-term monitoring of catch and catch estimates in the herring fishery. Proposed measures include:

• Daily VMS Reporting

- Each Category A & B, and potential C, vessel shall be required to submit daily electronic catch and bycatch reports and final electronic trip reports via the vessel's VMS system. Vessels will use Study Fleet software, or any compatible system acceptable to NMFS, to report this information. Ideally, paper VTRs would be replaced with electronic trip reports. Herring carrier vessels will be required to carry VMS and undertake additional reporting responsibilities, including daily reporting.
- Sub-options include improvements to the current reporting systems to clarify requirements, avoid unnecessary and duplicative reporting, and eliminate the possibility of duplicative reports.

III. Measures to Improve Estimates and Accounting of Catch and Discards

• Improved Reporting on Released Tows

• Measures to Achieve at Least 20% CV for Bycatch Estimates for River Herring from a Combination of At-Sea and Shoreside Sampling

The intent of this provision is to achieve a level of precision that reflects at least a 20% coefficient of variation (CV), for estimates of river herring bycatch in the Atlantic herring fishery from a combination of at-sea and shoreside sampling. Given the volume of fish caught by midwater trawl, pair trawl, purse seine vessels, and Atlantic herring carriers and the

configuration of the vessels, it is virtually impossible to sort fish in the hold at sea. Fish are pumped directly from the net to the holds below the deck or onto carrier vessels. Other than larger species such as dogfish that are excluded by grates, samples taken portside and those taken at-sea should yield results comparable to basket samples collected at sea. High levels of precision for species of concern, like river herring and haddock, can therefore be obtained through a combination of at-sea and shore-based sampling. (Improving estimates for bycatch that is not brought on board is addressed through measures to improve at-sea monitoring in Section __).

- **Increase Observer Coverage to SBRM Levels.** This measure includes a recommendation that NMFS increase observer coverage in the Atlantic herring fishery to levels required by the Standardized Bycatch Reporting Methodology (SBRM) amendment. At-sea monitoring for the herring fishery would be prioritized by NMFS in such a way that the necessary levels of coverage could be achieved.

Discussion

The Council seeks to insure that the full measure of observer coverage necessary to meet the standards in the SBRM is achieved. However, even if the provisions for at-sea monitoring target a 30% coefficient of variation (CV) for bycatch estimates, the Council could achieve higher levels of precision by utilizing an expanded shore-based sampling program, as proposed (see below).

- **Dockside Monitoring/Portside Sampling Program**

This measure would require NMFS, in cooperation with the States of Maine and Massachusetts, to establish a uniform and statistically-robust shore-based catch sampling protocol, including standardized reporting forms, criteria for sampling (number of samples, methodology, etc.), standards for species identification training and data archiving. This will ensure that all information collected is comparable and rigorous, regardless of what entity is undertaking the collection (State, Federal, or other).

This measure also would mandate the establishment of a shore-based sampling program – directing NMFS to use some existing resources to collect catch/bycatch information at the first point of landing or production, subject to the normal operation of the fishing company. Vessels would be required to report when they will arrive in port, as detailed below, but unavailability of an observer, port sampler, state agent, or other authorized NMFS personnel to sample the catch will not prevent a vessel from being able to unload.

1. Dockside Sampling Program Objectives

Based on Herring Committee discussion and recommendations, this alternative for a dockside sampling program (DSP) is intended to achieve the following objectives:

1. Sample a sufficient number of landings events to provide a reasonably precise and accurate estimate of bycatch in the herring fishery (at least 20 percent CV for river herring in combination with at-sea monitoring/observer coverage);

2. Confirm the accuracy of self-reporting of herring landings (as an integral part of the measures to improve catch weighing and monitoring as specified above).

In addition, samplers may collect important biological information and commercial catch samples necessary to support stock assessments and other biological needs.

To achieve these objectives, this dockside sampling program (DSP) would be designed similarly to the current portside bycatch sampling programs managed by ME DMR and MA DMF with increased sampling coverage to ensure that extrapolations of landings and landed bycatch estimates can be made with some specified degree of precision (expressed as a coefficient of variation, CV). The sampling design and coverage levels for this program (distribution of sampling events across space and time) would be determined by NOAA Fisheries similar to how the NEFSC allocates sea days for observer coverage in the fishery, depending on the priority species and the target CVs that are identified by the Council (see below). To the extent possible, data collected from existing state port sampling programs will be utilized by NMFS.

