Atlantic States Marine Fisheries Commission

Atlantic Herring Section

October 22, 2012
8:00 – 9:00 a.m.
Philadelphia, Pennsylvania

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1.	Welcome/Call to Order (*D. Pierce)*	8:00 a.m.
2.	Section Consent • Approval of Agenda • Approval of Proceedings from August 2012	8:00 a.m.
3.	Public Comment	8:05 a.m.
4.	Review and approve comprehensive spawning regulations under Addendum V (*T. Kerns*) **Final Action**	8:15 a.m.
5.	Review Technical Report (*M. Cieri*) • Nantucket Shoals Spawning Area White Paper	8:20 a.m.
6.	Update on New England Fishery Management Council Amendment 4 Court Ruling (*T. Kerns*)	8:45 a.m.
7.	Discuss ISFMP Policy Board task of flexibility and delayed implementation under the FMP	8:50 a.m.
8.	Other Business/Adjourn	9:00 a.m.

The meeting will be held at the Radisson Plaza-Warwick Hotel**,** 220 South 17th Street, Philadelphia, PA 215.735.6000

MEETING OVERVIEW

Atlantic Herring Section Meeting
Monday October 22, 2012
8:00 – 9:00 a.m.
Philadelphia, Pennsylvania

Chair: David Pierce (MA) Assumed Chairmanship: 08/11	Technical Committee Chair: Matt Cieri	Law Enforcement Committee Representative: Marston/Fessenden
Vice Chair: Terry Stockewell (ME)	Advisory Panel Chair: Jeff Kaelin	Previous Section Meeting: August 7, 2012
Voting Members: ME, NH, MA, RI, CT, NY, NJ (7 votes)		

2. Section Consent

- Approval of Agenda
- Approval of Proceeding from August 7, 2012

3. Public Comment – At the beginning of the meeting public comment will be taken on items not on the Agenda. Individuals that wish to speak at this time must sign in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Section Chair may determine that additional public comment will not provide additional information. In this circumstance the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Section Chair may allow limited opportunity for comment. The Section Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Review and approve comprehensive spawning regulations under Addendum V (8:15-8:20 a.m.) Final Action

Background

- Addendum V, which modified modify spawning regulations was approved at the August 2012 meeting.
- As part of the addendum process, all spawning regulations from the FMP and its Addenda have been compiled into one document **(Briefing CD)**.

Presentations

- Staff will present an summary of the compiled spawning regulations

Section Action for Consideration

- Approve Spawning Regulation Document

5. Technical Committee Report (8:20-8:45 a.m.)

Background

- The Board tasked the TC to write a white paper assessing the possibility of initiating a spawning area for Nantucket Shoals.
- The TC drafted a white paper that assesses the impacts to the Herring stock if a

spawning area were to be established for Nantucket Shoals (**Supplemental Materials**)
- As part of the addendum process, all spawning regulations from the FMP and its Addenda have been compiled into one document **(Briefing CD)**.

Presentations
- Matt Cieri will present the TC white paper

Section Action for Consideration
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5. Update on NEFMC Amendment 4 Court Ruling (8:45-8:50 a.m.)

Background
- On August 2, 2012 the U.S. District Court for DC issued a remedial order for Flaherty et al. v. Blank, et al. The Court ordered action to address deficiencies identified by the court for Amendment 4 to the Atlantic Herring FMP (**Briefing CD).**

Presentations
- Staff will present an update on Council and NOAA action to address the court order.

6. Discuss ISFMP Policy Board task of flexibility and delayed implementation under the FMP (8:50-9:00 a.m.)

Background
- In May 2012, the ISFMP Policy Board directed the Atlantic Herring Board to discuss and report back to the Policy Board on ways to address additional flexibility and delayed implementation in the Herring FMP (**Briefing CD**).

Presentations
- Staff will present possible sections of the FMP where these issues could be incorporated.

6. Other Business/Adjourn

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

ATLANTIC HERRING SECTION

Crowne Plaza Hotel - Old Town
Alexandria, Virginia
August 7, 2012

These minutes are draft and subject to approval by the Atlantic Herring Section.
The Section will review the minutes during its next meeting.

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INDEX OF MOTIONS

1. **Motion to approve agenda** by Consent (Page 1).

2. **Motion to approve proceedings of April 30, 2012** by Consent (Page 1).

3. **Move to adopt Option A for 3.1.2, spawning area boundaries; Option C for 3.2.2, size bins that trigger a spawning closure start; and Option B for 3.3.2, number of fish per sample (Page 6).** Motion by Pat Augustine; second by Peter Himchak. Motion carried (Page 6).

4. **Move to approve Addendum V to the ISFMP for Atlantic Herring with options selected** (Page 6). Motion by Bill Adler; second by Pat Augustine. Motion carried (Page 6).

5. **Motion to adjourn** by Consent (Page 20).

ATTENDANCE

Board Members

Terry Stockwell, ME, proxy for P. Keliher (AA)
Steven Train, ME (GA)
Doug Grout, NH (AA)
G. Ritchie White, NH (GA)
Rep. David Watters, NH (LA)
Rep. Sarah Peake MA (LA)
William Adler, MA (GA)
David Pierce, MA, proxy for P. Diodati (AA)
Bob Ballou, RI (AA)
Bill McElroy, RI (GA)
Rick Bellavance, RI, proxy for Rep. Martin (LA)
Dave Simpson, CT (AA)
Lance Stewart, CT (GA)
Pat Augustine, NY (GA)
James Gilmore, NY (AA)
Brian Culhane, NY, proxy for Sen. Johnson (LA)
Peter Himchak, NJ, proxy for D. Chanda (AA)
Tom Fote, NJ (GA)
Adam Nowalsky, NJ, proxy for Asm. Albano (LA)

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Matt Cieri, Technical Committee Chair
Joe Fessenden, Law Enforcement Representative
Jeff Kaelin, Advisory Panel Chair

Robert Beal
Toni Kerns
Mike Waine
Jeff Kipp

Guests

Mike Johnson, NC
Wilson Laney, USFWS
Lindsey Fullencamp, NOAA
Jud Crawford, Pew Charitable Trusts
Adam Davis, Chesapeake Research Consortium
Charles Lynch, NOAA
Raymond Kane, CHOIR
Patrick Paquette, MSBA/RFA
Janice Plante, Commercial Fisheries News

The Atlantic Herring Section of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crowne Plaza Hotel,

Alexandria, Virginia, August 7, 2012, and was called to order at 8:30 o'clock a.m. by Chairman David Pierce.

CALL TO ORDER

CHAIRMAN DAVID PIERCE: If everyone would please take your seats, we'll begin our meeting.

APPROVAL OF AGENDA

CHAIRMAN PIERCE: All right, you have the agenda before. The agenda today focuses on Draft Addendum V; final approval for Draft Addendum V. We will be hearing public comment on that, technical committee report, advisors, law enforcement.

That will be followed by Amendment 5 Selected Measures, specifically a review of those measures adopted by the New England Council. We're all aware of those measures now and we will find out what exactly was selected. Then we will conclude with a review of the benchmark assessment for Atlantic sea herring, an assessment that we have waiting for, and, of course, Matt Cieri has been very involved in that and he will be presenting that report as well as peer review panel report. The draft agenda is before you. Are there any changes to the agenda? Sarah.

REPRESENTATIVE SARAH K. PEAKE: Mr. Chairman, I'm not sure where the appropriate place to bring this up is, but I would like to bring up a gentle reminder. I went back through the approved minutes of our winter meeting in February; and as you may recall, Terry Stockwell and I had a little back and forth with a motion regarding the spawning stock on Nantucket Shoals.
The conversation is recorded on Pages 16 through 18 of the February meeting minutes. Where we ended up on that was with Vince O'Shea making the suggestion, quote, "that we pull together a white paper of sorts scoping out what the issues would be involved with this; much less labor-intensive than the addendum. I think a reasonable time may not be in May but maybe for the August meeting."

I've looked in the materials and I didn't see a white paper like that. I suspect it may not have been pulled together. This is just a friendly reminder that we did have that representation. I don't intend to make any further motions regarding the Nantucket Shoals spawning stock or anything today, but I do want to keep that on our radar screen. Thank you.

CHAIRMAN PIERCE: All right, thank you, Sarah, that is a good reminder, and I suspect we will get back to that issue under other business just to get a staff update as to where we are with that and what the next steps should be regarding that white paper. Thank you for that reminder. Are there any suggested changes to the draft agenda? If not, we will consider the agenda approved, and we will follow it for the two hours we have devoted to Section business this morning.

APPROVAL OF PROCEEDINGS

CHAIRMAN PIERCE: Next is approval of proceedings from our April 30 meeting. I assume everyone has had a chance to take a look at them. Do I have a motion to approve or suggestions for changes to those minutes if indeed a change is required? Bill Adler.

MR. WILLIAM A. ADLER: I make a motion to approve them.

CHAIRMAN PIERCE: Okay, Bill Adler has made a motion to approve; second by Pat Augustine. All right, motion to approve; with no objection we will consider the proceedings approved.

PUBLIC COMMENT

CHAIRMAN PIERCE: All right, public comment; as always we provide an opportunity for the public to comment on any issues that are not going to be dealt with through the agenda itself, through our business..

Is there anyone in the public who would care to comment on any other issues that are specific to sea herring? I see no interest in commenting at this time.

DRAFT ADDENDUM NUMBER V FOR FINAL APPROVAL

CHAIRMAN PIERCE: Therefore, we will go on to Agenda Item Number 4, which is Draft Addendum Number V. Once again, it is here for final approval. We're going to review the options and that will occur – well, actually, Toni, are you going to review the options?

MS. TONI KERNS: I'm going to review the options and while I review the options, I'm going to remind the board of which options the technical committee had recommended and then give the overview of the public comment and then Jeff Kaelin has an AP Report and Joe Fessenden has the LEC Report.

CHAIRMAN PIERCE: All right, if you then review the options for us and that will be followed by public comment summary.

MS. KERNS: As a reminder to the Section, Addendum V addressed spawning regulations. The reason why this document was put forward is that the current regulations for spawning were scattered in three different documents, and there was a lack of clear guidance to the states on some of those regulations.

There were some slight inconsistencies amongst the states in their state regulations as a result of this. Up to this point it has worked out due to cooperation between the state fishery agencies but that would not always be guaranteed in the future. What we're looking to do here is to replace all of the spawning regulations that were listed in the three different FMP documents.

The procedure that we would go forward with in approving this document is the Section will take a vote on the final measures that are contained in Addendum V. Then the staff and the technical committee chair will draft spawning regulations and carryover language that were included in the selected options today as well as all of the other spawning regulations from the different documents.

The full technical committee will review those draft regulations, we'll come back to the Section and have them review that language and then approve that full spawning regulation language and then we will publish Addendum V. This is a two-part process that we're going to go through, as a reminder. The first options that we're considering are looking at how the spawning area boundaries are modified. They can either, Option A, be modified through an addendum like we currently have in our regulations, so this is status quo.

Option B is to have the boundaries be changed through Section action but this would have to be based on technical committee advice. The technical committee recommends this Option B. The second issue in the addendum is looking at size bins that trigger a spawning closure start. Closures begin based on a percentage of the Stage 3 through 5 spawning herring that are greater than 24 centimeters, and that's our current regulation.

The technical committee considers this to be a type and it should say spawning herring that are equal or greater than some number value. The technical committee looked at the size of the spawning herring and found from recent samples that herring are maturing at a smaller size, especially in the 23 to 24 centimeter size bin.

We're proposing to change the language to say Option A, which is status quo, just greater than 24 centimeters. Option B is greater than or equal to 24 centimeters. Option C is greater than or equal to 23 centimeters, and this is the technical committee's recommended option because of the changes that they're seeing in the sizes that herring are starting to spawn. Option D is greater than or equal 22 centimeters.

The next issue is looking at the number of fish per sample that are collected. Option A, which is status quo, currently there is a requirement for 50 fish per sample. Option B is looking to change and it would be a hundred fish per sample. Sufficient sample information shall mean that at least two samples of a hundred fish or more in either length category taken from commercial catches during a period not to exceed seven days apart. The technical committee recommends increasing to a hundred fish per sample because the states of New Hampshire, Maine and Massachusetts are already collecting a hundred fish per sample.

For the public comment that we received for the document, we received two comments. These comments supported changes to the spawning area boundaries through addendum and not through Section action to allow for full public comment. The technical committee recommendation to change sampling protocol for all sizes of spawning herring, specifically one of the commenters said that they would support a size bin to a trigger for a closure at greater than or equal to 22 centimeters, which is Option D.

They support increasing the sample size to a hundred fish. They also encouraged action to alter boundaries consistent with stages and aggregations of spawning herring. Specifically some of the commenters encouraged setting a spawning area for Nantucket Shoals and also to setting a spawning area for Georges Bank.

There was an overall concern for the herring stock in some of the comments and for the Section to consider what are the implications of fish that are maturing at smaller sizes and to think about the ecosystem level importance of spawning herring as the Section moves forward with management. Those are the public comments.

CHAIRMAN PIERCE: Thank you, Toni. Are there any questions of Toni regarding the options as she has described them or regarding any of the public comments that have been submitted relative to the addendum? All right, I see none; we'll therefore go on to the technical committee report to be provided by Matt.

MS. KERNS: I actually gave the technical committee's options in my narrative.

CHAIRMAN PIERCE: All right, very good. The advisory panel report will be provided by Jeff.

MR. JEFF KAELIN: Good morning, Section members. It is a pleasure to be here as the AP Chair for the first time. I'm also an AP Chair now for the New England Council. You have a summary of the conference call we had on June 1st in front of you. I will read through this to make sure I don't miss anything.

We did have a call. I was elected chairman and we were all very appreciative of the work that Dave Ellenton had done as AP Chair since 2003. He will continue as a member of the AP. On Section 3.1, spawning area boundaries, the AP unanimously supported Option A; spawning area boundaries modified through the addendum or amendment process.

We agreed that changes to spawning area boundaries have significant impact on industry and public hearings and a public comment period are necessary to inform the Section before making a final decision. For example, under the zero tolerance provision, closures can overlap and close the entire Maine coast for part of the year.

AP members also commented that quick decisions based solely on new scientific information often have unintended consequences if not vetted through fishermen and the AP first. On the size bins, the AP unanimously supported Option D, greater than or equal to 22 centimeters. We support the size reduction mainly because of concern that smaller spawning fish might not be counted during sampling, and there was some concern that sampling data from Maine DMR was not utilized when coming up with these options although a thorough presentation of the data would have been useful in the document.

AP members did utilize Table 1, which identified the percentage of spawning or developing females, in deciding on this preferred option; agreeing that 20 percent of a 21 to 22 centimeter fish in 2011 is significant enough to decrease the size bin on an annual basis to 22 centimeters or greater. AP members also noted that herring are spawning at a smaller size and not at a younger age.

On Section 3.3, number of fish per sample, we were also unanimously supportive of Option B. There was a lot of unanimity in this AP; probably the most that I've ever seen in my entire life, which was good. Option B, a hundred fish per sample, we agreed that increased sampling provides a more accurate understanding of when and where herring spawn.

All AP members agreed that states don't collect enough samples and resources should be funneled by the states to increase the number of fish collected for spawning area closures. There was support from most of the AP to remove the zero tolerance provision that now exists as this measure has resulted in fewer and less accurate sampling because commercial samples are unavailable during a closure.

The members that were supporting this agreed that the broad closures are a result of insufficient sampling effort and that increased sampling could allow for tolerance. One member disagreed with the tolerance because you have to kill spawning fish to learn that an area should be avoided. There was a tolerance in place for decades. I don't know, Dr. Pierce, that could be something that might be added to the white paper if the board wants to consider that in the discussion on the Nantucket Shoals spawning stock, perhaps. I just throw that out as an idea.

Under other business, the AP discussed a few issues that we wanted to highlight for you this morning. We believe states should increase their sampling effort, especially New Hampshire. AP members would support programs for fishermen and dealers contact state marine fisheries agencies and provide them with spawning herring samples.

Zero tolerance spawning closures should be re-evaluated. The AP is concerned that regulations may not be consistent from state to state and think that the technical committee should review the regulations again. The specific issue that was raised was that perhaps Massachusetts did not issue notice when the Western Gulf of Maine and Eastern Gulf of Maine spawning areas are closed.

There is concern that seven open days is too liberal. That really speaks to the days-out scenario; that is changed. And then finally we agreed that the Section should consider a days-out measure for Area 2 because of the quick closure of the Area 2 herring fishery last year; a lot of fish around up in the Rhode

Island area, which did not allow sufficient herring to remain during the winter to allow a mackerel fishery to take place. That ends my report, Mr. Chairman.

CHAIRMAN PIERCE: Thanks, Jeff. Questions of Jeff? Pat.

MR. PATRICK AUGUSTINE: Mr. Kaelin, on your report you noted that there was only a difference – and I apologize for not having reviewed that chart – you noticed there was only a difference in that 22 and 23 centimeter for two – was it two years, 1976 and 2001? I guess the question to our technical committee would be does it make a difference whether we do the 22 or 23 where the advisory panel noted it was an age issue versus a size issue? If we go one number versus the other, how would it affect the results of your information?

DR. MATT CIERI: That is actually really a good point and something I was going to bring up a little bit later on. If you go to I believe it is the table on Page 8 of the addendum document, you will see that there is a highlighted section of a 23 to 24 centimeter size bin. If you look at the 22 to 23 centimeter size bin directly above that, that row directly above that, what you can see is that there has only been a few – there is only been basically 2011 in which you've actually had a significant amount of spawning occurring in that size bin.

The difficulty is that spawning tolerances and triggers are based on a percentage of mature fish caught. So, what ends up happening is if you've got a lot of fish in that sort of 22/23 centimeter size bin that aren't spawning, they're going to affect your results. So if they're not maturing like they did in 2011, then you will end up not closing those places that need to be closed based on other fish. Do you see where I'm going, because you're adding in zeros is what it comes down to. So we believe that the fish in that size bin aren't consistently spawning on a year-to-yea basis and therefore you're probably better off using the 23 and up.

CHAIRMAN PIERCE: Thanks for that clarification, Matt. Pete.

