New England Fishery Management Council
50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116
E.F. "Terry" Stockwell III, *Chairman* | Thomas A. Nies, *Executive Director*

FINAL MEETING SUMMARY

Observer Policy Committee

Doubletree Hotel, Danvers, MA

January 22, 2015

The Observer Policy Committee met on January 22, 2015 in Danvers, MA to: review the draft Environmental Assessment for NMFS-led Omnibus Industry-Funded Monitoring (IFM) Amendment, which will establish provisions for industry-funded monitoring across all Council-managed fisheries and specify coverage targets for the herring and mackerel fisheries; and to discuss the details of the Omnibus IFM Amendment alternatives and develop related recommendations for the Council to consider at its January 2015 meeting.

MEETING ATTENDANCE: Terry Stockwell (Chairman), Pete Kendall, Mary Beth Tooley, Terry Alexander, Mike Sissenwine, Jeff Kaelin, Peter Christopher, Wendy Gabriel, Gerry O'Neill, Peter Hughes, Paul Parker, Rick Usher, Bruce Lambert, Doug Brander (14 of 14 Committee members present); Lori Steele (NEFMC staff); Carrie Nordeen, Aja Szumylo (NMFS GARFO staff); Mitch MacDonald (NOAA General Counsel); several members of the public in the audience.

In addition, several individuals listened to the meeting online via GoToMeeting.

KEY OUTCOMES

The Observer Committee passed two motions (both 11-0-2) related to the Draft Environmental Assessment (EA) for the Omnibus IFM Amendment. Overall, the Observer Committee agreed that the Draft EA needs to be further developed and reviewed again by the Committee and both the New England and Mid-Atlantic Councils prior to moving forward for public comment. The Observer Committee also identified specific issues related to the Draft EA that should be addressed prior to public comment and final decision-making.

Detailed minutes of the January 22, 2015 Observer Committee meeting are provided below.

PRESENTATION: OMNIBUS INDUSTRY-FUNDED MONITORING AMENDMENT– MANAGEMENT ALTERNATIVES UNDER CONSIDERATION (GARFO STAFF)

Carrie Nordeen and Aja Szumylo (NMFS GARFO/SFD staff) presented the Observer Committee with an overview of the Draft Environmental Assessment for the Omnibus Industry-Funded Monitoring Amendment. This amendment proposes to establish provisions for industry-funded monitoring (IFM) across all FMPs; it also includes options to address targets for observer coverage on Atlantic herring and mackerel vessels. The Committee members asked some

clarifying questions and agreed to develop more specific comments and recommendations following more detailed discussion of three issues (below).

- Mr. Parker asked some clarifying questions regarding the alternatives in the document and expressed serious concern that the issues raised at the August 2014 Committee meeting are not addressed by the current range of alternatives. He emphasized the need to include an alternative in the document that would allow for the industry to pay for all of the IFM monitoring costs, essentially delivering a package of data to the Council/NMFS that could inform management.
- Mr. Kaelin, Mr. O'Neill, and Ms. Tooley expressed concerns about the impact analyses provided in the draft Environmental Assessment. Mr. O'Neill and Mr. Kaelin agreed that better information could be obtained by contacting a few herring industry participants and at least clarifying/ground-truthing estimates of fixed/operating costs.

The Observer Committee discussed three issues identified by GARFO staff in more detail.

1. ***Proposed Division of Cost Responsibilities:*** GARFO staff summarized the response provided in the November 2014 letter.
2. ***Discretionary Prioritization Alternatives:*** Ms. Szumylo provided the Committee with an overview of streamlined approaches for prioritizing IFM programs under the two discretionary alternatives proposed in the document. She summarized the results of working examples using a survey that several Committee members completed. Dr. Sissenwine noted that although the weighing process proposed in the alternatives is clearly-articulated, the process (i.e., formula for combining factors) is arbitrary such that it does not necessarily lead to meaningful results.
3. ***Service Provider Requirements:*** GARFO staff summarized the current alternative in the omnibus amendment that addresses service provider requirements for IFM. Currently, the omnibus alternative in the IFM amendment proposes to establish service provider requirements for IFM programs (including dockside and EM) that are consistent with the observer service provider requirements in the SBRM amendment. However, the IFM amendment proposes that service provider requirements can be adjusted for specific FMPs/fisheries in the trailing actions (framework adjustment) that establish new IFM programs. Ms. Steele reminded the Committee that there may be a need to address this issue more specifically when selecting the options to address coverage for the herring and mackerel fisheries in this amendment.