2. DSP – Responsibilities, Notification requirements, and Sampling Design

- NOAA Fisheries would be required to determine levels of coverage for dockside sampling in a manner similar to the SBRM approach for at-sea monitoring, based on the Council's specified goals/objectives and the SBRM methodology (see below).
- NOAA Fisheries would be responsible for determining levels of coverage on an annual basis, including time/area/gear type.
- All herring limited access vessels and Atlantic herring carrier vessels would be required to call NOAA Fisheries, or the agency's designee, and notify the agency of a landings event at least six hours prior to landing. The current pre-landing notification system could be used to provide ample notice to NOAA Fisheries prior to landing, in order to arrange for samplers when they may be available. For these purposes, however, a transfer at sea from a limited access herring vessel to a herring carrier would not constitute a landings event; rather, the herring carrier would be required to provide timely notice prior to landing. The vessel must indicate when/where the boat will land, the approximate amount of the catch, and whether or not the offload will be to a processing facility, bait dealer, or other location. NOAA Fisheries will inform the vessel if the landings event may be sampled, and if so, NOAA Fisheries will work with the vessels to ensure that trips that require dockside sampling are met by a sampler.
- On all observed trips, the observer, after being adequately trained in dockside monitoring protocols, shall conduct the dockside monitoring.
- NMFS will have the authority to detail observers to dockside sampling program, so long as requirements for reasonable at-sea coverage can also be provided. In order to maximize resources, observers should be used in this manner at locations and during times with high volumes and numbers of landings.

3. Sampling Design for Estimating (Landed) Bycatch – Objective #1

A. DSP Sampling Methodology/Protocols

Sampling methodology will be consistent with NOAA Observer Program protocols, with some modifications to decrease variance in extrapolation of bycatch estimates and reduce potential sampling bias. Due to the large quantities of fish that are typically landed in the herring fishery, sub-sampling will likely be necessary for many offloading events. Sub-sampling is used when the volume of fish that the sampler is attempting to quantify is too large to obtain actual weights or if the amount of bycatch is too abundant. During sub-sampling, the sampler will collect smaller batches of fish, sort and weigh by species, and then extrapolate to the total catch.

In the Atlantic herring fishery, no offload points/events are the same. The methodology described in this section provides some general guidelines and examples for sampling landings events in the herring fishery. NOAA Fisheries will determine the most appropriate sampling approaches given the logistical differences in offload points and other complicating factors.

The two fundamental elements necessary for a dockside sampler to know in order to successfully sample a landings event are a volumetric estimate of the total landings and the species composition of the catch. Landings will be either sampled completely or sub-sampled to determine the species composition of the catch (see protocols for complete sampling and sub-sampling below). In most situations, sampling will be conducted over the entire offloading period to capture any stratification that may occur throughout the entire fishing activity (*e.g.*, while being pumped aboard while out at sea, due to the difference in species size and composition between purse seine sets or trawl tows, settling in the vessel's holding tanks, etc.). Because the catch is not unloaded the same way at every dealer or plant, sampling techniques may vary (examples are provided below). Typically, samples will be collected systematically at set intervals with predetermined sample sizes. All samples will be sorted by species, and actual weights will be taken. Lengths will be taken according to the NOAA Observer Program species priority list by statistical area, and commercial catch samples for assessment purposes will be collected using current protocols.

i. Complete Sampling Protocol (Processing Plants and Whenever Possible)

A complete sampling protocol can be utilized in cases where the entire offload can be observed and sampled, and all bycatch can be sorted and counted. Complete sampling is desirable for offload events that occur at processing plants. The samplers collect and quantify all landings from individual lots of fish (transported by trucks or vessels) that enter the processing facilities. Samplers position themselves at the point of entry into the facility along an assembly line or at the base of the hoppers where the fish are unloaded. Sampling is conducted before grading or sorting of the catch occurs. All bycatch is removed from the assembly line or hopper and placed in bushel baskets or buckets specific to each species. The total weight of any observed bycatch is recorded along with species identification, total species weight, individual lengths and weights of all fish according to a NOAA Fisheries and ACCSP specified

protocol. If there is a large amount of one incidental species, the total weight is recorded and then length frequencies and weight are gathered from a randomly selected sub-sample of 50-100 individuals.