MR. PETER HIMCHAK: I was focusing on the same point, and the conference calls for both the technical committee and the advisory panel were on the same day. Was the AP aware of the technical committee's comment on the number of immatures that they would get at 22 inches? This wasn't brought out I don't believe in the development of the addendum where the technical committee – I think at that point it was 22/23.

Well, now the technical committee is coming out with a good reason to say 23 inches. If the advisory panel had been aware of the technical committee's conference call results – well, were they, first of all; and if they were, would it have influenced your decision; because if you go with the smaller size limit, then you may have the reverse effect of not protecting spawning Atlantic herring. That is my question to Jeff.

MR. KAELIN: I don't think we were aware that the technical committee had their call the same day. I think generally we felt that this might be a little bit over our head, honestly, and my sense of the call was that AP members wanted to be as conservative as we could be and making sure that we're protecting spawning fish.

I'm not sure my head is wrapped around this particular issue that both you gentlemen brought up this morning, but I can tell you that we were just trying to be ultra-conservative, I think, in our discussion. If the technical committee's advice is to use a 23 centimeter fish and we were clear about, I wouldn't be surprised if we would support that as an advisory panel.

CHAIRMAN PIERCE: Thank you, Jeff. Any further questions of Jeff? All right, we now have the Law Enforcement Committee Report.

MR. JOE FESSENDEN: Good morning. Basically, I think in your packet you will find a memorandum from Mark Robson, our law enforcement coordinator's comments from our committee on the Addendum V for Atlantic herring. I will read the bottom paragraph basically is we reviewed the Section 3.0 and as far as the LE Committee was concerned, no concerns or issues were raised by members regarding these management measures.

Current management allows for changes in spawning area seasons depending on the availability of sampling data. No additional problems are foreseen with the mechanism to change boundaries provided that timely notification of such changes is integral to the process. The LEC is supportive of efforts to consolidate and standardize regulations into one primary management document. The LEC appreciates the opportunity to review this addendum and provide input.

CHAIRMAN PIERCE: Thank you, Joe. Question of the Law Enforcement Committee? All right, I see none; therefore, it is time – Pat.

MR. AUGUSTINE: Are you ready for a motion or are we going to get public comment or where are we going to go with it, Mr. Chairman?

CHAIRMAN PIERCE: No, it is now time for a motion if anyone cares to make one, and I suspect you are ready.

MR. AUGUSTINE: Sure, we would like to do that, Dr. Pierce. Relative to management measures, how would you like to have this stated? I would state that 3.1, spawning area boundaries, should remain status quo; 3.2 –

CHAIRMAN PIERCE: Hold on one second; so you're saying Option A?

MR. AUGUSTINE: Option 1; thank you, Mr. Chairman; 3.2, size bins that trigger a spawning closure start would be Option B; and 3.3, number of fish per sample –

CHAIRMAN PIERCE: Hold on one second; excuse me, I just wanted to make sure that we have this right. You said for management option 3.2.2, Option B, greater than or equal 24 centimeters, which is the technical committee's report or the advisors' suggestion.

MR. AUGUSTINE: I thought that was the technical committee's recommendation Option –

CHAIRMAN PIERCE: Option C is the technical committee.

MR. AUGUSTINE: I'm sorry, Option C, I stand corrected.

CHAIRMAN PIERCE: Okay, so your motion is for Option A under 3.1.2, spawning area –

MR. AUGUSTINE: Correct.

CHAIRMAN PIERCE: – boundaries can only be modified through an addendum to the FMP. And then the second part of your motion is Option C for –

MR. AUGUSTINE: Option C, greater than or equal to 23 centimeters.

CHAIRMAN PIERCE: Greater than or equal to 23 centimeters, and –

MR. AUGUSTINE: Under 3.3.2 would be Option B, 100 fish per sample, Mr. Chairman.

CHAIRMAN PIERCE: Okay, we have a motion. Staff is putting it in clearer terms on the screen; it would be **move to adopt Option A for 3.1.2, spawning area boundaries; Option C for 3.2.2, size bins that trigger a spawning closure start – add that language in – size bins that trigger a spawning closure start; and Option B for 3.3.2, number of fish per sample**. I correctly stated that motion, Pat?

MR. AUGUSTINE: That is correct, Dr. Pierce.

CHAIRMAN PIERCE: Okay, thank you; so Pat Augustine has made the motion; Pete Himchak has seconded the motion. Discussion on the motion? Terry.

MR. TERRY STOCKWELL: Thank you, Pat, that was the exact motion I was going to make. I appreciate the work of the technical committee and the AP. The technical committee's work is going to answer a lot of the issues that we've have been not really struggling with but dealing with over the last couple of years for consistency in the spawning regulations. I certainly feel that Option A under 3.1.2 is important enough to require a public hearing. Anytime we change a spawning area boundary, the public should be involved. I'm a hundred percent supportive of Pat's motion as it is on the board.

CHAIRMAN PIERCE: Other comments? I see none; I'll go to the audience. Does anyone in the audience wish to comment on the motion? I do not see any interest; therefore, any need for a caucus?

(Whereupon, a caucus was held.)

CHAIRMAN PIERCE: All right, all those in favor of the motion please signify by raising your hand; all opposed; any null vote. **Okay, it is unanimous; the motion is approved**. Next we need a motion to approve Draft Addendum V to the Interstate Fishery Management Plan for Atlantic Herring. Bill Adler.

MR. ADLER: **I'll make the motion to approve the addendum as approved options.**

CHAIRMAN PIERCE: Okay, so we have a motion to adopt the Addendum V with the options that we have selected. The seconder is Pat Augustine. The motion is move to approve Addendum V to the

ISFMP for Atlantic Herring with options selected. Motion by Mr. Adler; seconded by Mr. Augustine.

All right, I'm assuming there is no need to caucus and I can ask the simple question is there any objection to adoption of this motion? I see no objections; therefore**, we will consider the motion approved. We have adopted Draft Addendum V.** Now, as a reminder I'll turn to Toni and she will once again indicate the next step in this process.

MS. KERNS: I will work with Matt and we will draft a full set of spawning regulations. We will give those to the technical committee to review and then at the annual meeting we will come back to the Section to review that full language and for you to consider approval of that so all of our spawning regulations will be in one place.

CHAIRMAN PIERCE: All right, thank you very much. I think I can speak on behalf of the Section to express our appreciation to Matt and to other members of the technical committee who have put in a lot of time regarding the crafting of this addendum, the technical support for the addendum, and we greatly appreciate the fact that they did call to our attention a problem that needed to be addressed and indeed we have done that.

REVIEW OF THE NEW ENGLAND FISHERY MANAGEMENT COUNCIL AMENDMENT 5

CHAIRMAN PIERCE: Next on the agenda is review of the New England Fishery Management Council Amendment 5 selected measures. Indeed, the New England Council has acted. The decisions have been made and now Toni will provide us with an update as to what that council did.

MS KERNS: The council did select measures to move forward in Amendment 5. Those measures that were selected have been sent to the regional office for their consideration and approval. Options include expansion of possession restrictions. It eliminates the VMS power-down provision for limited access herring vessels.

It establishes a new at-sea herring dealer permit for carrier vessels. It looks at the pre-trip notification requirements for all LA herring vessels and Category D vessels fishing in the areas 1A, 1B and 3. It has pre-landing notification requirements that would apply to all vessels. Federally permitted dealers are required to accurately weigh all fish and document how the composition of mixed catch is estimated.

There is a 20,000 pound possession limit in Area 2/3 for vessels that also possess a federal LA mackerel permit. There is a hundred percent at-sea observer coverage on Category A and B vessels supported by funding from federal and industry and the use of state service providers. It improves the catch sampling by observers. There is a trip termination after ten slippage events for limited access vessels with the exception for slippage because of spiny dogfish.
There is a two-phase bycatch avoidance approach. The bycatch limits or catch cap will be approved for consideration in future herring action. For midwater trawl access to the groundfish closed areas; apply closed Area 1 provisions; and there is a hundred percent observer coverage on all trips in the groundfish year-round closed areas.

Also, as an update yesterday there was a federal court decision for the lawsuit that was undergoing for Amendment 4 through the New England Fishery Management Council. That lawsuit was filed in April of 2011. The court ruled that Amendment 4 is vacated or null for one year from now.

The court will retain oversight of the agency's actions in this matter until the National Marine Fisheries Service fully complies with the court ruling. It requires that the National Marine Fisheries Service and the New England Fishery Management Council review the most recent science and consider a full suite of protections for shad and river herring.

It gives the National Marine Fisheries Service one year to take action to minimize the bycatch of shad and river herring. It orders the National Marine Fisheries Service to consider new approaches for setting the allowable catch for sea herring that accounts for its role as food. It requires reports to the court at several stages, one, six and twelve months down the line. This ruling just came out yesterday so this is the limited information that we have on the ruling.

CHAIRMAN PIERCE: Thank you, Toni. This update from Toni is a bit of a surprise to me. I was unaware of it. Of course, I knew that it was eventually going to happen; the judge would eventually rule. I think what we're going to have to get from the National Marine Fisheries Service fairly soon now that the decision has been made is to what extent will the actions taken by the New England Council in Amendment 5 address the court's concerns.

That I think is a central issue. Well, it is the issue, I think. For example, in Amendment 5 the council went with a river herring monitoring and avoidance approach and not the river herring protection approach which would involve specific closed areas. It is a two-phased bycatch avoidance approach and it is an approach that was developed by the fishing industry itself working with SMAST, which is, of course, the University of Massachusetts-Dartmouth and Marine Science and Technology and also the Division of Marine Fisheries.

The council chose to go with that and the council chose to go with a river herring catch cap, but the cap would be implemented through a framework adjustment or the fishery specification process; in other words, through the next appropriate action. I believe the council is still waiting to be advised as to whether or not we can actually implement the river herring catch cap through the specification process. I will turn to Doug Grout, who is chair of the Sea Herring Committee of the council. I think I misstated something; go ahead, Doug.

MR. DOUGLAS GROUT: I believe that we will more than likely have to go through a framework as opposed to a specification process. That was my understanding from our council meeting at that time.

CHAIRMAN PIERCE: Doug is correct; that is the understanding. However, there is still some disagreement among New England Council members as to whether or not this can be done through the specification process. I for one believe it can be done through the specification process, but NOAA Legal Counsel has told us it cannot be done. It is a rather bizarre situation, to say the least, and now I think it will unfold more as a consequence of the judge's decision.

We will see if indeed NOAA Fisheries will change its mind on that particular position as to whether or not it can be done through the specification process. It will all unfold, to say the least. Any questions of Toni regarding what she has provided regarding a summary of what the New England Council has done and, of course, what the judge has just decided. The many specifics of what has been adopted through the New England Council's actions, of course, can be found on the New England Council's Website if indeed anyone cares to really delve deep into the individual issues and the rationale for all the different decisions. Pete.

MR. HIMCHAK: Mr. Chairman, maybe you can't answer this now because this complicates the process for implementing a river herring/shad cap. You recall Amendment 5 was paralleling the development of Amendment 14 in the Mid-Atlantic Council for squid, mackerel and butterfish. Now, we voted on preferred management options at our June council meeting.

Is now recommendations that have been made to the National Marine Fisheries Service for the development and implementation of a cap that would be developed through 2013 and implemented in 2014; not through a framework following the amendment, but as part of the actual Amendment 14; whereas, New England was working under the premise that the cap would be developed through a subsequent framework adjustment.

I guess my question is, well, what is the anticipated implementation of a river herring/shad cap under Amendment 5 in consideration of what we're doing with Amendment 14. They may be on the same timetable now. You may have to accelerate your process; whereas, I was afraid you'd be like a step behind the Mid-Atlantic.

CHAIRMAN PIERCE: So to clarify, Pete, the Mid-Atlantic Council will be doing it through the specification process, right, setting a cap through specifications?

MR. HIMCHAK: That's correct.

CHAIRMAN PIERCE: Okay, and right now the – okay, Doug.

MR. GROUT: I would anticipate, given what we were talking about, we would be on the same timeframe. You're right, Dave, that was some discussion that the council had that we already had a mechanism under Amendment 1 to put in a river herring catch cap, but the NOAA Counsel advised us that we did not properly consider river herring in those catch caps. Until I hear differently from NOAA Counsel, I have to assume that we're going to do it via framework.

CHAIRMAN PIERCE: Okay, the Chair of the Herring Committee, those are his views and highly respected views. Bill.

MR. ADLER: Toni, back to Amendment 5, there was one line there that you said something about applying to Area 1, and I didn't know what that meant.

MS. KERNS: Bill, were you talking about the pre-trip notification required for all limited access herring

vessels and Category D vessels fishing in Area 1A, 1B and 3?
MR. ADLER: No, that wasn't it; yes. Maybe Closed Area 1 Provisions; what was that one about?

MS. KERNS: The midwater trawl vessels would be prohibited from fishing in the groundfish year-round closed areas without a National Marine Fisheries Service approved observer on board.

CHAIRMAN PIERCE: Any further questions of Toni? Yes, Bob.

MR. ROBERT BALLOU: Toni, just so I understand the court's ruling; did that reflect at all the council's decision on Amendment 5 or was that undertaken separately and without regard to the council action?

MS. KERNS: I would believe it would be separate without regards to the council action because the document hasn't been finalized. Amendment 5 hasn't been finalized. It has to go through the regional office and then beyond before it gets finalized, so it wouldn't be brought in otherwise would be my assumption. It wasn't a part of the lawsuit so I'm not a hundred percent sure everything that the judge looked at.

MR. BALLOU: And just a quick followup; so now the National Marine Fisheries Service needs to review Amendment 5 both with regard to Magnuson provisions and now with regard to this new court decision. It adds an additional layer of review upon the National Marine Fisheries Service; is that my understanding of where things now stand?

CHAIRMAN PIERCE: I think we can assume that is what the Service will have to do. I believe the assumption has been that Amendment 5 had options within it that would enable – well, that would adequately address concerns about river herring. The question now becomes – the options that were adopted by the New England Council as part of the amendment; do they go far enough; do they actually address the judge's concerns. We don't know because no one has the decision – we don't have the decision in front of us and I don't know the specifics. Toni did a very good job summarizing where it stands right now. Bob.

ACTING EXECUTIVE DIRECTOR ROBERT E. BEAL: Just quickly reading through the judge's orders, they do reference Amendment 5, but the way it is worded in my quick reading here is that they don't presuppose what the outcome of Amendment 5 is going to be coming out of the National Marine Fisheries Service.

They recognized that Amendment 5 is moving through the process and has been approved by the council. As part of the one month, the six months and twelve month reports back to the court from the National Marine Fisheries Service and the council, the relationship between Amendment 4 and Amendment 5 is going to be one of the key points in those reports.

CHAIRMAN PIERCE: Thanks for that additional information, Bob. Terry.

MR. STOCKWELL: Just to follow up, Doug, I have the same recollection of general counsel's advice to the council that moving forward a catch cap would have to be through a framework. John Bullard will be here tomorrow and this will be a real welcome to our neighborhood and a question to ask him.
CHAIRMAN PIERCE: All right, to be added to the list; very good. Any further questions?

MR. HIMCHAK: Mr. Chairman, I just wanted to follow up the Mid-Atlantic Council also voted to begin the initiation of Amendment 15 to the Squid, Mackerel and Butterfish FMP to include river herring and shad as stocks in the fishery. This further complicates and that will include ACLs and AMs for river herring and shad in those fisheries.

ATLANTIC HERRING SAW 54 BENCHMARK ASSESSMENT

CHAIRMAN PIERCE: Thank you, Pete; nothing new; increased complexity and complications; par for the course. Any further questions of Toni? All right, I see none; therefore, we will go on to the next agenda item, which the Atlantic Herring SAW 54 Benchmark Assessment. Matt is going to give us his summary of the stock assessment report as well as the peer review panel report of that assessment that we have been waiting for. Toni.

MS. KERNS: I just want to let the Section know that the reports were on your supplemental materials. The full assessment report has yet to be released. When I called to inquire about the full assessment report, they said it would be several weeks. It is undergoing some revisions, mostly edits, but as soon as it is released I will send it out to the Section; or, if it's too large of a report, I'll send you all a link to pull it off of the ASMFC Website.

DR. CIERI: Yes, those tend to be pretty honkin, so by and large you're going to get a link because otherwise these documents are literally like 200 megs by the time we're done with them. My name is Matthew Cieri; I'm the technical chair and also from Maine DMR. I'll be talking to you today and giving you an update on the summary document from the 54th SARC.

This SAW/SARC actually accomplished two species. One was yellowtail flounder and the other one was Atlantic herring. We'll talk today about Atlantic herring rather than yellowtail flounder as herring is a commission managed species and yellowtail is not. This particular idea was to take a new approach for Atlantic herring.

As you may remember from some of the background information, in 2009 we did an update through the TRAC process. At that particular TRAC meeting it was discovered that there was a very large retrospective pattern with the model as well as some very significant uncertainties about some of the end result.

What ended up happening was during the specifications process for Atlantic herring, the SSC moved to simply use the last three-year running average for Atlantic herring and to set specifications based on that. Even though the model for 2009, that update had been peer reviewed, it was still only an update and it was a very difficult model to deal with.

We decided to take a fresh look at Atlantic herring in an Atlantic Herring Assessment through a SAW/SARC process. We looked at a number of different types of models; the first one being SS-3, which is a very popular west coast model, which is length and age based. Then we also looked at another model developed by Yong Chen, which is very similar to the lobster model that you guys might be familiar with for the Gulf of Maine.

We also started from scratch with all of our surveys. New and old surveys were brought to light during this entire process, and these included the winter, spring and fall NMFS bottom trawl series; the Gulf of Maine shrimp, which actually will end up becoming fairly important; the inshore Maine, New Hampshire and Massachusetts DMF trawl surveys; as well as the larval survey and a Georges Bank acoustic survey. Those are all the surveys that we had to work with.

We reformulated natural mortality completely and looked at a lot of new, fresh approaches for natural mortality that are done for some other species as well as stuff that we came up with ourselves. We took a fresh look at the catch at age. We took a fresh look at pretty much a lot of the landings. We took a fresh look pretty much at a lot of stuff.

At the end of the day we ended up with the same model. It is the same model but entirely different, and I'll go through some of these changes as we go along. The last time we used this model called ASAP, which is an age-structured forward-projection type of a model, using a statistical catch-at-age approach.