Herring Committee Recommendations (January 16, 2015)

The Observer Committee reviewed/discussed the Herring Committee recommendations regarding the options for herring observer coverage targets in the IFM amendment. It was noted that although a motion to support portside sampling/EM failed at January 16 Herring Committee meeting, a very similar motion carried unanimously at the November 2014 Herring Committee meeting. It was apparent to the Observer Committee that there is a need for the Councils to clarify recommendations regarding the development of options for portside sampling/EM for the herring/mackerel fisheries in the IFM amendment.

Observer Committee Recommendations Re. Draft IFM Amendment

The Committee members provided more specific comments about the Draft EA for the Omnibus IFM Amendment and discussed possible modifications to the range of alternatives and the document prior to moving forward with the document for public comment. The Committee members agreed that more explicit consideration and additional development of options for portside sampling and EM under the herring/mackerel options is necessary.

1. MOTION: TOOLEY/HUGHES

To include in the omnibus amendment alternatives available for all FMPs for portside monitoring and electronic monitoring, and that the analysis in the document would support future framework adjustments, and to also include a portside sampling/EM program in the options for herring and mackerel coverage

Discussion on the Motion: GARFO staff advised the Committee that these options would require coverage targets similar to the observer coverage options in the Draft IFM document. Ms. Steele suggested some possible approaches to developing coverage options and agreed that the options would need to be more specific; she noted that the document may require revisions anyway and hoped that options for herring/mackerel could be better developed to allow for this approach to be further developed.

MOTION #1 carried 11-0-2.

2. MOTION: TOOLEY/ALEXANDER

That the draft omnibus IFM amendment needs more development and additional analysis, and should be reviewed by the Observer Committee and both Councils at a future meeting prior to going out for public comment

MOTION #2 carried 11-0-2.

The Observer Committee identified the following issues related to the Draft Environmental Assessment for the Omnibus IFM Amendment that should be addressed prior to public comment and final decision-making by the New England and Mid-Atlantic Councils:

- Expansion of the discussion of economic impacts – address/groundtruth fixed and operating costs for herring/mackerel vessels
- Expansion of the discussion of impacts on the Atlantic herring and mackerel fleets
- Information and analysis to support the implementation of a portside sampling program and/or EM program to be implemented through a framework adjustment (relative government costs/industry costs, comparison to at-sea costs)
- Costs differences between at-sea monitors versus observers
- Expansion of impacts of herring and mackerel options on other fisheries (groundfish stocks)
- Impacts of current observer coverage requirements for midwater trawl vessels in the groundfish closed areas

The Observer Committee also discussed an email message sent by one of the Committee members prior to the meeting (see attachment). The message reviewed the evolution of observer program from a Woods Hole Laboratory scientific program to the current government-led multipurpose program that provides information for stock assessment, enforcement, quota monitoring, and other purposes. The message raises the possibility of a system of purpose-specific program elements including an element that is industry-funded and designed according to standards and quality control procedures established by the Council. The Observer Committee expressed interest in further discussing this approach at a future meeting.