ii. Sub-Sampling Protocol

A sub-sampling protocol can be utilized when sampling a very large volume of catch and/or when facilities at the offload point make complete sampling impossible. Instances where this is likely to occur include offload points where fish are pumped directly into trucks. Sub-sampling is also appropriate in instances when the volume of fish pumped is greater than the manpower available at the sampling point can observe with certainty. In these cases, it may not be possible to use the complete sampling protocol regardless of the amount inspected (< 80,000 lbs.). These situations are also likely to occur when vessels are fishing mixed groups of herring and mackerel, some of which can have a 50-50 composition.

Sub-samples are to be collected using bushel baskets at timed intervals during the pumping or unloading process following the NOAA Fisheries at-sea observer sampling protocol. To accomplish this type of sub-sampling, the dockside sampler needs to know the total lot weight and the duration of time it will take to unload the catch. After sampling, the bushel baskets of fish should be sorted by species, and total weight of each species and length frequencies should be recorded (sub sample n=50, for length frequencies if more than fifty of any species occurs).

Data will be recorded on sheets developed by NMFS in coordination with the States of Maine and Massachusetts, as specified above, and which are based on the ME DMR and MA DMF data collection sheets for the existing portside bycatch sampling programs (Figure __). The sampling sheet for the processing plant (Figure __) is designed to collect and record all data needed to comprehensively quantify discards through the field “inches in vat.” Once the discard composition is recorded, along with pump rate and data for “kept” catch, Excel worksheets are used to derive the composition of the landings. Sub-sampling data sheets (Figure __) are used to sample baskets of unsorted catch at intervals set by the sampler based on the total volume of catch and pump rates.

- **Use of Electronic Logbooks and Passive Monitoring Systems**

This measure calls for phased-in implementation of a requirement that vessels employ passive vessel monitoring systems, along the lines of the Study Fleet technology, to enable the monitoring of incidents of released tows on unobserved Category A & B vessels. This system should be configured to record: the deployment and retrieval of the net, along with the GPS coordinates of the vessel while towing (for otter, mid-water, and pair trawl vessels), or the deployment of the seine and location of the vessel (for purse seine vessels); the operation of the vessel’s pump system; and any mechanical device used to release the net.

A released tow would be considered on in which a net or seine is deployed without a subsequent pumping event. Each such incident should be accompanied by the required affidavit providing

details on the reason for the release, the amount and type of fish released, etc. The ability to match length and location of these events on unobserved trips will enhance NMFS's ability to (1) confirm whether releases occur more, less, or at the same frequency as on observed trips and (2) use precise and detailed information on the location and length of hauls to match with observed hauls in order to check for consistency with volumes and types of species that are discarded at sea.

In order to implement this program, a pilot program should be undertaken at the earliest reasonable time, by the midwater trawl and purse seine sectors of the industry, to investigate the feasibility of adopting passive monitoring systems that integrate major vessel systems (GPS, pumps, gear retrieval systems, net sensors and the like) into the Study Fleet software and computer systems. This research may be funded through the research set-aside program, other funding sources, or by the industry directly.

The phased in alternative would require that the NMFS Regional Administrator evaluate the results of this pilot program and assess the agency's ability to utilize the data in order to measure slipped hauls. If the finding is that this approach is not technically or administratively feasible, the RA would have the authority to waive the requirement. The other will be to allow the requirements to utilize such systems and report such data to be adopted through a framework action.

Discussion

The amount and quality of the information collected can help managers and the industry to better assess conditions that may lead to higher levels of bycatch, thereby improving the ability of fishermen to avoid it. Ultimately, this technology may also prove to be a much more cost-effective means of monitoring the fishery than either additional at-sea observers or video monitors.

ATTACHMENT 2-

**Pelagic Resource Council
Code of Conduct
For the Sustainability of the Atlantic Herring Fishery¹**

Each owner, captain and crew member of the harvesting vessels operating in the Atlantic herring fishery of the East Coast of the United States will individually subscribe, as members of the Pelagic Resource Council, to this Code of Conduct to ensure the sustainability of the Atlantic herring fishery and Atlantic herring resource.