As you might remember, we had a standard natural mortality across the board, all ages, all year at about 0.2. We had a huge retrospective bias, on the order of 40 or 50 percent, and that tended to overestimate your biomass and underestimate your fishing mortality in the terminal year. There were a lot of problems with that old model.

This time we used the same model. It is the same statistical framework, but we've got a new formulation for the catch at age. We've got new fleets. We got age and year time-varying natural mortality. We've got new surveys and we've a whole other bunch of stuff in there. The data, just stepping right through it, we've catch and catch and age from 1965 to present; so we used a new approach and reformulated that.

We broke it out into two types of gear, fixed and mobile. In this case fixed would be a stop seine and weir as well as any type of pound net activity, that type of fixed gear, and mobile gear which would be purse seines, midwater trawls and bottom trawls. Instead of resolving the catch-at-age spatially, we decided just to lump everything all together. In the past we've resolved it spatially, but then we've had to borrow samples from one thing to the other.

Most of us found that to be kind of silly, so therefore we just simply did it as one lump. For the surveys we included the NMFS spring survey and the NMFS fall survey and then a new survey, which hasn't been online before for Atlantic herring, which was the shrimp survey that occurs in the Gulf of Maine in the summer.

This is a particularly important survey because it predominantly catches herring age five and up, so it as an adult index unlike some of our other surveys. The ones that we considered but ended up finally rejecting for use in inclusion in this model was the NMFS winter survey, the flatfish survey.

The acoustics and the larval survey were also tossed as well as the Massachusetts DMF and the New Hampshire bottom trawl, mostly because these don't cover the entire range of the stock, and what we're trying to look at is the entire meta-complex of Atlantic herring. Just to give you a landings breakdown of what this kind of looks like, again this is right out of the document.

You can turn and follow along in the figures if you're having trouble seeing, but we've got mobile gear and the catch of mobile gear by year from about 1965 onward. You can see this sort of large spike here. That would be the ICNAF fisheries, the foreign fleets that went after Atlantic herring. We have a New Brunswick weir fishery in the panel right below that. As you can see, it has been highly variable, but in some cases where it is much higher than where it is currently down here.

The U.S. fixed gear fishery; the same deal; in the eighties actually quite high, 60,000 metric tons was being taken by fixed gear alone and now it is down around five or six hundred metric tons. When you look at this in the overall total, what you can see is pretty much everything follows the mobile gear, and by and large we've had large landings back here in the ICNAF fisheries. It then declined and now we've got some – we had some increase here in the mid-nineties and then it started to come down ever since.

We took a completely fresh look at natural mortality. I know this is fairly technical. A lot of this will be explained in detail when the assessment report comes out, but we did a Hoenig approach, first off, which basically gives us a scale of what natural mortality is, and that is based on life history. That includes things like growth and maximum age.

This gives us an idea of what natural mortality is using this approach. We then took something called the Lorenzen approach, which looks at body size, and this gives us actually M at age. What it does is when you go through and you take look at that type of stuff, what you end up seeing is that smaller, younger fish tend to have higher natural mortality than older fish.

It is something that most people can kind of grasp their hand around. We've now got age and year time-varying natural mortality from the approaches. One of the other things that we did was to take a look at the consumption data, and what it indicated is that there seems to be sort of two break points for Atlantic herring; prior to 1996 and after 1996.

The consumption data available from the NMFS Food Habits Database increased it. After 1996 there was a very large increase in consumption. This large increase in consumption by some of the major predators, including striped bass, dogfish, monkfish and a few others, indicated that we should shift our natural mortality to 50 percent higher on average for all of our years, for all of our ages after 1996.

Surprisingly when we did that, what ended up happening was our retrospective pattern completely went away. That was one of the indications that indicated that doing this type of an approach was going to be beneficial in resolving some of our issues that we had had with the previous model. This overall reduces the retrospective pattern.

So post-1996 has been an increase in natural mortality as a result of increased consumption by most of the dominant predators in the system. That was included so all of the natural mortality by age and by years was then scaled up by 50 percent. When we did that, a lot of our problems with our previous model went away.

To give you an idea of what that kind of looks like, again from Figure 6-A you can take a look at what the consumption looks like in total magnitude as well as the ratio of consumption and catch. Again, this might end up being an important figure. What you can see is that at certain times consumption by itself is 600,000 metric tons, and that the ratio of consumption and catch in some cases tops out to be five, six times what the fishery catches in total biomass.

When you start including these in the calculations, this is the reason why things are going change with your reference points, as we'll discuss in a few minutes. So you're now accounting for predator removals which are literally anywhere from four to seven times what your fishery is catching. You change the stock dynamics when you do so and you change your reference points and the stocks productivity when you account for that.

Again, in looking at this, the red line here is roughly about what you've been catching on average. You can take a look at just the consumption and just from an eyeball you can see in the black line fishery catches. For example, in 2008 the fishery catch is 100,000 metric tons, but the actual predators are removing 600,000 metric tons. Keep that all in mind as we move forward.

When we did the consumption and we took a look at all this natural mortality, what we ended up seeing was in some cases the approach that we had taken was very consistent when you started adding up all of your predators that might be important for Atlantic herring consumption. In some cases we didn't just include other fish predators, but we also included a highly migratory species; bluefin tuna, for example, and some of the migratory sharks.

We included birds and in particular we included marine mammals, particularly seals. That ends up becoming fairly important. When you do that, our approach using both Lorenzen and Hoenig with a 50 percent scaled, comes in at this black dotted line. Whereas, if you simply added up all the consumption by predators that we know of and can account for directly, you're looking at something like what occurs in the orange line here.

So they're roughly on track, they roughly give us the same order of magnitude. The approach that we took is probably a little bit more than when you add up all the consumptive fishes and mammals, but the difference is that there is some stuff that you just can't account for in the food habits database; like striped bass in inshore areas, for example; places in which Atlantic herring are that the NMFS bottom trawl doesn't go and the food habits data does not exist for. That becomes fairly important.

We were all done and we figured all of that stuff out and we came out with our results. Our these results included our reference points and our status, which is what we're supposed to give and the SSC as we go through all this process. The current estimate at Fmsy from this benchmark assessment is 0.27. Current F is estimated to be about 0.14, so we are fairly far below our F at MSY.

Our spawning stock biomass at Bmsy is about 157,000 metric tons with half of that being about 78,000 metric tons. Those are our typical biological base reference points for both fishing and biomass for managing the stock. Our current SSB is roughly a little bit above half a million, so we are very far, far above our biomass targets; more than double.

The current estimate of MSY from the productivity of this fish over the long term is about 53,000 metric tons total for a long-term sustainable yield. The 2011 catch was roughly about 88,000 metric tons, and that is actually lower than what it has been taken in the ten or fifteen years, which has roughly averaged around 100 to 120.

So we have re-estimated our MSY, and part of that is due to the changes in natural mortality that we've seen. The overall status is that we are not overfished and overfishing is not occurring for Atlantic herring, but we do have a number of uncertainties associated with this, and I will get to that in a minute. The first thing is to realize to take a historical look at what fishing mortality has looked like for Atlantic herring, and this is exactly what it has looked like or at least as we have estimated it.

As you can see, our F at MSY reference point is here in the dashed line, and this is what things have looked like in the past. You will notice that this F at MSY dashed line does not go past 1996. That is on purpose, because this is the reference point – the F at MSY that was developed post-1996, and that is actually a fairly important point is that we don't know what F at MSY was back in this timeframe.

We do and we can probably estimate it, but it was probably much higher because your predator removals were not as great. Looking at it from spawning stock biomass, again here is your reference point. Again, it only goes back to 1996. Here is your biomass. This gives you an idea of where you are biologically with the actual biomass of the stock relative to your reference points.

If you're looking at total biomass, what you see here is it just gives you the sort of magnitude, but it also gives you – it highlights where we are versus where we thought we were historically. This is actually another important point. Back here before the ICNAF fisheries, we were running at a total biomass roughly at about a million to 1.4 million. This is where we think we are now for total biomass.

The other thing to keep in mind – and again we'll talk about this – is that there has been a very gradual decline in Atlantic herring biomass since roughly about 1996 until about 2008, and that is one of our uncertainties. One of the things that this model is suggesting is that is a very large year class for 2008, which we will get into.

The major uncertainties that are associated with this problem; we have resolved the retrospective pattern. For the most part it is done. We've got a different issue and that is the size and strength of the 2008 year class, and this is important for both – in particular for projections and for quota setting.

Right now the model is estimating that it is double the next highest year class of 1994, which is a lot. It literally doubled the biomass in one year. We know

it is a strong year class. We've got fishermen reports to that effect. It shows up in our surveys; it shows up in the catch-at-age matrix. It shows up in a lot of different other data that we've seen.

However, the magnitude is what is troubling. Is it literally double the next biggest year class we've ever seen in the history of this fishery? That is going to be the major uncertainty as we move forward. Even if it's the same size as the 1994 year class – and we believe that is probably a no-brainer – even if it is the same size, the status of the stock doesn't change, so this doesn't really affect the status of the stock itself.

What it does affect is your projections as you move forward in quota setting. To give this a graphical sort of presentation, here is 1994. You'll notice that there have been spikes in year class all along. Here is 2008. It is estimated to be very, very large. The other difficulty is that it is not fully selected by the fishery, which means it is not fully available in the catch-at-age matrix so it is not fully being accounted for in the model without a lot of uncertainty associated with it. We've changed the selectivity of this fishery.

Prior to this we have assumed a knife-edge – everything is available for being fished on by age two. That's not really the case, and in some cases the 2008 year class in 2012 is going to be four years old, correct, so therefore it is not quite in there. It is only a little bit above 60 percent selected by the fishery, so it is not fully into the model.

It is not fully integrated into the model and so there is major uncertainty associated with that year class. The report actually sort of sums it up a lot better than I can. What they said is that in the short term – and this is from the peer reviewers – in the short term this 2008 year class may reduce the vulnerability of the stock to overfishing.

The strength of large cohorts, however, is often overestimated in the short term, and the strength of this cohort should be interpreted cautiously and decisions based on this assessment should consider this uncertainty. This statement and this issue is more than likely what is going to dominate all of the discussion for SSC for setting OYs and ACLs.

There are some other uncertainties also associated with this model. One is the scale of natural mortality in recent years; you know, to scale it up by 50 percent, we had a long discussion about that; you know, was it 50, was it 40, was it 60? Fifty seemed to be the appropriate step from sensitivity analysis; but when you change natural mortality as you just saw, you not only change how you view the stock but what its reference points are.

Any uncertainty around your natural mortality can translate into a bigger uncertainty with your reference points. The other major uncertainty deals with the unit stock. You've got a couple of things going on here. One is that you've got a meta-complex with a bunch of smaller aggregations in it with different environmental pressures, probably different natural mortality rates, different growth rates, different harvest pressure, all lumped into one, and so that can give you some uncertainty associated with it.

The other thing is that there is some uncertainty about that mixing with the Canadian stock, with 4WX. What we've started to notice is that in certain years there seems to be more leakage from the Canadian side to the U.S. and vice versa, and so there needs to be a little bit more work done on that.

We've had to make the assumption that our stock is ours and that the New Brunswick weir fishery is part of the U.S. stock just as we always have, but we recognize that this is an uncertainty and actually can give you false readings. Particularly if you have a strong year class in Canada that winds up in U.S. catches, it can give you that false impression that looks like emigration or migration, so that can mess up a model.

Right now we're dealing with the projections and these are also available from the document. You totally can't read this but this is also Table A-1, and I've got sort of a summary over here. Basically, you're roughly at about 518,000 metric tons spawning stock biomass. If you fish it at F at MSY, if you fish it at that rate of 0.27, your landings start off in the first year at about 168,000 metric tons, double what you currently catch.

These landings will drop to about 100,000 metric tons by 2015, and your stock will from half a million down to 300,000 at an F at MSY rate. At basically 75 percent of that rate, you can already tell what is going to happen. You drop from half a million down to roughly about 300,000 and change. If you keep the F current, your rate at 0.14, you go from roughly half a million and you drop it down to 400,000 by 2016.

You start off with a catch at 93,000 metric tons; you wind up with 67,000 metric tons by 2015, so the catch goes down. If you fish it at the F at MSY, the 53,000 metric tons, you have 53,000 metric tons for each of the years, your stock declines from roughly

500,000 down to 448,000. Your stock still goes down even if you fish it at MSY, that is how far above your biomass targets you are.

If you kept the same catch, 88,000 metric tons, your stock will go from 500,000 down to nearly 400,000 metric tons by 2015. Note at no point do you actually go down to your Bmsy in any of these scenarios. Now, that I have completely boggled your brain the first thing in the morning – and I apologize for that – what is next?

The next thing is that somehow we've got the assessment result, we've got the reviewers' comments. They were actually very supportive. There were some minor tweaks that they wanted us to do within the model during the meeting. Those have been resolved. Currently we're editing the document. They provided their comments; those are available, but basically they went along with the formulation as we've suggested.

From here it goes to the PDT/TC for a meeting on the 14th of August. Anyway, then we have an SSC meeting on September 4th, and this is where the SSC will get their crack at it. This is where they're going to be looking at it in terms of things such OFLs and ABCs. Now, if you're not really completely familiar with some of these terms, an OFL is your overfishing limit.

It is always going to be higher than your ABC, your allowable biological removal, and the difference between those tends be scientific uncertainty associated with them. An ACL or accountability measures, those are set by the managers and the buffer between ABC and ACL will account for management uncertainty.

As you guys move through the specifications process, you will be getting a presentation from Lori about all of these alphabet soups for you to contend with. You've got a committee/section meeting on September 20th I believe in Warwick, Rhode Island, and then this kicks off the specifications process for Atlantic herring and area allocations of quota by area.

In this assessment document there hasn't been a lot of guidance on the proportion of inshore and offshore fish, so that is going to take a lot of work through the specifications process. The idea is to have an approved document out to NMFS I believe in the fall for final approval by January 1st or as soon as possible thereafter for total quotas. That's it.

CHAIRMAN PIERCE: Thank you, Matt. I've always known that you have borne a striking resemblance to Harry Potter, and the reason I say that is I can picture you with your wand saying, "Retrospective pattern, be gone", and it is gone. Shocking! That's good news. Questions of Matt? Bill.

MR. ADLER: First of all, back to your natural mortality where it was 0.2 but you increased it by 50 percent, so you mean 0.3 now; is that how that works?

DR. CIERI: No, it is not. Actually, what we did was we changed how we looked at natural mortality. In the past it was – when we've assessed it previously, it was 0.2 across the board, all ages; all years. We actually redid that whole thing; and then when we went through and redid that, we've got an age and time-varying natural mortality that is some number.

I can't give you want that number is because it changes by age for each year. What we found is when we did that and we basically put that number in or those numbers in as a matrix, they didn't quite jive, and there was still something wrong with the model and it was that retrospective problem. Then we looked at the consumption data and realized that natural mortality had changed. We scaled all of our natural mortality for all of the years and all of the ages up by 50 percent.

MR. ADLER: Okay, if I may, Mr. Chairman, one more question. On this stock thing, on Page 14 and 15, could you explain why the wording there says that the biomass is at 517,930 metric tons in 2011 and then on the very next page it says estimated total biomass in 2011 is 1.322 million. What am I missing here; how we go from 517,930 in the same year to 1.3 million?

DR. CIERI: Does one say spawning and one say total?

MR. ADLER: Spawning stock biomass, so the spawning stock biomass is he 517,930, right?

DR. CIERI: Correct.

MR. ADLER: And then the larger number is the total?

DR. CIERI: Correct.

MR. ADLER: Okay, I'm trying to get my head around this. Thank you.

DR. CIERI: Right, because not all the fish are spawning.

MR. G. RITCHIE WHITE: It seems like the biggest change in this is the natural mortality. Will the natural mortality rate that you now have established; will that continue at the same rate in the next assessments or will that be up for review at each assessment?

DR. CIERI: It will be up for review each time we do it. Just like anything else, natural mortality and some of these parameters are always – they're always on the table for changing. I think over the short term, over the specifications process, the regime that you're in of high natural mortality due to consumption; that is a lock. You don't see any of the predator stocks aren't going to change over the next three years that dramatically. But at the end of those three years, of course, we'll go back and take a look at all of this stuff. We always do.

MR. GROUT: Matt, I was very pleased to see that retrospective pattern was reduced substantially by the work that you folks did. That was certainly something that made our job three years ago very, very difficult having that much scientific uncertainty. I just want to ask a question about was it the change in the retrospective pattern from your scientific and from the assessment's understanding was totally driven by this natural mortality. There wasn't anything else that you saw before you made the natural mortality regime change that indicated that there might have been some improvement in the retrospective pattern before?

DR. CIERI: It was kind of done in tandem. If you're asking did we change the natural mortality and simply fix the model or is this – it was a little bit of both. At first we took a look at the consumption data and then what we had as a natural mortality and what that translated to in biomass; and after 1996 they went like this (indicating).

And, we looked at it and went, well, that is really weird, but what if we scale it up, and then when we were running the diagnostics, we went, wow, the retrospective pattern just went away when we did that. It is one of those eureka moments where you go, all right, that makes sense, but we hemmed and hawed over that for a long, long time during the meeting about whether we were changing natural mortality just to get rid of the retrospective pattern and whether it was based in fact. The answer is it makes the model work better, which is a legitimate way of doing it, anyway, but by and large there is also a lot of consumption data that goes into it that suggests the same thing.

MR. GROUT: Just a quick additional question; you had indicated that one of the uncertainties with the 2008 year class, your estimate is based on the fact it is not fully selected to the fishery yet. Is it fully selected to the fishery-independent gear yet or do they have about the same selectivity pattern as a fishery?

DR. CIERI: It is fully selected in the fishery-independent gear, and it shows up well in both, and it indicates that it is there in both. But the major driving force of this model is the catch and the associated age structure that is the major driving force of this model. It isn't fully selected by the thing that affects the model the most, so that is the uncertainty.

MR. GROUT: But at the same time was the change in the – was the magnitude in the fishery-independent gear as big as what the model is showing right now? Okay.

REPRESENTATIVE DAVID H. WATTERS: Matt, my question has to do with your confidence in the model over natural mortality. What risk do you factor into this could be wrong or that you're not anticipating changes in predation that may occur? How confident are you that going forward we won't have to be revising this?