ATTACHMENT

Observer Policy Committee (Email)

January 22, 2015

Dear Observer Committee,

Yesterday's meeting was interesting and a learning experience for me since it was my first Observer Committee meeting and it has been years since I have been responsible for observer programs. We seem to have made progress and I complement the Regional Office for taking the initiative to move an option for industry funded observers forward, and to the staff for a lot of good work. However, I am concerned that "repurposing" the existing observer program approach to meet new needs may be less effective and efficient than starting over with an alternative approach. With respect to the purpose of observer programs (or more broadly, at sea data collection), I think it is useful to consider the following purpose categories:

1. Science- Most importantly, at sea data collection is needed to estimate discards for input to stock assessments. A lot of other scientific data is collected.
2. Enforcement- At sea data can be used as evidence that a violation has occurred. For example, it might be used as evidence that a vessel fished in a closed area, but VMS is probably a more effective enforcement tool. It might also be used as evidence that a vessel retained more fish than is documented in logbooks and dealer reports (evidence of black landings) or that illegal gear (e.g., undersize mesh) is used.
3. Quota monitoring- This purpose is similar to the purpose of enforcement since at sea data collection is used as a deterrent to mis-reporting landings and/or discards. However, I think it is useful to distinguish it from broader enforcement needs and to use this category for at sea data collection to address compliance with sector or individual allocations of quota. Quota monitoring needs to be more systematic and comprehensive than at sea data collection for broader enforcement purposes.
4. Other- Some of the other reasons for at sea data collection are:
    - monitoring exempted fishing programs.
    - research in addition to Science purpose in number 1, such as gear testing.
    - as a condition for treating a fishing operation (individual or sector) different from other fishing operations. For example, an overall average discard rate might be applied to all fishing activity that catches a particular species/stock. However, a more favorable rate might be applied to fishing operations that provided reliable evidence their rate is lower.
    - to address miscellaneous concerns about the fishery. More data may be useful to respond to stakeholders concerns (e.g., herring fishery).

The premise of this message is that a "one size fits all" solution may be inefficient and so expensive that opportunities to obtain additional valuable at sea data are missed. I discuss the purposes for at sea data collection below.

Science and Enforcement

Observer programs were initiated by the Woods Hole Fishery Laboratory in the first half of the 20th century. Scientists went to sea on fishing vessels to get to know fishermen and collect data. The data was only used for scientific purposes. Bigelow and Schroeder's will known book on Fishes of the Gulf of Maine was based on a lot of this data.

In the 1980s, the program was more formally organized and funding increased tremendously mostly to monitor takes of marine mammals. The data continued to be used solely for scientific purposes. Fishermen were assured it would not be used for enforcement because scientists wanted unbias samples of what went on at sea.

The situation changed dramatically when Enforcement demanded the data to make a case. The NEFSC was sympathetic to the enforcement need, but it argued vigorously that the quality of the data for scientific purposes, including discard estimates, would be degraded because it could no longer be confident future data would be representative of the fishery when observers are not present. The change in fishing behavior that might occur when observers are present, potentially biasing observer data, is referred to as the "observer effect." The Center lost the argument when the Director was threatened with disciplinary action and it was told that observer data would be subpoenaed. The representativeness of the data has been a potential issue ever since (unless there is 100% observer coverage). Most of us involved at the time accepted that use of observer data for both scientific and enforcement purposes was the only realistic option because separate programs were unaffordable. This continues to be the prevailing view. There is also a widely held view that data collected for scientific purposes cannot be protected such that fishers can be confident that it will not be used for enforcement.

LET ME BE CLEAR, NO ONE SHOULD WANT TO INHIBIT ENFORCEMENT OF FISHERY REGULATIONS OR MAKE IT EASIER FOR A FEW BAD ACTORS TO VIOLATE THE LAW! The issue is, how best (in terms of cost and effectiveness) to collect at sea data to fulfill different purposes.