Subscribers to this Code will:

Commit to the standards for and limits to the fishery as proscribed by the National Marine Fisheries Service, the New England Fishery Management Council and the coastal States in whose waters we fish.

Promote the sustainable management and stewardship of the Atlantic herring stock complex, as a source for products of value to coastal communities and as a source for the enjoyment and enterprise of others who share the Atlantic herring's marine ecosystem with us.

Ensure that the harvesting of Atlantic herring, whether for human consumption, bait or other use, is carried out in a manner which will maintain the nutritional value, quality and safety of the herring products, minimize waste, reduce the catch of non-target species (both fish and non-fish species) and minimize negative impacts on the environment, including associated or dependent species

Utilize selective and environmentally safe fishing gear technologies and operational methods that reduce discards, and minimize the loss of fishing gear, and work willingly with private industry, non-governmental organizations, educational institutions and state and federal governments to support the development of practices, techniques and technologies to further improve the environmental health and sustainability of the Atlantic herring fishery and Atlantic herring stock complex.

Assist and accommodate federal fishery observers at sea, and dockside monitors on shore, in the performance of their duties and provide opportunities for regular communication between owners, captains and crews to establish and improve protocols and methodologies for Atlantic herring fishery data collection.

¹ For owners, operators and crew of Category A, B & C single vessel and paired midwater trawl and purse seine fishing vessels. *Principles embodied in this draft code of conduct apply provisions of the 1995 United Nations Food and Agricultural Organization's Code of Conduct for Responsible Fisheries* (www.fao.org)

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Code of Conduct for the Sustainability of the Atlantic Herring Fishery**

Ensure that observed and unobserved fishing operations are documented to provide complete reports regarding retained catches of fish and non-fish species and, as regards to discards, provide the information required for both quota monitoring and stock assessment purposes.

Discourage and avoid the deliberate discarding of catches except to ensure the safety of the vessel and crew, maintain marketability and quality of the herring products, and to comply with rules that require the discarding of particular species of fish and non-fish species. When the discard of a catch or a portion of a catch is unavoidable, the Captain and crew will commit to assisting fishery observers in estimating the weight and composition of released catches, including providing observers with the opportunity to document the contents of the cod end or seine to the extent practicable and safe according to the determination of the vessel's captain. If an observer is not present, the Captain and crew will record this information to the extent practicable. Whenever possible, releasing fish or non-fish species should be with the intention of returning them to the water alive.

Commit to the development, use and dissemination of an Atlantic herring fishery fleet-wide bycatch avoidance program, which complements federal and state fishery management rules, utilizes technologies supported by the National Marine Fisheries Service as appropriate for this purpose, and provides proprietary information from federal observer reports to a neutral third party with the intent of identifying and avoiding areas where high levels of incidental catches of non-target fish and non-fish species may occur, and encourage the expansion of this program to extend to other small mesh fishing fleets in the region.

Agree that when operating in areas and at times when significant levels of non-target fish or non-fish species may occur, a test tow or test set will be employed. If significant levels of non-target species are in the area, the vessel will move a minimum distance from the fishing area for a minimum period of time. With midwater trawling, if the captain determines that bycatch levels are within acceptable limits to remain to fish, the time of the first tow in the area would also be limited to ensure that reasonable bycatch rates can be sustained in the fishing area of concern.²

² Fishing areas of concern, test tow times and set limits, area-avoidance times and distances, and initial area-of-concern tow times, are under consideration by industry. A Captain's meeting will be held following the 2009 herring fishing season to discuss these details and finalized them for adoption in this code.

ATTACHMENT 3-

Amendment 5 to the Herring Fishery Management Plan (FMP)

DRAFT Discussion Document

DRAFT – PROPOSED RESTRUCTURE

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

Amendment 5 to the Herring Fishery Management Plan (FMP)

**DRAFT Discussion Document
DRAFT – PROPOSED RESTRUCTURE**

This document summarizes the work of the New England Fishery Management Council’s Herring Committee, Advisory Panel (AP), and Plan Development Team (PDT) to date regarding the development of specific management measures and the range of alternatives that may be analyzed in the Draft EIS for Amendment 5 to the Herring FMP. Relevant background and supporting information/analyses provided by the Herring PDT are also included in this document.

AMENDMENT 5 DISCUSSION DOCUMENT

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