DR. CIERI: This stuff is always on the table, all these parameters, selectivity, catchability, all this stuff is always on the table every time you do a benchmark, always. They're always relooked at. They may not change from benchmark to benchmark, but usually there is a statement in there as to why they haven't changed. They are always a fresh look.

This is based on life history parameters, by and large, with the backup being, wow, this actually fits with the consumption data as well. We don't see it changing over your three-year time horizon. You're not going to see a doubling of cod or of dogfish or of anything else in three years or of striped bass. It is just not going to happen, so by and large your consumption probably isn't going to change very much over the next three-year time horizon where you're setting specifications.

More than likely natural mortality is not going to change over three years, so therefore this is what we're going to base the projections on. Will it

change over time on a scale larger than three years, absolutely, and that will be based on the number of striped bass and dogfish that you've got hanging around as well as other things that also serve as forage.

One of the things that we've noticed, if you go back – if you look at the consumption data and you notice the dip – see the dip in 2003 down here – and what we're suggesting is that there might have been in the consumption data a lot of – we've got a lot of sandlance that comes in during that timeframe.

But the life history shows the same pattern, you'll notice, in how we have assumed with things, and that makes sense, but it is not as responsive, so there is a lot of variability. What a fish eats from year to year or moment or moment is based on availability, and sometimes herring aren't the most available; it is sand eels. But overall the size at age and the length and the size at – you know, when they get to be really, really old fish, and the longevity of the fish speak to an integrated over an average what the natural mortality is. Have I answered your question?

MR. STOCKWELL: Different version of Representative Watters' question and it concerns the 2008 year class uncertainty. It is almost easy for me to think about rolling over the specification process for a year in order to allow this year class to either recruit into the fishery or for us to be able to refute that it does not, and it probably is going to make a huge difference from your perspective and SSC's on what the recommendations are going to be for a specification-setting process.

Did I hear you correctly that you are projecting that this 2008 year class will carry through in the recommendations or am I hearing you that you're ringing a bell that we should be cautious as we deliver our specifications to either include or not include them into a three-year process. It makes a huge difference to all of us and certainly the industry.

DR. CIERI: I don't know what the SSC is going to do. This will be entirely up to them. I think there are major concerns from most of the assessment scientists of the magnitude of the 2008 year class. Is it really double the 1994? I think one of the things that we will probably approach when we go to the meeting, apparently the week after next; no, next week – one of the things we're going to want to see is what happens if we do the projections and the 2008 year class is the same size as the 1994, for example? That might be one thing to run.

So we're currently in 2012; by the time we get all the data together, if we ran the model next year, we would have a much better understanding, if you look at the selectivity curve, of whether or not that 2008 year class is as big as we think it is. We would be close to being fully selected to the fishery. We will have another year's worth of trawl survey data; you know, the whole nine yards. The uncertainty will certainly go down.

How the SSC deals with that uncertainty as a committee I don't know. They could come up with a number of different options. If the year class isn't as strong – it is strong and we know it is and we know it is better than average; but if it is not as big as we think we is, there could be a lot of caution that would need to be provided. You certainly don't want to open up the floodgates and realize three years down the road that that year class wasn't as big as we thought it was and wind up in a rebuilding process.

CHAIRMAN PIERCE: Matt, I've got a question. This 2008 year class, assuming it is as big as we think it is or almost as big as we think it is going to be, will this year be the year when that year class will be spawning or have they already had one opportunity to spawn once at age three? This has I think great relevance to concern of this Section, noted by Representative Peake earlier on, about protecting spawning fish. Any insights into whether or not this is the year?

DR. CIERI: They spawned last year. Last year was their first year of spawning. They will be spawning again this year. They are the dominant year class in the model. If you look back, here is the spawning stock biomass, and remember this was 2011. That peak right here in spawning stock biomass, that is the 2008 year class, but they're not fully mature until this year. Most of them entered this past year, 2011, but they will be in full force this year.

CHAIRMAN PIERCE: All right, so we all need to be vigilant with regard to spawning fish. Another question? Jeff, you had one?

MR. KAELIN: Yes, Matt, I'm confused; did you guys end the time series for the model at 2007 and eliminate the 2008 data point completely when you did the projections? In other words, do the projections include the biomass estimate based on the 2008 year class at all?

DR. CIERI: They do.

MR. KAELIN: They do; so there is necessarily then uncertainty about the projections due to the fact you included the 2008 year class?

DR. CIERI: Right. Yes, you kind of have to include the 2008 year class. If you remove them from – if you remove everything after 2007, for example, you remove not only that year class but you also remove the stock-recruitment productivity function that has happened post-2007. That is actually very important. That is your recent recruitment.

MR. KAELIN: Okay, thanks; I'm just trying to characterize how much scientific uncertainty remains after all this for our discussion with the SSC next month.

CHAIRMAN PIERCE: Does anyone in the audience have any questions that you would like to ask? Yes, Jud.

MR. JUD CRAWFORD: Jud Crawford with the Pew Environment Group from Boston. For better or worse, I was at all the stock assessment meetings. They went over a very long period of time. I thank Matt for doing a great job reviewing that process in his presentation. I think you've heard a lot about it.

I don't want to say very much except that I think that they made a huge step forward in terms of really grappling with this issue of the consumption of herring by real predators, looking at real information estimated from stomach contents, a lot of hard work at the Northeast Science Center, data that is hard to work with, and I think they did a great job trying to embrace that issue.

For the first time ever – I think this is correct – they departed from an assumption that predation or consumption of herring is static across all ages and sizes and M equals 0.2. In every assessment I've read the assessment scientists and the reviewers have said, well, we used M as equal to 0.2, but we know this isn't right and the next people that do an assessment should do something about this, and they never did until now. I think that they deserve some recognition for that.

Atlantic herring are one of the most important fish in the northeast U.S. because of the vast role they play in marine ecosystems and their importance to fishermen. That is a quote from the ASMFC's website that I just read to you. I just want to point out something that many of you around the table no doubt know, but as forage fish, the way we think about the reference points, the MSY reference points, we now know I think – or many scientists are advising us we should treat those a little bit differently.

These are fish that are nearer the bottom of the food web and the way we decide how many of them we catch is a little different from the way we think about predators that are up near the top of the food web. I just wanted to make that comment and to point out that there have been some I think significant scientific activities going on both at the Marine Stewardship Council that is in the business of looking at fisheries and deciding how to certify them, convening scientists to look at this question of how catch levels should be set; and also the LENFES Forage Fish Task Force Report that was released recently; also looking at this question.

I hope as this assessment gets taken up and used for setting catch levels, caution will be taken not only because of the 2008 year class that has been an important year for New England, those of you who have been following the cod story, but also because these are very important fish and their abundance impacts on lots of other fisheries. Thanks.

OTHER BUSINESS

CHAIRMAN PIERCE: Any Section members have any comments you would like to make regarding the presentation given by Matt? All right, with that we will go on to the next item on the agenda, which is other business. I will highlight a couple of points and then turn to Section members to see if you have anything else to add.

The first point is relative to the question asked of staff by Representative Peake earlier in the meeting regarding the white paper. I checked with Bob and Bob indicated that the staff turnover and the like postponed work on that, but he did say that he expects it to be done and ready to be provided to the Section at our annual meeting. Good catch on that, Sarah, thank you very much.

The other item I wanted to highlight is that the delegations of the three states, Maine, Massachusetts and New Hampshire, will be meeting tomorrow at lunch at menhaden to continue our discussions – they're always ongoing – regarding days out, to evaluate where we are right now with Area 1A catch, inshore Gulf of Maine catch, and do we need to make any changes in the regulations that we now have in place regarding days allowed for landing. That's tomorrow at 12:45. All right, any other business? Yes.

MS. KERNS: Just two things; one, Bob Beal just sent you guys all the judge's ruling so that should be in your e-mail inbox for the Amendment 4 case. Then, secondly, please make sure if I don't find you that you find me today if you're going to be coming to the Section Day's-Out Meeting so I can get your lunch order for tomorrow. Thank you.

MR. KAELIN: I just wanted to raise the issue again that the AP brought up asking for the Section to review whether or not the zero tolerance spawning closure should be re-evaluated. I don't know if you want to take any action on that or just let that ride. The other one is some consideration as to whether or not a days-out scenario could be established for Area 2 in the next fishing year. Those are two outstanding AP issues that the Section hasn't addressed today.

CHAIRMAN PIERCE: Thank you, Jeff. Unless anyone cares to address those issues today – Ritchie.

MR. WHITE: Mr. Chairman, this has come up a number of times and I'm still strongly opposed to bringing up the spawning issue again. It is clear that it is not enforceable in New Hampshire and therefore I strongly support the status quo. The only other thing I would bring up is Representative Peake's issue on the Nantucket Shoals and will we be going forward with a white paper?

CHAIRMAN PIERCE: The white paper will be at the annual meeting, so we will address it that time and then determine what the Section wishes to do once the white paper is in hand, of course, before the annual meeting so we'll have a chance to think about it and be prepared for any possible actions to be taken at the annual meeting.

ADJOURNMENT

All right, if there is no further business, I would entertain a motion to adjourn. All right, motion to adjourn with no objection. All right, the meeting is adjourned.

(Whereupon, the meeting was adjourned at 10:10 o'clock a.m., August 7, 2012.)

Atlantic States Marine Fisheries Commission

ADDENDUM V TO THE INTERSTATE FISHERY MANAGEMENT PLAN FOR ATLANTIC HERRING

Spawning Sampling Provisions including Comprehensive Spawning Requirement for the Fishery Management Plan

ASMFC Vision Statement:
Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015.

Pending Board Approval

1.0 Introduction

In February 2012, the Atlantic Herring Section (Section) initiated an addendum to implement the Technical Committee's (TC) recommendations regarding spawning regulations. These recommendations include 1) refining the sampling protocol; 2) investigating shifting the boundary between the Western Maine and Massachusetts/New Hampshire (MA/NH) spawning areas south and 3) incorporating all spawning regulations in one document for clarity. The Board approved changes to the sampling protocol but did not include changes to the Western Maine and Massachusetts/New Hampshire (MA/NH) spawning areas south. The comprehensive spawning requirements for the FMP can be found in Appendix A.

2.0 Management Program Background

2.1 Statement of the Problem

ASMFC spawning regulations do not provide sufficient guidance for standardized regulations between states because they are contained in five different ASMFC management documents. As a result, slight inconsistencies exist between state and the ASMFC spawning regulations, and between the states. Cooperation and open communication between state fisheries agencies staff has resulted in consistent application of sampling protocol and open/close dates for shared spawning areas—but this consistency is not guaranteed in the future.

This addendum seeks to clarify the spawning regulations to achieve consistency in their application as well as eliminate any inconsistencies between various ASMFC documents. When final, this Addendum will replace all spawning regulations in previous management documents to provide a single, clear document for states to use when complying with ASMFC spawning regulations.

Additionally, parts of the required sampling process (size bins, number of fish per sample, and MA/NH boundary) could be improved to better reflect spawning stages and behavior of current herring stocks.

2.2 Background of Current Spawning Requirements

ASMFC spawning regulations are found in sections from Addendum I to Amendment 1, Amendment 2, and Technical Addendum I to Amendment 2 as follows. Each requirement is described in Section 2.2.1.1 – 2.2.1.6 of this addendum. Full text of the spawning regulations can be found in Appendix A.

2.2.1 Spawning Area Delineation (4.2.1.1 of Amendment 2):

Note: The Western Maine and MA/NH spawning area boundaries <u>may change</u> under Issue 1 in Section 3.0 Management Options of this Addendum

The spawning area boundaries are (Figure 1):

Eastern Maine Spawning Area: All waters bounded by the following coordinates:

Maine coast 68^{o} 20' W
43^{o} 48' N 68^{o} 20' W
44^{o} 25' N 67^{o} 03' W
North along US/Canada border

Western Maine Spawning Area: All waters bounded by the following coordinates:
43° 30' N 68° 54.5' W
43° 30' N 68° 20' W
43° 48' N 68° 20' W
North to Maine coast at 68° 20' W

Massachusetts/New Hampshire Spawning Area: All waters bounded by the Massachusetts, New Hampshire and Maine coasts, and 43° 30' N and 70° 00' W

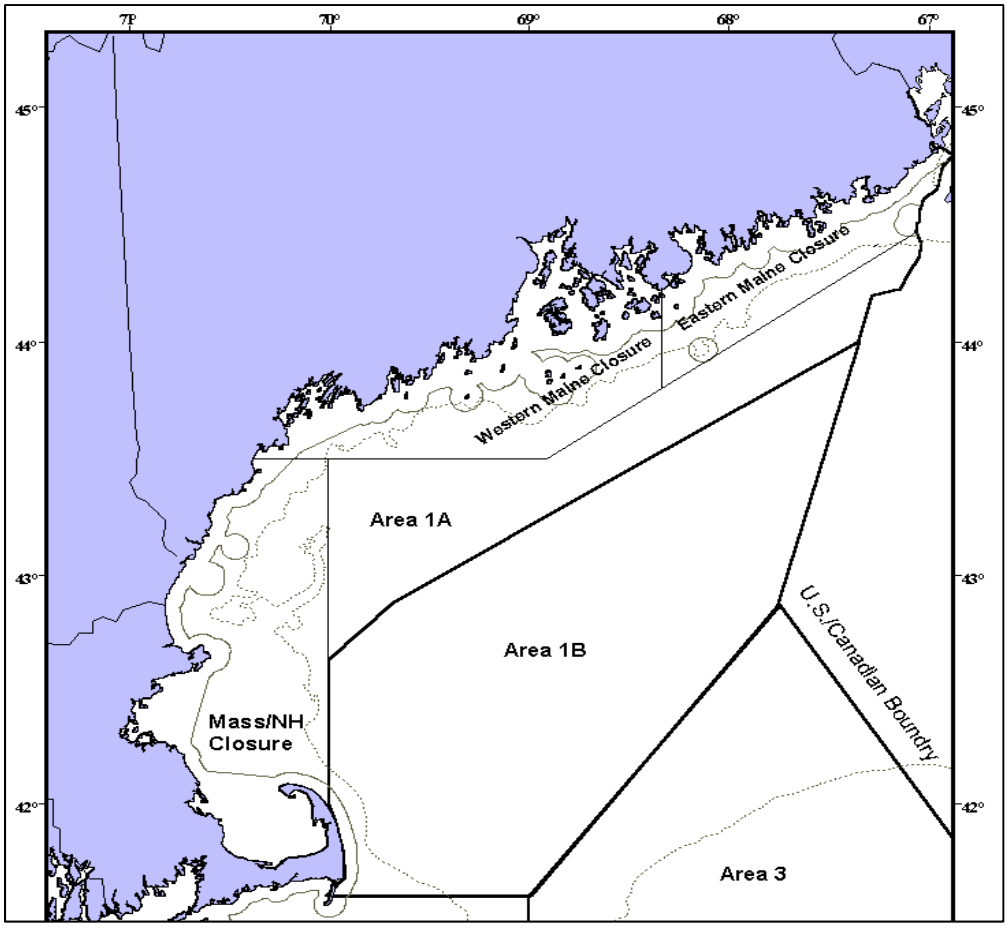


Figure 1. ASMFC Atlantic Herring Spawning Areas.

2.2.2 Default Start Date (4.3.2.2 Spawning Closures & Default Dates of Amendment 2):
If sufficient samples are not available, closures will begin on the following dates.
Note: Default start dates <u>will not change</u> in this addendum.

Eastern Maine: August 15
Western Maine: September 1
Massachusetts/New Hampshire: September 21

2.2.3 Sampling Protocol (4.2.1.2 Determination of Starting Date for Spawning Closures of Addendum I to Amendment 1):

Note: The size of fish that would trigger a closure may decrease under Issue 2 in Section 3.0 Management Options of this Addendum

Closures in a given area will begin based on the spawning condition of Atlantic herring as determined from commercial catch samples. Commercial catch sampling shall begin by at least August 1 for the Eastern and Western Maine areas, and by at least September 1 for the Massachusetts/New Hampshire area. If sufficient samples are not available, closures will begin on the default dates.

Closures in a given area will begin seven days after the determination that female herring in ICNAF gonadal stages III - V from that specific area have reached the following spawning conditions: female herring greater than 28 cm in length have reached a mean gonadosomatic index (GSI) of 20% or female herring greater than 24 cm and less than 28 cm in length have reached a mean GSI of 15%. Length refers to the mean natural total length, measured from the tip of the snout to the end of the caudal fin in normal position. "GSI" shall mean gonadosomatic index calculated by the following formula. Length refers to the mean natural total length, measured from the tip of the snout to the end of the caudal fin in normal position. "GSI" shall mean gonadosomatic index calculated by the following formula:

[Gonad Weight / (Total Body Weight - Gonad Weight)] x 100 percent

2.2.4 Sufficient Sample Information (4.2.1.2 Determination of Starting Date for Spawning Closures of Addendum I to Amendment 1):

Note: The required number of fish per sample may increase under Issue 3 in Section 3.0 Management Options of this Addendum

"Sufficient sample information" shall mean at least two (2) samples of 50 fish or more, in either length category, taken from commercial catches during a period not to exceed seven days apart.

2.2.5 Spawning Closure Length (4.3.2.2 Spawning Closures & Default Dates of Amendment 2):

Note: Default spawning closure length and sampling protocol to determine the end date will not change in this addendum.

By default, closures will last four (4) weeks. Catch sampling of the fishery will resume at the end of the initial four-week closure period. If catch sampling indicates significant numbers of spawn herring are still being harvested, closures will resume for an additional two weeks. Significant numbers of spawn herring is defined as 25% or more mature herring, by number in a catch sample, have yet to spawn. Mature or "spawn" herring are defined as Atlantic herring in ICNAF gonadal stages V and VI.

2.2.6 Tolerance (4.3.2.3 Tolerance Provision—Zero Tolerance of Amendment 2, clarified in Technical Addendum I to Amendment 2):

Note: Zero Tolerance will not change in this addendum.

Any vessel is prohibited to fish for, take, land, or possess herring from or within a restricted spawning area. Any herring vessel having spawn herring onboard, which were caught outside of a management

area that is under a herring spawning closure, may transit the closed area only if all of its fishing gear has been stowed. An incidental bycatch allowance of up to 2,000 pounds of herring per trip for non-directed fisheries shall be in place during the spawning closures.