To examine this issue, it is worth continuing with my review of the evolution of observer programs. In the 1980s when the potential for scientific observer program data for enforcement purposes became a reality, there was virtually no additional cost. Enforcement continued as usual with observer data occasionally used on an ad hoc basis. The scientific program did not change much under the continuing assumption that there was no change in behavior (fishing method, fishing location, discarding) when observers were onboard. This may have been a reasonable assumption at the time (an perhaps still is) since there had been little use of observer data for enforcement. However, the assumption was attacked in the early 2000s as part of continuing litigation over groundfish management. The sue asserted that the percentage observer coverage was not adequate. I recall preparing an affidavit stating that it was sample size, not percentage coverage, that mattered, and that precision of estimates was adequate. The litigant's response was that accuracy, not precision, was the issue because observer data was not representative of the fishery when observers were not on board, and that a much higher percent observer coverage was necessary. I do not recall the exact legal outcome, but my recollection is the argument that observer data might not be representative gained traction. Ever since, environmental NGOs have strongly advocated a higher percentage of observer coverage and expenditure on observers has skyrocketed. This has been great in terms of the amount of

scientific data produced, but there are still challenges to the accuracy of the data, and calls for 100% coverage in many situations. Even some scientists that have benefited from more at sea data collection believe that scientific uncertainty might be reduced more by using some of the money spent on observers for other scientific purposes.

Given the background above, I think it is important to ask and answer the question: Is the potential increase in cost and/or decrease in value of at sea data collection for scientific purposes justified by the benefits gained for enforcement purposes? The potential increase in cost comes from the need for higher percentage coverage and the potential decrease in value comes from loss of representativeness of the data. In terms of enforcement benefits, it would be worthwhile to examine how many cases have been made because of observer data (I have no idea) and how important the cases were. One should also consider how valuable the presents of an observer is as a deterrent. However, deterrent value is probably inversely proportional to loss of scientific value since being a deterrent means fishers change behavior when observers are onboard.

I suspect one reason the question I ask above has not been examined (if it has, its news to me) is because it is generally believed that observer data cannot be protected from enforcement use. I presume this is the case under current policies and law, but this should not prevent an objective consideration of the issues. If the conclusion is that there are better approaches in terms of both fiscal responsibility and conservation, why not advocate changing policies and/or the law. There are examples where information is protected (AID virus test results) because it is deemed to be in the best public interest.

Quota Monitoring

At sea quota monitoring requires less detailed, lower quality data, than at sea data collection for science, but the coverage percentage may need to be much higher (perhaps 100%). Depending on the nature of the fishery, it may be possible and monetarily rewarding to mis-report on any fishing trip when at sea monitoring does not occur. Since high levels of at sea monitoring by humans is probably only affordable by large high value fisheries (e.g., Bering Sea groundfish), it will be necessary to design quota management such that shore side monitoring is adequate or technology for cost effective electronic (camera or video) monitoring is perfected (meaning, good enough, not perfect). In most cases, shore side monitoring can be adequate to monitoring retained catch and this is the approach that is used for most fisheries.

Discards are the problem. In most cases, discards can be estimated for stock assessments and taken into account in ACL at the stock level using at sea monitoring data designed for scientific purposes. Even when at sea monitoring for scientific purposes is protected from enforcement uses, there may be situation where it is bias as a result of an observer effect. This potential will need to be examined on a case by case basis. I'd argue that accounting for discards at the individual vessel level (including enforcement of no-discard rules) is not feasible for most fisheries without perfected electronic monitoring. The recent Highly Migratory Species FMP Amendment that accounts for pelagic longline Bluefin tuna catch (including discards) at the individual vessel level is based on the expectation that electronic monitoring will be adequate. Accounting for discarding at the NE groundfish sector level falls between the level of a stock and individual vessel, but I am skeptical about the quality of sector level discard mortality accounting. I understand why there is a desire to account for discards at the individual vessel and sector level. Doing so creates a strong incentive to minimize discards. However well-

intentioned vessel level or sector level discard accounting is, it should not be pursued unless affordable monitoring is adequate.

Other

I think that at sea monitoring for other purposes should be industry funded in most cases. However, I do not think that industry should be saddled with the cost of a program that was primarily designed for application to a relatively small number of vessels for scientific purposes using government standards for doing business. The scope and quality of data needed for scientific purposes makes at sea monitoring expensive. Also, we have all heard about the Department of Defense buy hammers or toilet seats or whatever for a hundred times more than they are worth. I don't know if these stories are true, and I know that NOAA is conscientious about getting its money's worth, but it is true that government rules and procurement procedures add costs.