3.0 Management Program

This Final Addendum replaces all spawning regulations in previous management documents to provide a single, clear document for states to use when complying with ASMFC spawning regulations. Appendix 1 contains the comprehensive spawning regulations for the FMP.

3.1 Size Bins that Trigger a Spawning Closure Start

3.1.1 Background

The spawning regulations in Addendum I to Amendment I specify that closures begin based on the % of stage III – V spawn herring that are greater than 24 cm. The TC reviewed this language and commented that the wording "greater than 24 cm" was a typographical error and should have included "or equal to". A review of state spawning regulations revealed that some states have interpreted the requirement as "greater than *or equal to* 24 cm" (full text of state regulations is included as Appendix B).

Additionally, commercial biological sampling has found that in recent years, sampled fish are maturing at a smaller size but at the same age. As outlined in the most recent 2009 TRAC assessment, both length and weight at age has been steadily declining since the 1980s (Figure 2). As a result, mean fish length of age 3s (typically first time spawners) is now below 24 cm total length during the fall spawning period. As can be seen in Figure 3 and Table 1, an increasing number of fish in the 23-24 length bin are mature.

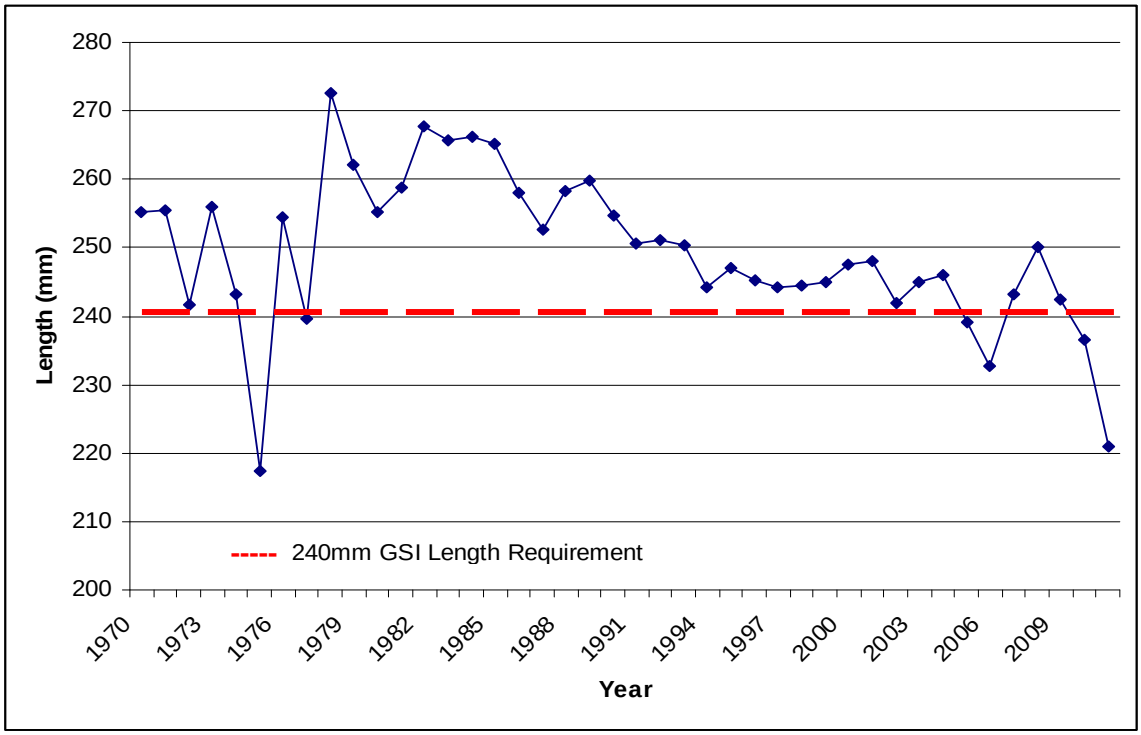


Figure 2. Mean total length (in mm) of age three females caught in area 1A during the spawning season (Aug –Oct).

Table 1. Percentage of spawning or developing females (> 10% GSI or > ICNAF stage III) Aug –Oct. by year and length bin from commercial samples. Note: blank cells indicate "no data" while zeros are calculated.

Total Length (cm)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	average 2000-2011
21-22										0		20	10
22-23			5	0		0	0	0		0	0	23	4
23-24	0	4	6	10	21	11	7	18	0	13	18	25	11
24-25	31	16	38	13	27	23	9	19	0	19	12	30	20
25-26	39	28	49	30	38	42	15	20	11	18	30	40	30
26-27	70	36	65	42	59	57	29	26	24	7	27	55	41
27-28	87	76	85	66	67	72	41	35	47	29	37	80	60
28-29	94	84	90	77	74	74	62	50	51	46	44	69	68
29-30	96	96	96	89	84	81	71	68	59	64	64	68	78
30-31	98	100	100	92	86	94	72	84	73	83	69	100	88
31-32	100	100	100	100	100	95	73	90	85	100	100	100	95
32-33	100	100	100				83	100	50	0	67		55
33-34							100	100	100				

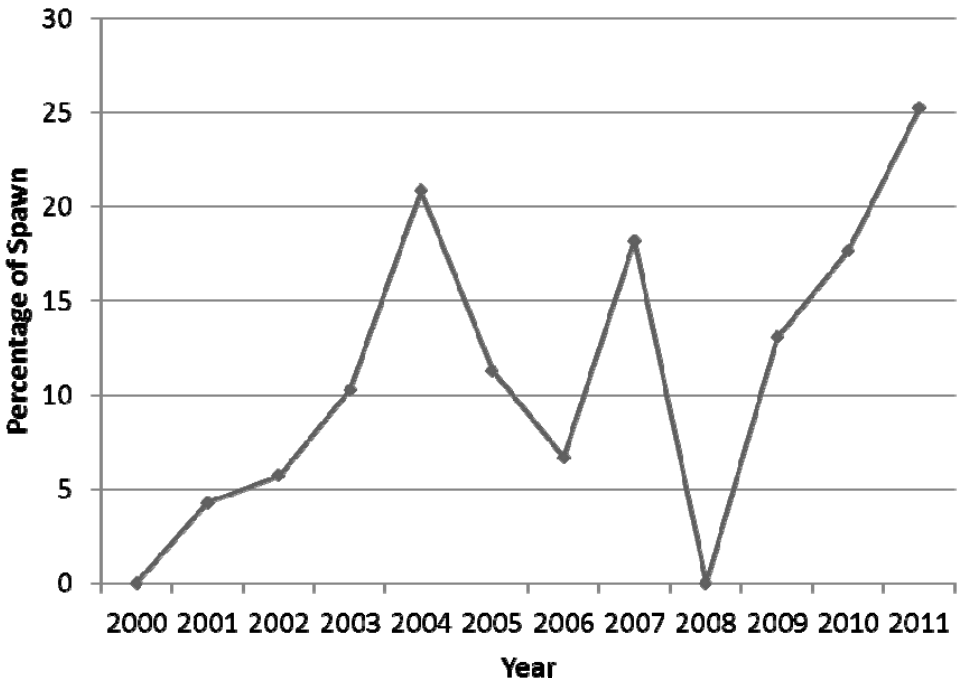


Figure 2. Percentage of spawning or developing females (> 10% GSI or > ICNAF stage III) Aug –Oct. by year in Area 1A, for fish 24-25 cm total length from commercial samples.

3.1.2 Management Program: Provisions revised under this Addendum

This languages replaces part of the language in section 4.2.1.2 of Addendum I to Amendment 1

Closures in a given area will begin seven days after the determination that female herring in ICNAF gonadal stages III - V from that specific area have reached the following spawning conditions: female herring greater than 28 cm in length have reached a mean gonadosomatic index (GSI) of 20%; or female herring greater than or equal to 23 cm and less than 28 cm in length have reached a mean GSI of 15%.

3.2 Number of Fish Per Sample

3.2.1 Background

Regulation in Addendum I to Amendment I required "at least two samples of 50 fish or more, in either length category, taken from commercial catches during a period not to exceed seven days apart". The TC recommended that the number of fish per sample be increased to 100. They agreed that interpreting the samples is often a qualitative science and 100 fish per sample should suffice to determine if a closure should be extended.

3.2.2 Management Program: Provisions revised under this Addendum

This section replaces part of the language in section 4.2.1.2 of Addendum 1 to Amendment 1.

Sufficient sample information shall mean at least two (2) samples of 100 fish or more, in either length category, taken from commercial catches during a period not to exceed seven days apart.

4.0 Compliance Schedule

States must implement Addendum V according to the following schedule to be in compliance with the Atlantic Herring FMP:

XXXXXX: States submit proposals to comply with Addendum V.

XXXXXX: Section reviews and takes action on state proposals.

XXXXXX: States implement regulations.

APPENDIX A. ASMFC COMPREHENSIVE SPAWNING REQUIREMENTS

4.3.2 Spawning Restrictions

Landing restrictions on spawn herring are designed to conserve the stock by ensuring recruitment to the stock. Much of the management program is designed to move effort into the offshore areas where the TAC has not been fully harvested and the spawning component is thought to be strong. The inshore component is the most vulnerable component of the stock complex; therefore, management measures are focused on providing the greatest protection to the component that is thought to be most susceptible to overfishing. Protection to the offshore spawning component would come at the expense of putting more pressure on the inshore component of the stock complex.

Atlantic herring schools are especially susceptible to fishing when they aggregate for spawning. While vulnerable, they are also most valuable during spawning because their fat content is at its peak. The economic incentives to harvest spawn herring are countered by conservation concerns for the status of the stock. Fishing on spawning herring not only results in high catch rates, but may also interfere with the spawning behavior of uncaught herring. There is a peak point at which spawn herring is acceptable to the market; spawn herring in the latter stages may not be fit for some markets. Therefore, the amendment defines specific measures designed to reduce the exploitation and disruption of spawning aggregations, while providing a limited opportunity to harvest herring during that time of the year.

4.3.2.1 Inshore Gulf of Maine Spawning Areas (Area 1A)

Figure 14 displays the areas defined in this measure.

Eastern Maine Spawning Area
All waters bounded by the following coordinates:

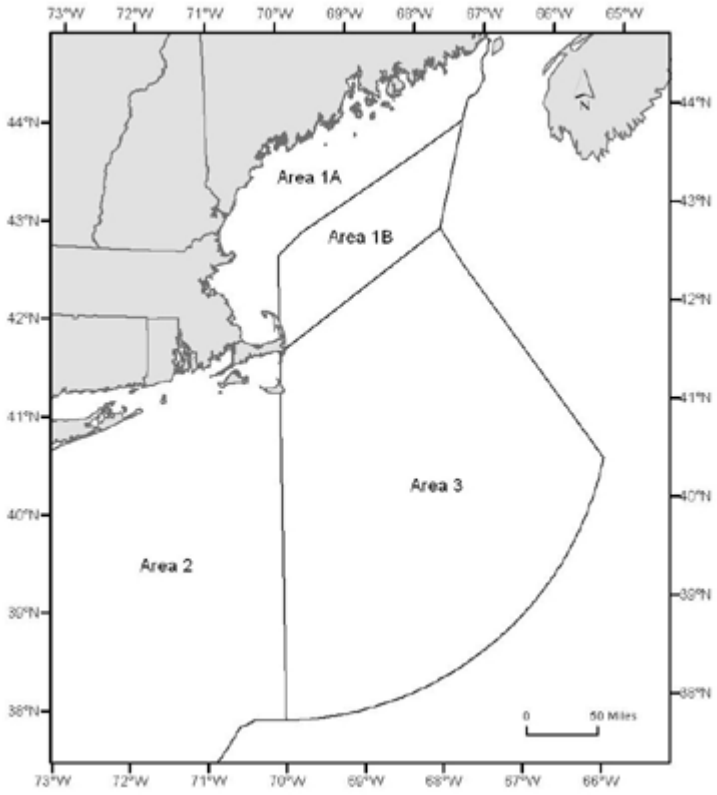
Maine coast 68° 20' W
43° 48' N 68° 20' W
44° 25' N 67° 03' W
North along US/Canada border

Western Maine Spawning Area
All waters bounded by the following coordinates:

43° 30' N Maine coast
43° 30' N 68° 54.5' W
43° 48' N 68° 20' W
North to Maine coast at 68° 20' W

Massachusetts/New Hampshire Spawning Area
All waters bounded by the Massachusetts, New Hampshire and Maine coasts, and
43° 30' N and 70° 00' W

Figure 1. Spawning Areas for Atlantic Herring in State Waters



4.3.2.2 Spawning Closures & Default Dates

Spawning closures are based on commercial catch samples that are collected by at least August 1 for the Eastern and Western Maine areas, and by at least September 1 for the Massachusetts/New Hampshire area. If sufficient samples are not available, closures will begin on the default dates listed below and extend for at least four (4) weeks. Area 1A inshore spawning area closures will begin on the following dates, unless commercial catch samples show earlier spawning than the default date or continuing two weeks after the four-week closure.

Eastern Maine:	August 15
Western Maine:	September 1
Massachusetts/New Hampshire:	September 21

Closures in a given area will begin seven days after the determination that female herring in ICNAF gonadal stages III - V from that specific area have reached the following spawning conditions: female herring greater than 28 cm in length have reached a mean gonadosomatic index (GSI) of 20%; or female herring greater than or equal to 23 cm and less than 28 cm in length have reached a mean GSI of 15%. Length refers to the mean natural total length, measured from the tip of the snout to the end of the caudal fin in normal position. "GSI" shall mean gonadosomatic index calculated by the following formula:

[Gonad Weight / (Total Body Weight - Gonad Weight)] x 100 percent

If sufficient sample information is not available for reliably estimating mean GSI in either of the size categories, the restrictions will go into effect automatically on the default closure dates (see 4.2.1.3). "Sufficient sample information" shall mean at least two (2) samples of 100 fish or more, in either length category, taken from commercial catches during a period not to exceed seven days apart.

By default, closures will last four (4) weeks. Catch sampling of the fishery will resume at the end of the initial four-week closure period. If catch sampling indicates significant numbers of spawn herring still are being harvested, closures will resume for an additional two weeks. Significant numbers of spawn herring is defined as 25% or more mature herring, by number in a catch sample, have yet to spawn. Mature or "spawn" herring shall be identified as Atlantic herring in ICNAF gonadal stages V and VI.

4.3.2.3 Tolerance Provision – Zero Tolerance

Any vessel is prohibited to fish for, take, land, or possess herring from or within a restricted spawning area. Vessels are permitted to transit the restricted spawning areas with herring on board provided they comply with the provisions listed in the following two paragraphs.

Any vessel may fish for, take, land, or possess "spawn" herring from a management area outside of those identified in the Delineation of Spawning Areas. Any herring vessel having onboard spawn herring, which were caught outside of a management area that is under a herring spawning closure, may transit the closed area only if all of its fishing gear has been stowed. "Spawn" herring shall be identified as Atlantic herring in ICNAF gonadal stages V and VI.

An incidental bycatch allowance of up to 2,000 pounds of herring per trip for non-directed fisheries shall be in place during the spawning closures. This bycatch allowance will not be subject to the tolerance provision, i.e. vessels may land "spawn" herring as long as said vessel lands no more than 2,000 pounds. The amount of herring landed by one vessel in a day, as a bycatch allowance, shall not exceed 2,000 pounds (this prohibits a vessel from making multiple trips in one day to land more than the bycatch allowance). A trip shall be based on a calendar day basis.

4.3.2.4 Bycatch Allowance

No directed fisheries for Atlantic herring shall be allowed in a management area subject to a spawning closure. A bycatch allowance of up to 2,000 pounds of herring per trip for non-directed fisheries shall be in place during the spawning closures. The amount of herring landed by one vessel in a day, as a bycatch allowance, shall not exceed 2,000 pounds (this prohibits a vessel from making multiple trips in one day to land more than the bycatch allowance). A trip shall be based on a calendar day basis.

Any herring vessel transiting a management area that is under a herring spawning closure must have all of its fishing gear stowed.

4.3.2.5 Other Spawning Area Considerations – Exemption for East of Cutler Fixed Gear Fisheries

Under Amendment 1, all vessels fishing with fixed gear in state waters were required to obtain a permit from the appropriate state agency. While Amendment 1 does not specify an exemption for the fixed gear fisheries in the East Cutler area, these fisheries did have an exemption from the spawning restrictions prior to the amendment. The exemption was granted by the State of Maine and was later removed to comply with Amendment 1 to the Interstate FMP. The East Cutler area is defined in Figure 17 below. With implementation of Amendment 2, East of Cutler fixed gear fisheries are granted an exemption from spawning area considerations and are not limited on the amount of spawn herring that can be landed during a spawning closure.

APPENDIX B. STATE SPAWNING REGULATIONS:

Maine:
DEPARTMENT OF MARINE RESOURCES

Chapter 36 Herring Regulations

36.01 Herring Management Plan

A. Definitions

(1) Herring.
Herring means Atlantic Sea Herring, particularly the *Clupea Harengus harengus.*

(2) ICNAF gonad stages.

ICNAF gonad stages are the official stages adopted by the International Commission for the Northwest Atlantic Fisheries in 1964.

Excerpt from ICNAF, 1964, Table 2 definitions:
Stage V. Gonads fill body cavity. Eggs large, round; some transparent. Ovaries yellowish; testes milkwhite. Eggs and sperm do not flow, but sperm can be extruded by pressure.
Stage VI. Ripe gonads. Eggs transparent; testes white; eggs and sperm flow freely.

(3) Spawn herring.

Spawn herring is a sexually mature herring (male or female) in ICNAF gonad stages V or VI.

(9) "GSI" means the gonadosomatic index calculated by the following formula:
(Gonad Weight/ Total Body Weight – Gonad Weight) X 100 percent.

D. Catch restrictions.

(1) Spawning area restrictions.

It shall be unlawful to fish for, take, possess, transfer or land in any State of Maine port or facility, or to transfer at sea from any Maine registered vessel, any catch of herring harvested from the following described areas within ASMFC Management Area 1 at the following times:

(a) Eastern Maine:

All waters bounded by the following coordinates:
Maine coast 68° 20.0' W,
43° 48.0' N 68° 20.0' W,
44° 25.0' N 67° 03.0' W,
North along the U.S./Canada border.

Western Maine:

All waters bounded by the following coordinates:
43° 30.0' N Maine coast,
43° 30.0' N 68° 54.5' W,
43° 48.0' N 68° 20.0' W,
North to Maine coast at 68° 20.0' W.

Massachusetts/New Hampshire:

All waters bounded by the Massachusetts, New Hampshire and Maine coasts, and
43° 30.0' N 70° 00.0' W.

(b) Determination of starting dates for spawning areas.

Closures in a given area will begin based on a pre-determined spawning condition of Atlantic herring indicated by commercial catch samples. This spawning condition will be defined as: female herring greater than or equal to 28 cm in length having reached a mean gonadosaomatic index (GSI) of 20%; or female herring greater than 24 cm and less than 28 cm in length having reached a mean GSI of 15%. Closures in a given area will begin seven (7) days after the GSI determination is made. If sufficient samples are not available, closures will begin on area specific dates as follows: Eastern Maine- August 15, Western Maine- September 1, Massachusetts/New Hampshire- September 21.

(c) Duration of spawning area restrictions.

The closure will extend for four (4) weeks. If catch sampling after the end of the initial restricted period determines that 25% or more mature herring, by number, have yet to spawn then the spawning restrictions would resume for an additional two weeks. The 20% tolerance shall be determined by examination of at least one hundred herring selected at random from the catch.

New Hampshire:

Fis 603.07 Sea Herring.

(a) No person shall fish for, take, or possess unprocessed herring within the jurisdiction of New Hampshire from September 21 through October 19, except as specified in (d).

(b) The executive director shall revise the beginning date of the closure so that the closure shall be in effect whenever it is determined that the mean gonad somatic index for female herring 24 - 28 cm in length or greater is 15% or greater or the mean gonad somatic index for female herring 28 cm in length or greater is 20% or greater.

(c) If the results of herring samples collected at the end of the closure indicate that 25% or more by number of mature spawn female sea herring still contain spawn the executive director may extend the closure for an additional 28 days. "Mature spawn female sea herring" means female sea herring greater than 24 cm in length.

(d) During a spawning closure as specified in (a) through (c), all vessels fishing for species other than sea herring shall be limited to an incidental catch of 2000 pounds of herring per calendar day caught in or from the management area subject to a spawning closure.

(e) Any person, firm or organization engaged in the taking or landing of herring shall first obtain a permit to do so from the executive director.

(f) Any person, firm or organization properly permitted may land herring from areas not under spawning closures provided they are equipped with a functional vessel monitoring system.

(g) Nothing in the above provisions shall prohibit a person from possessing herring for use as bait while in the normal conduct of tending lobster and crab pots or any herring used as bait for angling purposes.

(h) No person shall land, transfer or transport herring taken from a management area or sub-area closed to a directed herring fishery to an internal waters processing operation.

(i) No person shall land herring taken from a management area or sub-area when 95% of the total allowable catch (TAC) for that area's or sub-area's seasonal or annual total allowable catch will be exceeded except a person may land and possess up to a maximum of 2,000 pounds of incidentally caught herring. The executive director shall revise the percentage of TAC, that would trigger a prohibition on landing, to 90% if it is determined that a closure at 95% is insufficient to prevent exceeding the seasonal or annual TAC.

(j) The executive director shall prohibit vessels from landing Atlantic herring caught from a management area which includes state waters from one and seven days per week, except as an incidental catch of a maximum of 2,000 pounds, if its projected that the seasonal or annual total allowable catch of the management area will be exceeded without no landing days. The number of no landing days per week shall be determined by the Atlantic States Marine Fisheries Commission's Atlantic herring section commissioners from New Hampshire, Maine and Massachusetts at a public meeting

(k) No person shall take herring from the waters under the jurisdiction of the state when the total allowable catch assigned to management area or sub-area which includes state waters has been attained except that a person may take and possess up to a maximum of 2,000 pounds of incidentally caught herring.

(l) Vessels shall not land herring more than once per calendar day.

Massachusetts:

322 CMR 9.00: MANAGEMENT OF SEA HERRING

Section

- 9.01: Definitions
- 9.02: Management Area Boundaries
- 9.03: Vessel Size Limit
- 9.04: Management Area 1A Fishing Day Restrictions
- 9.05: Fishing Restrictions & Annual Specifications

- 9.01 Definitions.
- For purposes of 322 CMR 9.00 only, the folowing words shall have the following meanings:
  - (1) Fish for means to harvest, catch or take, or attempt to harvest, catch or take any sea herring by any method or means.
  - (2) Gonad somatic index or GSI means for female herring the percentage obtained by the formula: [Gonad weight/(total body weight - gonad weight)] x 100.
  - (3) GSI Trigger means female herring greater than 28 cm total length with a mean GSI of 20% or female herring greater than 24 cm and less than 28 cm with a mean GSI of 15%.
  - (4) GSI Sampling means at least two samples of 50 fish or more in either GSI trigger length category taken from commercial catches during a period not to exceed seven days apart.
  - (5) Southern Gulf of Maine means that portion of Management Area 1 south of 43 [degrees] 32' N parallel of latitude.
  - (6) Land means to transfer the catch of any sea herring from any vessel onto any land or dock, pier, wharf, or other artificial structure.
  - (7) Management Area means one of three Management Areas as specified in the Atlantic States Marine Fisheries Commission Atlantic Herring Fishery Management Plan (FMP) and NOAA Fisheries federal fishery management plan.
  - (8) Management Area Quotas means the annual area-specific quota as specified by the Atlantic States Marine Fisheries Commission under the authority of the interstate and federal management plans.
  - (9) Massachusetts/New Hampshire Spawning Area means all waters encompassed by an imaginary line beginning at the intersection of the 43 [degrees] 30' N parallel of latitude and the Maine coast; thence in a southwesterly direction along the coasts of Maine, New Hampshire, and the Commonwealth to the intersection of the 70 [degrees] 00' W meridian of longitude; thence in a northerly direction along the 70 [degrees] 00' W meridian of longitude to its intersection with the 43 [degrees] 30' N parallel of latitude; thence in a westerly direction along the 43 [degrees] 30' N parallel of latitude to the point of beginning.
  - (10) Sea Herring means that species of Atlantic sea herring known as Clupea harengus.

- (11) Spawn Herring means mature sea herring in ICNAF gonadal stages V and VI.
- (12) Vessel means any waterborn craft registered under the laws of the state as that term is defined in M.G.L. c. 130, § 1.
- (13) Vessel Fishing for Mackerel means any vessel whose catch on board at any given time is at least 75% mackerel (Scomber scombrus) by weight.

- 9.02 Management Area Boundaries
  - (1) Management Area 1: all U.S. waters of the Gulf of Maine (GOM) north of a line extending from the eastern shore of Monomoy Island at 41º 35’ N latitiude, eastward to a point at 41º 35’ N latitude, 69º 00’ W longitude, thence northeasterly to a point along the Hague Line at 42º 53’ 14” N latitude, 67º 44’ 35” W longitude, thence northerly along the Hague Line to the U.S. Canadian border, to include state and Federal waters adjacent to the States of Maine, New Hampshire, and Massachusetts. Management Area 1 is divided into Area 1A (inshore) and Area 1B (offshore). The line dividing these areas is described by the following coordinates:
  -

W Longitude
70º 00’ at Cape Cod shoreline
70º 00’
69º 40’
69º 00’
68º 00’
(the U.S.-Canada Maritime Bo

  - (2) Management Area 2: All waters west of 69º 00' W longitude and south of 41o 35' N latitude, to include state and Federal waters adjacent to the States of Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina.
  - (3) Management Area 3: All U.S. waters east of 69º 00' W longitude and southeast of the line that runs from a point at 69º 00' W longitude and 41º 35' N latitude, northeasterly to the Hague Line at 67º 44' 35" W longitude and 42º 53' 14" N latitude.
  - (4) Management Area Map: [CLICK HERE TO VIEW MAP]
- 9.03 Spawning Herring Protection
  - (1) Prohibition. It shall be unlawful to possess or land any spawn sea herring caught from the Massachusetts/New Hampshire Spawning Area seven days after the GSI trigger for herring from that area is reached. (2) Closure Duration. The prohibition of 322 CMR 9.03(1) shall extend for four weeks and may be extended by the Director if DMF sampling indicates that herring landings comprise more than 25% spawn herring.
  - (3) Default Closure. It shall be unlawful to possess or land any spawn sea herring caught from the Massachusetts/New Hampshire Spawning Area during the period September 21 through October 18 provided the GSI trigger has not been reached by September 14. This prohibition may be extended by the Director beyond October 18 if DMF sampling indicates that herring landings comprise more than 25% spawn herring

- (4) Exceptions. A vessel may land or possess up to 2,000 lbs. of sea herring during the closure period described in 322 CMR 9.03.

- 9.04 Vessel Size Limit
- It shall be unlawful for any vessel greater than 165 feet in overall length and 3,000 horsepower to land sea herring in the Commonwealth.
- 9.05 Fishing Restrictions & Annual Specifications *
  - (1) Commercial Fishery Limits. It is unlawful for a vessel to land or possess sea herring from:
    - (a) Management Area 1A
      - (i) on no-fishing days specified by the Atlantic States Marine Fisheries Commission and established by the Director through declaration;
      - (ii) when 100% of the Management Area 1A quota is taken or projected to be taken.
    - (b) Management Area 1B & 2
      - (i) when 100% of the Management Area 1B or 2 quota, respectively, is taken or projected to be taken.
  - (2) Commercial Fishery Limit Specifications & Adjustments.
    - (a) The director may declare and adjust sea herring commercial fishery landing/possession limits, seasons, and no-fishing days to correspond to limits established by the Atlantic States Marine Fisheries Commission.
    - (b) Prior to any declaration or adjustment of the landing/possession limits for sea herring, the Division shall:
      - (i) obtain written approval by a majority of the members of the Massachusetts Marine Fisheries Advisory Commission;
      - (ii) file notice with the Secretary of State;
      - (iii) publish a notice on the Marine Listserv and Division website; and (iv) directly notify sea herring dealers.
  - (3) Exceptions.
    - (a) Any vessel may land or possess up to 2,000 lbs. of sea herring during prohibited times established by 322 CMR 9.05.
- REGULATORY AUTHORITY
  - M.G.L. c. 130, §§ 2, 17A, 80 and 104.
- ** Please Note: Sea Herring Management Area 1A trip limits have been updated via specification. Please see MarineFisheries Advisory*

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
55 Great Republic Drive
Gloucester, MA 01930-2276

AUG 31 2012

C.M. "Rip" Cunningham, Jr., Chairman
New England Fishery Management Council
50 Water Street
Newburyport, MA 01950

Dear Rip:

On August 2, 2012, the United States District Court for the District of Columbia issued a remedial order in the civil action Flaherty, et al. v. Blank, et al., Case No. 11-660. The Court ordered remedial action to address deficiencies identified by the Court with respect to Amendment 4 to the Atlantic Herring Fishery Management Plan (FMP), including the Court's findings that:

- NOAA Fisheries Service (NMFS) did not satisfy its obligation to independently determine whether Amendment 4's definition of "stocks in the fishery" complied with the Magnuson-Stevens Fishery Conservation and Management Act (MSA);
- NMFS did not adequately consider whether Amendment 4 complied with National Standard 9's requirement to minimize bycatch to the extent practicable; and
- NMFS violated the National Environmental Policy Act (NEPA) by failing to consider the environmental impacts of a reasonable range of alternatives for the acceptable biological catch (ABC) control rule, accountability measures (AMs), and measures for minimizing bycatch.

Consistent with the Court's remedial order, I recommend the New England Fishery Management Council (NEFMC) consider, in an amendment to the Atlantic Herring FMP, whether river herring (alewife and blueback) and shad (American and hickory) should be designated as stocks in the Atlantic herring fishery. The NEFMC's consideration should be based on, at a minimum, the following:

- The MSA requirements, described below, related to including a stock in an FMP;
- The 2012 Atlantic States Marine Fisheries Commission (ASMFC) river herring stock assessment report and peer review report;
- NMFS's 2011 finding that listing river herring as a threatened species under the Endangered Species Act may be warranted;
- The 2007 shad stock assessment report and its peer review report;
- Alternative Set 9 in the Mid-Atlantic Fishery Management Council's (MAFMC's) Amendment 14 to the Atlantic Mackerel, Squid, and Butterfish (MSB) FMP; and
- The Court's March 8, 2012, summary judgment opinion.

Under the MSA, each Fishery Management Council is required to develop FMPs "for each fishery under its authority that requires conservation and management." 16 U.S.C. § 1852(h)(1). A "fishery" is defined as "one or more stocks of fish that can be treated as a unit for purposes of conservation and management and that are identified on the basis of geographic, scientific, technical, recreational, and economic characteristics." Id. § 1802(13).

Section 303(a)(2) of the MSA requires each FMP contain, among other things, a description of the species of fish involved in the fishery. Id. § 1853(a)(2). The National Standard 1 Guidelines provide further guidance that in setting forth this description, Councils should determine "which specific target stocks and/or non-target stocks to include in the fishery," as well as whether it would be appropriate to designate any "ecosystem component species." 50 C.F.R § 600.310(d)(1). FMPs must include reference points (including, inter alia, status determination criteria, maximum sustainable yield, acceptable biological catch, and annual catch limits) and management measures (including accountability measures) for every stock "in the fishery." Id. § 600.310(d)(2); see also § 600.310(b)(2) (describing reference points and management measures required by the MSA).

In considering which stocks "can be treated as a unit for purposes of conservation and management," and therefore constitute a "fishery," councils should remain mindful of National Standard 3's requirement that, "[t]o the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination." 16 U.S.C. § 1851(a)(3). The National Standard 3 Guidelines further instruct that the choice of a management unit "depends on the focus of the FMP's objectives, and may be organized around biological, geographic, economic, technical, social, or ecological perspectives." 50 C.F.R. § 600.320(d)(1).

If a stock in a fishery is determined to be overfished or subject to overfishing, it must be included in an FMP. See 16 U.S.C. § 1853(a)(1)(A) (FMPs must provide measures to prevent overfishing and rebuild overfished stocks). For all other stocks, the National Standard 7 Guidelines provide that the following criteria should be considered in determining whether a fishery is in need of conservation and management through regulations implementing an FMP:

(i) The importance of the fishery to the nation and the regional economy;
(ii) The condition of the stock and whether an FMP can improve or maintain that condition;
(iii) The extent to which the fishery could be or is already adequately managed by states, by state/federal programs, by federal regulations pursuant to FMPs or by industry self-regulation, consistent with MSA policies and standards;
(iv) The need to resolve competing interests and conflicts among user groups and whether an FMP can further that resolution;
(v) The economic condition of a fishery and whether an FMP can produce more efficient utilization;
(vi) The needs of a developing fishery, and whether an FMP can foster orderly growth; and
(vii) The costs associated with an FMP, balanced against the benefits. 50 C.F.R. § 600.340(b)(2).

At its June 2012 meeting, the MAFMC adopted a motion to consider designating river herring and shad as stocks in the fishery in Amendment 15 to the MSB FMP. MAFMC staff indicated that development of Amendment 15 is scheduled to begin in September 2012. MAFMC staff's current draft timeline projects that the MAFMC will take final action on this amendment in April 2014, NMFS will publish a proposed rule in July 2014 and a final rule in December 2014, and implementation of the amendment will occur in January 2015.

I encourage the NEFMC to collaborate with the MAFMC, as well as the ASMFC, on its consideration of the need for federal conservation and management of river herring and shad. River herring and shad have unique management challenges because they are anadromous and range along the entire east coast of the United States. The consideration of federal management for river herring and shad is an opportunity to engage management partners and stakeholders to thoughtfully evaluate holistic management of these species.

Consistent with the Court's remedial order, I recommend the NEFMC consider, as part of the 2013-2015 Atlantic herring specifications, a range of alternatives for the Atlantic herring ABC control rule and AMs. The final rule for Amendment 4 (76 FR 11373, March 2, 2011), explained that, if a new ABC control rule could be developed following the 2012 Atlantic herring benchmark stock assessment, it would be developed in the 2013-2015 Atlantic herring specifications. The Court's remedial order stated that at least one of the alternatives to the ABC control rule should be based on the best available science regarding ABC control rules for forage fish. The 2012 Atlantic herring stock assessment included a thorough consideration of the role of Atlantic herring as forage and increased the estimate of Atlantic herring natural mortality to account for consumption of Atlantic herring by predators. The NEFMC's Science and Statistical Committee (SSC) is scheduled to meet on September 4, 2012, to review the 2012 Atlantic herring benchmark stock assessment and develop Atlantic herring ABC recommendations for 2013-2015. I believe it would be appropriate, and consistent with the Court's remedial order, for the SSC to consider a range of alternatives for the Atlantic herring ABC control rule at its upcoming meeting, as previously planned, and for that range of alternatives to be analyzed in the 2013-2015 specifications.

Atlantic herring regulations authorize the modification of existing Atlantic herring AMs through the specification process (50 C.F.R. § 648.200(g)). Consistent with these regulations, and the Court's remedial order, I believe it would be appropriate for the 2013-2015 Atlantic herring specifications to consider a range of alternatives to modify existing Atlantic herring AMs. If during the specification process a new Atlantic herring AM is identified, implementation of that new AM could be considered in a future framework or amendment.

NMFS is also ordered to recommend to the NEFMC that it consider a range of alternatives for minimizing bycatch in the Atlantic herring fishery, to the extent practicable. Amendment 5 to the Atlantic Herring FMP considers a range of alternatives to minimize bycatch. Therefore, Amendment 5 should explain why the range of alternatives considered in Amendment 5 was reasonable and how measures adopted by the NEFMC as part of Amendment 5 minimize bycatch, to the extent practicable, in the Atlantic herring fishery.

Additionally, NMFS is ordered to file with the Court a report describing all remedial actions by August 2, 2013. This report is to include the status of the NEFMC's consideration of designating river herring and shad as stocks in the Atlantic herring fishery and the completed NEPA analyses for the 2013-2015 herring specifications and Amendment 5. Lastly, the Court has retained jurisdiction over this case pending full compliance with its order.