For industry funded monitoring, I would leave it to industry to design, implement and pay for programs so long as the monitoring adheres to standards established by the fishery management process. Some standards should apply to all monitoring, such as data access and delivery requirements. Other standards might be fishery or situation specific to assure the data fulfills its intended purpose.

I use the term fishery management process generically. It could mean standards established in a fishery specific FMP (for example, standards for industry funded 100% at sea monitoring of herring pair trawling), an omnibus FMP, policy established by the Council, or guidelines issued by NOAA Fisheries.

I'd envision a formal review process for industry funded monitoring plans to assure that they will adhere to the standards, and that the integrity of data is protected. Integrity will probably require a standard that creates "arm's length" separation between the fishing operation and the observers (individuals and companies). Integrity might require some type of certification of observers or companies conducting at sea monitoring, but the certification should be about integrity and narrowly defined qualifications for purpose driven data collection, not about company management or business practices that drive up costs. This would be analogous to having certified public accountants sign off on various financial records with minimal interference with the management and business practices of accounting firms.

I would envision a standard that accepted the integrity of data produced by a non-profit scientific or educational institution. This doesn't mean that at sea monitoring program conducted by such an institution is always right or useful. It means that it is presumed that data is honestly recorded and the data collection methods are accurately described. I would not extent this presumption of integrity to spinoff companies of scientific or education institutions that are primarily fishing industry consultants. However, they might qualify for certification.

If a process along the lines I describe above was available now, it may not have been necessary for NOAA Fisheries to have rejected provisions of the sea herring FMP that called for 100% observer coverage because the Agency could not pay for the observers. My understanding is that the omnibus Amendment for Industry Funded Observers is an effort to address this dilemma. The problem is that the Amendment may be too late, it does not seem likely NOAA fisheries will

be able to fund its share of the cost of observers in excess of SBRM requirements, and the cost of the industry share is high (maybe unaffordable). It might have been better for the FMP to have required the industry (as a license condition or perhaps as a condition of an exempted fishing permit or whatever legal mechanism makes sense) to design, implement and pay for at sea monitoring to satisfy whatever concerns lead to the desire for 100% observer coverage. The industry might have contracted a university or scientific institution to design and implement a research project to address the concerns. The Council might have review the plan (perhaps using its SSC) and approved it if it was satisfied that it would be successful. At the conclusion of the study, a decision would have to be made if 100% at sea monitoring was necessary, and if so, how to achieve it. I would not envision a university or scientific institution carrying out such a monitoring program indefinitely.

One of the issues with the approach to at sea monitoring described above is adequacy of data for scientific uses such as stock assessment. In the design of the program, the only consideration should the adequacy of the data for its intended purpose, usually not stock assessment since SBRM data is intended for that purpose. However, the data might be useful for broader purposes, and this should be decided on a case by case basis by the scientists that are considering using the data.

Funding

In the discussion above, I specifically advocated that as sea monitoring for other purposes should be funded by industry. I did not comment on funding for at sea monitoring for science, enforcement or quota monitoring. Philosophically my inclination is that industry should pay the cost of quota monitoring, and maybe it should pay for part of the cost of monitoring for science and enforcement. My philosophy reflects the fact that private individuals are benefiting from a public resource. Paying such costs should be considered in the context of government cost recovery or a resource rental fees. However, philosophy must be balance by economic realities (fisheries need to be profitable to pay fees) and government accounting rules (i.e., user fees should be used to improve fishery management, not deposited in a general account of the Department of Treasury).

I have not commented on funding when the cost of monitoring is shared by NOAA Fisheries and the fishing industry. This topic seems to be covered by the Omnibus IFM Amendment. However, I do not think this amendment is adequate to address the diverse needs for at sea monitoring.

Happy holidays,

Mike
Michael Sissenwine