For the purposes of complying with the Court's remedial order, an environmental assessment would be considered complete when the finding of no significant impact (FONSI) is signed by NMFS. Additionally, an environmental impact statement (EIS) would be considered complete when the notice of availability (NOA) for the final EIS is published in the *Federal Register*. Both of these actions typically occur prior to publishing the final rule in the *Federal Register*.

Council staff has indicated to us that Amendment 5, and its final EIS, will be submitted to NMFS for review and approval in the near future. Submitting Amendment 5 to us soon would provide NMFS with adequate time to consider amendment approval, complete a rulemaking, and allow for the NOA for the final EIS to be published prior to August 2013. The NEFMC is currently scheduled to take final action on the 2013-2015 Atlantic herring specifications at its November 2012 meeting. I recommend that the NEFMC proceed as scheduled, thereby providing adequate time to complete a NEPA analysis for the herring specifications by August 2013.

I appreciate the time and effort that the NEFMC has put into the Atlantic Herring FMP, and I look forward to working with the NEFMC to address these important issues in the Atlantic herring fishery. Please contact George Darcy if you have any questions.

Sincerely,

for John K. Bullard
Regional Administrator

Enclosure (March 2012 opinion on summary judgment; August 2012 remedial order; letter to MAFMC regarding Amendment 14 to the MSB FMP)

cc: Rick Robins

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
55 Great Republic Drive
Gloucester, MA 01930-2276

AUG 14 2012

Richard B. Robins, Jr., Chairman
Mid-Atlantic Fishery Management Council
Suite 201
800 State Street
Dover, DE 19901

Dear Rick:

The Mid-Atlantic Fishery Management Council (MAFMC) adopted Amendment 14 to the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan (FMP) at its June 2012 meeting. As part of Amendment 14, the MAFMC passed motions to increase observer coverage up to 100 percent on limited access mackerel vessels using mid-water trawl gear, and to increase observer coverage to 100 percent, 50 percent, and 25 percent for small mesh bottom trawl trips on Tier 1, Tier 2, and Tier 3 mackerel vessels, respectively. The MAFMC also adopted a motion specifying that NOAA Fisheries Service and the Atlantic mackerel industry would share the cost of increased coverage, with the industry contributing up to $325 per sea day. At its June 2012 meeting, the New England Fishery Management Council (NEFMC) passed a similar motion, as part of Amendment 5 to the Atlantic herring FMP, to increase observer coverage on vessels with Atlantic herring permits. The motion also requires the cost of increased coverage to be shared between NOAA Fisheries Service and the Atlantic herring industry, with the industry contributing $325 per sea day.

As we have noted, the development of an observer cost sharing program will be challenging since laws pertaining to funding and contracting are complex. I believe that the MAFMC, NEFMC, and NOAA Fisheries Service should work together through the Council process to develop a cost sharing program. Since a cost sharing program would require the industry to pay for observer coverage, industry representatives must be included in the development of the cost sharing program. In order to engage industry representatives, while still complying with regulations regarding public participation, I recommend that the MAFMC and NEFMC form a joint plan development team (PDT)/fishery management action team (FMAT) to develop an observer coverage cost sharing program and bring it to the MAFMC and NEFMC for consideration.

NOAA Fisheries Service staff will serve on the joint PDT/FMAT and will provide information and guidance on funding and contracting requirements. We have already discussed the concept with General Counsel, NOAA Fisheries Service's contract attorneys, and other regions, and my staff will continue to investigate ways to develop an observer cost sharing program. If you choose to form a joint PDT/FMAT, I will provide a list of NOAA Fisheries Service staff to serve on the joint PDT/FMAT.

Finally, the MAFMC's selected alternative regarding industry funding suggests that the final funding mechanism will be enacted through the specifications process, presumably the process

cc: LS, CBK (8/16)

that will develop specifications for the 2014 fishing year. While we hope to develop a funding solution in a timely manner, we encourage the Council to build flexibility into the potential regulatory mechanisms that can be used to implement these solutions (i.e., framework adjustments are not held to the same strict timing constraints as the specifications process).

I appreciate the time and effort that the MAFMC and MAFMC staff have put into Amendment 14, and I look forward to working with the MAFMC on these important issues in the Atlantic mackerel fishery.

Sincerely,

John K. Bullard
Regional Administrator

cc: Rip Cunningham, Jr.
Bill Karp

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
55 Great Republic Drive
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AUG 14 2012

C.M. "Rip" Cunningham, Jr., Chairman
New England Fishery Management Council
50 Water Street
Newburyport, MA 01950

Dear Rip:

The New England Fishery Management Council (NEFMC) adopted Amendment 5 to the Atlantic Herring Fishery Management Plan (FMP) at its June 2012 meeting. As part of Amendment 5, the NEFMC passed a motion to increase observer coverage up to 100 percent on vessels with Atlantic herring Category A and B limited access permits. The motion also specified that NOAA Fisheries Service and the Atlantic herring industry would share the cost of increased coverage, with the industry contributing up to $325 per sea day. At its June 2012 meeting, the Mid-Atlantic Fishery Management Council (MAFMC) passed a similar motion, as part of Amendment 14 to the Atlantic Mackerel, Squid, and Butterfish (MSB) FMP, to increase observer coverage on vessels with Atlantic mackerel permits. The motion also requires the cost of increased coverage to be shared between NOAA Fisheries Service and the Atlantic mackerel industry, with the industry contributing $325 per sea day.

As we have noted, the development of an observer coverage cost sharing program will be challenging since laws pertaining to funding and contracting are complex. The NEFMC specified that the cost sharing program is to be implemented within one year of the implementation of Amendment 5, but it did not specify the process for reviewing the cost sharing program or the vehicle to implement the cost sharing program. I believe that the NEFMC, MAFMC, and NOAA Fisheries Service should work together through the Council process to develop a cost sharing program. Since a cost sharing program would require the industry to pay for observer coverage, industry representatives must be included in the development of the cost sharing program. In order to engage industry representatives, while still complying with regulations regarding public participation, I recommend that the NEFMC and MAFMC form a joint plan development team (PDT)/fishery management action team (FMAT) to develop an observer coverage cost sharing program and bring it to the NEFMC and MAFMC for consideration.

NOAA Fisheries Service staff will serve on the joint PDT/FMAT and will provide information and guidance on funding and contracting requirements. We have already discussed the concept with General Counsel, NOAA Fisheries Service's contract attorneys, and other regions, and my staff will continue to investigate ways to develop an observer cost sharing program. If you choose to form a joint PDT/FMAT, I will provide a list of NOAA Fisheries Service staff to serve on the joint PDT/FMAT.

cc: LS, CBK (8/17)

Finally, as part of Amendment 5, the NEFMC passed a motion to consider establishing a river herring catch cap through the next appropriate action. While Amendment 1 to the Atlantic Herring FMP identified catch caps as management measures that could be implemented via a framework or the specifications process, Amendment 5 contains a specific alternative that considers implementing a river herring catch cap through a framework or the specifications process. Because of the explicit consideration of a river herring catch cap, and the accompanying analysis, in Amendment 5, it is more appropriate to consider a river herring catch cap in a framework under Amendment 5. The Council may begin development of the river herring catch cap framework immediately, but the framework cannot be implemented prior to the approval and implementation of Amendment 5.

I appreciate the time and effort that the NEFMC and NEFMC staff have put into Amendment 5, and I look forward to working with the NEFMC on these important issues in the Atlantic herring fishery.

Sincerely,

for John K. Bullard
Regional Administrator

cc: Rick Robins
Bill Karp

EARTHJUSTICE

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

October 8, 2012

C.M. "Rip" Cunningham, Jr., Chairman
Paul Howard, Executive Director
Members of the Executive Committee
New England Fishery Management Council
50 Water Street, Mill 2
Newburyport, MA 01950

RE: Atlantic Herring Fishery Priorities for 2013

Dear Chairman Cunningham, Director Howard, and Members of the Executive Committee:

We write on behalf of our clients Michael Flaherty, Captain Alan Hastbacka, and the Ocean River Institute,[1] the plaintiffs in *Flaherty v. Bryson*, regarding the management priorities for Atlantic herring in 2013.[2] These draft priorities as revised at the most recent Council meeting include: 1) the 2013-2015 specifications package with alternatives to address the Amendment 4 court order; 2) a framework adjustment to establish the River Herring catch cap; and 3) an amendment to consider River Herring as stocks in the Atlantic herring fishery.[3]

The *Flaherty v. Bryson* Memorandum Opinion and Order[4] requires consideration of River Herring[5] as stocks in the Atlantic herring FMP and measures to minimize the bycatch of River Herring (and other species) to the extent practicable consistent with National Standard 9. The Order also requires consideration of a range of reasonable alternatives to the existing AMs and the interim ABC control rule in the specifications package (or another appropriate action to be completed within one year), including at least one alternative "based on the most recent best available science for setting ABC control rules for herring and other forage fish." None of these requirements have been met. All of the remedial actions, including the supporting NEPA analysis demonstrating Defendants took a "hard look" at the environmental impacts of these actions, must be completed by August 2, 2013.[6]

In order to comply with the Court's remedial order and August 2, 2012 deadline, we request that the Council consider the following:

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[1] *See Flaherty v. Bryson*, 850 F. Supp.2d 38 (D.D.C. 2012).
[2] *See* Draft Management Priorities for 2013 (Sep 25, 2012) at p.2 under Herring, available at: http://www.nefmc.org/press/council_discussion_docs/Publish/Sept2012.html. (The draft priorities also include development of an industry-funded observer program).
[3] *Id.*
[4] The Memorandum Opinion and Order in *Flaherty v. Bryson* are found behind Tab #1 to the NEFMC Council Meeting Materials for the Herring Committee Report for Wednesday, September 26, 2012, available at: http://www.nefmc.org/herring/index.html; *see also* August 31, 2012 Letter from John Bullard (NMFS) to Rip Cunningham (NEFMC) behind Tab #1 Herring Committee Report for Wednesday September 26, 2012.
[5] The term River Herring is defined in the Court Opinion and Order includes blueback herring, alewives, hickory shad and American shad.
[6] *See* Order at 13 fn. 3.

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1. A reasonable range of alternative ABC control rules for Atlantic herring as part of the Council's river herring catch cap framework, which also must be completed by August 2, 2012. An appropriate approach based on the most recent scientific studies on forage fish (Pikitch et al 2012; Smith et al 2011; Cury et al 2011; Tyrrell et al 2011) is briefly outlined below and two alternatives are provided in greater detail in a separate letter specifically addressing the 2013-15 specifications. These alternatives were developed in consultation with scientists familiar with this work.
2. Additional AM alternatives as part of the 2013-2015 specifications action and /or as part of the River Herring catch cap framework, as appropriate.
3. A framework adjustment that implements a River Herring catch cap.
4. An amendment that considers whether River Herring are stocks in the Atlantic herring FMP based on, at a minimum, the materials listed in the Court's Order and also found in NMFS August 31, 2012 Letter to the Council.[7]

ABC Control Rule Based On The Best Available Science On Forage Fish

Our clients and others have requested on many occasions that the Council consider an ABC control rule for Atlantic herring based on the best available science for forage fish.[8] By definition, a control rule should specify an *approach* that sets appropriate harvest levels under a wide range of stock conditions and protects the stock from overfishing by becoming increasingly conservative as stock biomass departs from a specified target biomass.[9] During the development of Amendment 4 and the last (2010-2012) specifications process, the Council declined to develop an actual control rule consistent with the revised Magnuson-Stevens Act and National Standard 1 Guidelines due to the absence of a benchmark assessment. The public was assured, however, that the "interim" control rule (average of most recent 3 years catch) would be replaced by an appropriate control rule in the next specifications package.[10]

The new benchmark assessment was completed in July 2012. As discussed at the recent Council meeting, this assessment is a significant improvement over prior assessments because it used the best available scientific information on predation to specify natural mortality (m) in the assessment model); however, more is required when determining the acceptable biological catch for forage fish like Atlantic herring. Recent scientific studies, using different models to look at forage fish within many different ecosystems, conclude that both a realistic treatment of natural mortality in the stock assessment and determination of MSY, *and* a forage-appropriate control

[7] *See* Order at 11-12 and Letter from Bullard to Cunningham referenced in FN3.
[8] *See inter alia* January 13, 2009 Letter from Marine Fish Conservation Network to NEFMC; March 19, 2009 Letter from Herring Alliance to NEFMC; June 19, 2009 Letter from Herring Alliance to NEFMC; January 13, 2010 Letter from Herring Alliance to NEFMC; January 13, 2010 Letter from National Coalition for Marine Conservation to NEFMC. These comment letters and others pointed the Council toward a large body of science indicating that herring's role as forage must be taken into account in stock assessments, as well as in ABC control rules in order to protect their forage base.
[9] 50 C.F.R. §§ 600.310(e)(3)(iv)(C), (f)(1).
[10] *See* AR 6069 Final Amendment 4 to the Herring FMP at p. 22 ("The interim control rule serves as a placeholder until a more appropriate control rule is developed. In addition to the ABC advice, the SSC also recommended that a new benchmark assessment should be scheduled as soon as possible, preferably in advance of the next management cycle. This would allow the SSC to create an ABC control rule for the next specifications process. In the future the SSC will develop the ABC control rule when further information becomes available.").

rule are needed. *See* Pikitch et al 2012; Smith et al 2011; Cury et al 2011; Tyrrell et al 2011. This is necessary to account for the special risks associated with fisheries for forage fish, including the risk of dependent predator-populations collapsing and the particular vulnerability of forage species to over-exploitation. Herring are particularly vulnerable to over-exploitation because of their schooling behavior and because they undergo substantial population shifts even without fishing, making the risk of overfishing during down cycles even higher. Forage stocks must be given special consideration, above and beyond proper treatment of natural mortality in assessments, in order to avoid collapsing the forage stock and / or dependent predator populations, and causing destructive impacts on ecosystems. *See* Pikitch et al 2012; Smith et al 2011.

The Science and Statistical Committee (SSC) met on September 12, 2012 in order to develop its ABC recommendations for catch in the 2013-2015 fishing years and to discuss ABC control rules for the fishery. The SSC concluded that the two approaches for setting ABC developed by the Herring Plan Development Team (PDT) were nearly equivalent from a biological perspective (similar spawning stock biomass in 2015), thus the SSC gave the Council the choice of the two approaches for setting catch. However, many SSC members at that meeting recognized that both of these alternatives fell short of a proper control rule. *See* SSC discussion, September 12, 2012.

When the Council in turn considered only these two approaches for the 2013-15 specifications package, the Council failed to consider an ABC control rule alternative based on the best available science for setting ABC for forage fish and failed to meet the National Standard One guidelines for setting ABC for forage fish. The first approach, the 75% F_{msy} approach, is simplistic and undifferentiated from the default control rule used for many of the non-forage stocks (such as New England groundfish): ABC is based upon a fishing mortality rate (F) of 75% F_{msy}. The second approach, the "constant catch-based approach," is similar to the interim approach used for setting ABC during the 2010-2012 specifications (average catch 2006-2008). This approach (based on the maximum catch that will still have less than a 50% chance of overfishing in any of the three years) allows for more herring to be caught (342 mt as compared to 320 mt), is not based upon the above default control rule (75% F_{msy}), and was not part of the peer-reviewed material developed for the benchmark assessment. This approach fishes at twice MSY justified in part by a single year class (the strength of which can often be overestimated in the short-term[11]), and has no buffer for scientific uncertainty in its third year.

The SSC requested guidance from the Council regarding how it would like to see this Atlantic herring stock managed in the future, as would be appropriate to develop a permanent ABC control rule, yet none was provided.[12] As the SSC noted, neither approach in the specifications

[11] *See* DRAFT Atlantic Herring Specifications 2013-2015 at § 5.2.2 at p. 19 (2008 Atlantic Herring Year Class).
[12] The SSC requested guidance in their written report and Dr. Legault reiterated this request in the oral presentation at the September 26, 2012 NEFMC Meeting. *See* September 21, 2012 Memorandum from SSC to Paul Howard entitled *Herring ABC for FY2013-2015* ("However, the SSC requests guidance from the Council as to how it would like to see this stock managed, i.e., as a typical fishery with MSY-based reference points, or a reduced fishing rate and higher stock size to account for its role in the ecosystem. This would ensure that the next time herring are assessed, a control rule could be created which meets the needs of the Council. A control rule which could be set for more than three years would need to consider a wide range of possible stock conditions and have a known objective."); *see also* September 26, 2012 Council Meeting Audio Recording #12 *Scientific and Statistical Committee Report*

package may be acceptable beyond the next three years and neither is a control rule that considers a wide range of possible stock conditions with a known objective – instead both rely on a single year class that will ultimately move out of the population.[13] Although the recommendations might meet ecosystem needs "by default if not by design," these approaches are not an ABC control rule based on the best available science for forage fish that would have "reduced fishing rate and [maintained] higher stock size to account for its role in the ecosystem."[14]

Based on the best available science, an appropriate control rule for Atlantic herring should:

- Offset ABC from the estimated OFL according to scientific uncertainty in the estimate.
- Establish a target Biomass at or greater than 75% B_0 (virgin biomass)(*see* papers Pikitch et al 2012; Smith et al 2011; National Standard 1 guidelines)
- Establish a limit cut-off biomass at or above 40% $B_{0;}$ cut-off biomass is used now for Antarctic krill, Alaska herring, U.S. West Coast sardine, and mackerel.
- Set a maximum fishing rate (F) corresponding to 50% F_{msy} or 50% of natural mortality (m), whichever is smaller; F should be low compared to m.
- Establish a declining mortality rate as Biomass declines below the target level, so that fishing ends when the limit Biomass is reached (i.e., F=0).

The New England Council is yet to consider an Atlantic herring ABC control based on the best available science for establishing an ABC control rules for forage fish, as required by the *Flaherty v. Bryson* Remedial Order. In a letter to the Council dated October 8, two ABC control rules for forage fish, and the best available science supporting their consideration, were provided to the Council. *See* October 8, 2012, Letter from Flaherty to NEFMC Re: Atlantic Herring Fishery Specifications for 2013-2015 fishing year. We request that you provide terms of reference to the SSC to consider a range of alternatives for setting an ABC control rule for this fishery, including alternatives based on those provided in our October 8, 2012 letter, as part of the river herring catch cap framework to be completed by the Council by August 2, 2013.

Alternative for Accountability Measures

NOAA General Counsel advised the Council at its September 26, 2010 meeting that it needed to consider a "reasonable range of alternatives" to the current AMs in order to comply with the Court's Order in *Flaherty v. Bryson*.[15] Although Amendment 4 initially identified three different measures in the Atlantic herring FMP as AMs for the fishery, the court found that only two of these (management closures and overage deductions) could be considered AMs for the Atlantic herring fishery. *See* Opinion at 58 (haddock incidental catch cap is not an AM for herring because it does not limit the ACL of herring). Moreover, the Court held that Amendment 4 and its environmental assessment "demonstrate[] a total failure to consider the environmental impacts of alternatives to the proposed ABC control rule or AMs."

[13] *Id.*
[14] *Id.*
[15] *See* Council Audio Wednesday September 26, 2012, #15 Herring Committee Report. *See also* Opinion at 70 (In the absence of consideration of a range of alternatives to the accountability measures chosen in Amendment 4, NMFS had failed to take a "hard look" at the environmental impacts of Amendment 4).

Therefore, the Council must at a minimum analyze a reasonable range of alternatives to the two existing AMs for the fishery listed below:

1. Management Area Closures - 50 C.F.R. § 648.201(a)(1) (prohibits vessels from catching more than 2000 lbs of Atlantic herring per day once NMFS has determined that catch will reach 95% of the annual catch allocated in a given management area).
2. Overage Deduction - 50 C.F.R. § 648.201(a)(3) (mitigates ACL overages by deducting the amount of any overage from the relevant ACL or sub-ACL for the fishing year following NMFS's determination of the overage).

Overages occur in this fishery frequently and are significant. For example, from 2003-2011, numerous overages occurred in Areas 1A or 1B in 6 out of 9 years, and likely occurred in Area 1A for the third year in a row in 2011.[16] In 2010 (the last year for which catch totals are final), the quota caught in Area 1A was 107% and the quota caught in Area 1B was a whopping 138%, despite "closure" at 95%. These facts demonstrate that the current AMs are ineffective at constraining ACLs, sub-ACLs in particular, because they allow ACLs to be exceeded and for rolling overages to occur -- both counter to the objectives of the Magnuson-Stevens Act.

The Council identified two AM alternatives for consideration in the 2013-2015 specifications package:[17]

> 1. A "proactive" AM that would close the directed fishery in a given management area when the catch is projected to reach 92% of the area annual catch limits under the following two conditions:
>
> a) the stock is overfished or overfishing is occurring and;
> b) the sub-ACL for a management area has been exceeded in either of the preceding two years.
>
> 2. A "reactive" AM providing that if overfishing is not occurring and the stock is rebuilt (spawning stock biomass exceeds the target), the accountability measure (a pound for pound payback) will not be triggered until the sub-ACL is exceeded by 5% or more.

These alternatives do not constitute a "reasonable range of alternatives" consistent with the National Environmental Policy Act.[18]

At best, the first alternative might require an earlier closure to the fishery under very limited circumstances (the fishery must be both overfished (or overfishing is occurring) *and* the area in question has suffered its second overage in three years). The second alternative is less restrictive than the current reactive AM for the fishery because it would eliminate the requirement for overage paybacks in many circumstances and makes unclear what the effective limit for the

[16] *See* Tab #2 Draft Discussion Document Atlantic Herring Fishery Specifications for the 2013-2015 Fishing Years, Tables 2, 3, and 4 and discussion on pp. 5-7.
[17] *See* September 28, 2012 NEFMC News Brief at 2, available at: http://www.nefmc.org/ (Council Meeting Brief); *see also* Council Audio # 15 Herring Committee Report.
[18] *See* 40 C.F.R. § 1502.14

fishery is – in fact, it appears to provide an incentive to fish harder as the area catch limit is approached in order to catch up to 5% more than the ACL without having to mitigate the overage. Moreover, neither alternative addresses the overall ACL for the fishery. This set of AM alternatives is inconsistent with NEPA, the Court's Order to consider a "range" of AM alternatives, and the Magnuson-Stevens Act requirements to prevent ACLs from being exceeded and mitigate overages if they occur.[19] The Magnuson-Stevens Act requires ACLs to set *specific limits* on the total fish caught in each fishery to prevent overfishing. 16 U.S.C. §§ 1851(a)(1), (15); 50 C.F.R. § 600.310(f) (1).

Given the history of recent overages in this fishery, ranging as high as 138% of the sub-ACL, a closure at even 92% of the limit is unlikely to prevent the ACL's from being exceeded. A reasonable range of alternatives to the management area closure should include options that close the fishery when the catch is projected to reach 85% and 90% of the sub-ACL. A reasonable range of alternatives to the overage deduction should include an option that would deduct overages in the next fishing year. Although NMFS has taken the position in the past that it cannot monitor catch accurately enough to implement the pound for pound overage deduction in anything less than a one-year lag, under current regulations NMFS appears to be able to monitor Canadian catch in near real time in order to return 3,000 mt to the U.S. catch within the same fishing year. It has also been argued that the industry needs certainty in order to business plan, thus estimating potential overages and adjusting the amounts if necessary once the data is final is not feasible. This argument does not stand up given the fact specification are regularly not finalized prior to the start of the fishing year, yet industry has been unaffected. Given the further improvements to the fisheries monitoring and reporting measures included in Amendment 5, next year overage paybacks is a reasonable alternative that would increase accountability in the fishery.

In sum, the identified AM alternatives in the specifications package do not represent a reasonable range of alternatives under NEPA and do not meet the requirements of the Magnuson-Stevens Act. "[A]ctions that violate the MSA cannot be reasonable alternatives to consider." Opinion at 71 (*citing American Oceans Campaign v. Daley*, 183 F. Supp. 2d 1, 20). In order to comply with the Court's Order, the Council should immediately develop new accountability measure alternatives and analyze them expeditiously for implementation with this specifications package. Alternative AMs that cannot be completed as part of the specifications should be considered in the bycatch cap framework, consistent with the Court's Remedial Order.

River Herring Catch Cap Framework Action

The Court in *Flaherty* held that Amendment 4 failed to comply with National Standard 9's requirement to minimize bycatch of River Herring and other species to the extent practicable. *See* Opinion at 40-41. NMFS (and the Council) took the position that this legal deficiency would be cured by management measures in Amendment 5. *See* Order at 8. Amendment 5 received final Council approval on June 20, 2012, however, this action contains no substantive provision that will minimize bycatch of River Herring to the extent practicable. Amendment 5 provides

[19] 16 U.S.C. § 1853(a)(15); 50 C.F.R. § 600.310(g)(1).

only "support" of a voluntary industry avoidance project (SMAST /SFC/ DMF) and an undefined promise to "consider" a River Herring catch cap in a future action.[20]

Although the development of the River Herring catch cap could have begun immediately as part of the 2013-2015 specifications process (as contemplated by Amendment 1 to the FMP), debate ensued over the proper procedural vehicle for the cap which has delayed its development and implementation. As a result, the Council and NMFS have taken no action to date that satisfies the Courts Remedial Order to demonstrate that it has minimized bycatch to the extent practicable , by August 2, 2013. The Council must promptly initiate a framework adjustment that will implement the River Herring catch cap , and begin its NEPA analysis immediately, in order to meet its August 2, 2013 deadline.

Amendment That Considers River Herring As Stocks In The Atlantic Herring Fishery

Consistent with the Remedial Order, NMFS also recommended that the Council consider in an amendment to the Atlantic Herring FMP, whether river herring (alewife and blueback) and shad (American and hickory) should be designated as stocks in the Atlantic herring fishery.[21] The Court Order and NMFS's letter provided a list of legal, scientific, s and related materials that should be considered, at a minimum, when making this determination. This list includes the requirements of the Magnuson-Stevens Act related to including a stock in an FMP, the most recent river herring and shad stock assessments and peer review reports, NMFS own finding that a listing under the Endangered Species Act for river herring "may be warranted," Alternative Set 9 in the MAFMC's Amendment 14 to the Atlantic Mackerel, Squid, and Butterfish FMP, and the Court's Memorandum Opinion in *Flaherty v. Bryson*.[22]

The Opinion, in addition to the Order, in the *Flaherty v. Bryson* case is critical to completing this work and bringing the Atlantic herring FMP into compliance with the law. When finding that NMFS failed the first time to "reasonably and rationally consider [] whether Amendment 4's definition of the fishery [to exclude river herring] complied with the National Standards and with the MSA," Opinion at 32, the Court made clear that "councils do not have unlimited and unreviewable discretion to determine the make-up of their fisheries," *id*., and they must follow the "MSA's directive that FMP's be generated for any fisheries requiring conservation and management." The determination of what stocks make up a fishery must be consistent with the applicable legal standard, 16 U.S.C. § 1852(h), based on the best available scientific information, 16 U.S.C. § 1851(a)(2), and reviewed by NMFS for compliance with the Magnuson-Stevens Act and other applicable law, 16 U.S.C. § 1854(a). The Court in *Flaherty* laid out the legal standard: **Section 1852(h) requires the Council prepare an FMP or amendment for any stock of fish that requires conservation and management.** *See* Opinion at 30.

NMFS filed a supplemental explanation on the definition of the fishery with the Court on August 31, 2012, stating that based on the information available at the time Amendment 4 was approved it had "determined that Amendment 4's definition of the stocks in the fishery complies with the

[20] *See* June 2012 Council Report at 1 (Amendment 5 Measures Receive Final Council Approval); *see also* NEFMC Motions Report for Wednesday June 20, 2012 (Management measures to address River Herring bycatch).
[21] *See* August 31, 2012 Memorandum from John Bullard (Daniel Morris) to Rip Cunningham, Chairman NEFMC
[22] *See* FN 10.

MSA." This supplemental explanation is nothing more than another carefully lawyered *post hoc* rationalization for the failure to manage these species. It does not affect the Council and NMFS's obligation to prepare an FMP or FMP amendment for stocks in need of conservation and management, i.e., river herring and shad. As pointed out to the Court by the Plaintiffs, the supplemental explanation bypasses Congress's detailed structure, specifically the Council process, for determining which stocks should be included in a fishery, fails to satisfy NEPA's mandate to take a "hard look" at the environmental impacts of agency actions, and is contradicted by NMFS's own scientific information and actions. Plaintiffs filed their response to NMFS's supplemental explanation on September 25, 2012, attached to this letter as Attachment 1. As Plaintiff's Response shows, the best available scientific information, including that since Amendment 4 was approved, demonstrates that river herring and shad are involved in the Atlantic herring fishery (caught in significant amounts), and are unquestionable in need of conservation and management. Further, contrary to NMFS's strained explanation, it would not be impracticable to manage these species as a unit with Atlantic herring or duplicative of the ASMFC's management efforts, which pertain only to state waters. We urge you to initiate an amendment to add River Herring to the Atlantic herring FMP in November in order comply with the Court's Opinion and Order.

***

The Council and NMFS are required to complete all remedial actions in response to the Court's Order by August 2, 2013, including the NEPA analysis for the 2013-2015 specifications and all other remedial actions. *See* Order at 13. We therefore urge you to prioritize and take prompt action to consider our recommendations for complying with the *Flaherty v. Bryson* Court Order. Consideration of the measures could significantly improve management of our Atlantic herring and River Herring resources.

Sincerely yours,

/s/ Roger Fleming__
Roger Fleming, Attorney
Erica Fuller, Attorney
Earthjustice

on behalf of its clients
Michael Flaherty
Captain Alan Hastbacka
Ocean River Institute

Cc: John Bullard, Northeast Regional Administrator
Gene Martin, NOAA General Counsel
Mitch McDonald, NOAA General Counsel
Carrie Nordeen, NERO Sustainable Fisheries Division
Dr. Chris Legault, Chairman of SSC
Rick Robbins, Chairman, MAFMC
Lori Steele, Fishery Analyst Herring FMP

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

MICHAEL S. FLAHERTY, et al. Plaintiffs, v. REBECCA BLANK, in her official capacity as Secretary of the Department of Commerce, et al., Defendants.	Civil No. 1:11-cv-660-GK

PLAINTIFFS' RESPONSE TO DEFENDANTS' SUPPLEMENTAL EXPLANATION OF ITS CONSIDERATION OF AMENDMENT 4'S FISHERY DEFINITION

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Dated: September 25, 2012

Pursuant to this Court's September 14, 2012 minute order, Plaintiffs hereby submit this Response to Defendants' supplemental explanation of Amendment 4's fishery definition (August 31, 2012, Memorandum of A. Risenhoover[1], Doc. 42-1)("Supplemental Explanation").

Defendants' Supplemental Explanation is inconsistent with the Magnuson-Stevens Act, National Environmental Policy Act, Administrative Procedure Act, and this Court's Memorandum Opinion (Doc. 31)("Opinion") and Memorandum Order (Doc. 41)("Order").[2] It entirely bypasses Congress's detailed structure for determining what stocks should be included in a fishery, which was described in detail in this Court's Opinion, and is not based on the best scientific information available. It also does not satisfy NEPA's mandate to take a "hard look" at the environmental impacts of agency actions. It is contradicted by NMFS's own scientific information and actions, and is not otherwise supported by the record.

In substance Defendants' Supplemental Explanation is merely another *post hoc* rationalization for their failure to include River Herring[3] as stocks in the Atlantic herring fishery. They present three excuses for this failure, suggesting that it would have been "impracticable" to manage River Herring, that the available information was "insufficient" to do so, and that any such management would have been "duplicative." Supplemental Explanation at 1. The difficulty with these excuses is that each one is contradicted by NMFS's own scientific information and actions, and is not otherwise supported by the record. For these reasons, Defendants'

[1] *But see* the Defendants' Notice of Filing Supplemental Explanation (Doc. 42)("Notice") stating that this memorandum to the file is authored by Samuel D. Rauch III, NMFS Deputy Assistant Administrator for Regulatory Programs.

[2] Defendants' Supplemental Explanation ignores that part of this Court's Order requiring that their consideration of Amendment 4's determination of the stocks in the fishery be consistent with this Court's March 8, 2012, Memorandum Opinion. *See* Order at 10-11. In fact, Defendants never reference this Court's Opinion in their Supplemental Explanation, Notice, or letter to the New England Fishery Management Council. (Doc. 42-2)("Council Letter"). This is important because, as discussed below, the Supplemental Explanation, and Council Letter, continue to misinterpret the Magnuson-Stevens Act contrary to this Court's Opinion.

[3] "River Herring" include alewife and blueback herring, and hickory and American shad.

Supplemental Explanation is arbitrary and capricious and not in accordance with law. It should be given no weight.

I. Defendants' Supplemental Explanation Is Not Consistent With the Magnuson Stevens Act, the National Environmental Policy Act, and this Court's Memorandum Opinion and Order

As an initial matter, the Defendants' Supplemental Explanation is fatally flawed because it avoids the procedural requirements of the Magnuson-Stevens Act and other applicable law. Defendants admit that "[d]esignating river herring as a stock in the fishery was not considered by the Council in Amendment 4" and was not analyzed in the environmental assessment. 76 Fed. Reg. 11373, 11377 (Mar. 2, 2011) (AR 6329). Defendants did not review the Council's failure to include River Herring as a stock in the fishery, arguing in their summary judgment memorandum they believed Congress left such decisions entirely to the Council's discretion and thus beyond the Magnuson-Stevens Act's mandate that the Secretary review Council decisions for compliance with applicable law. Defs' Opp. and Cross-MSJ at 18-19 (Doc. 18). These arguments were rejected, Opinion at 26-33, and this Court held that Defendants violated the Magnuson-Stevens Act and the APA by failing to "reasonably and rationally consider[] whether Amendment 4's definition of the fishery [to exclude river herring] complied with the National Standards and with the MSA's directive that FMPs be generated for any fisheries requiring conservation and management." Order at 3.

This Court concluded that the law regarding its remedial power requires that in cases where "the record before the agency does not support the agency action, if the agency has not considered all relevant factors, or if the reviewing court simply cannot evaluate the challenged agency action on the basis of the record before it, the proper course, except in rare circumstances is to remand to the agency for additional investigation or explanation." Order at 7 (citation

omitted). This Court explained that "when a court reviewing agency action determines that an agency made an error of law, the court's inquiry is at an end: the case must be remanded to the agency for further action consistent with the corrected legal standards." *Id.* (citation omitted). Given this limited remedial authority, this Court concluded that the appropriate remedy was for Defendants to correct what they failed to do before by considering whether Amendment 4's definition of the fishery complied with the Magnuson-Stevens Act through a remand "for reconsideration and action consistent with the Court's March 8, 2012, Memorandum Opinion." *Id.* at 8. This Court explained that "Congress created a detailed federal-state-local structure to investigate, study, and eventually make those decisions." *Id.* at 8.

Defendants' Supplemental Explanation, however, is at odds with the detailed structure Congress established for making these important decisions, and with this Court's Opinion explaining this structure, because it entirely bypasses the Council process that is at the heart of the Magnuson-Stevens Act. This Court explained the Act's decision-making process in great detail. Opinion at 2-5, 7, 20-33. Critically here, the Court explained "that it is the Council's role to name the species to be managed 'in the first instance,' [and] it is NMFS's role in the second instance to ensure that the Council has done its job properly under the MSA and any other applicable law." *Id.* at 29.

As the Opinion and record make clear, neither the Council nor NMFS followed the law in Amendment 4 when completing their jobs under the Magnuson-Stevens Act. Defendants incorrectly explained that it was their view that the Council was only required to develop a fishery management plan for a stock of fish where "NMFS has determined that a fishery is 'overfished'" or that "overfishing" is occurring. Opinion at 27-28.[4] Otherwise, in Defendants'

[4] Defendants continue to emphasize this narrower legal standard in their carefully worded communications with this Court and the New England Council over the Magnuson-Stevens Act's broader "conservation and management"

view the decision regarding which stocks to be included in a fishery management unit was left entirely to the discretion of the Council. *Id.* at 27. The Council, apparently relying upon this incorrect legal interpretation,[5] chose early in the development of Amendment 4 not to consider adding River Herring as a stock to the fishery, and as a result the Council never evaluated whether River Herring are in need of conservation and management and never developed the Amendment 4 record with the scientific information and data that would be necessary to determine if River Herring need to be added to the fishery management plan. *See* 76 Fed. Reg. at 11377 (AR 6329); Opinion at 9; Opinion at 23-26 (pointing to lack of record evidence and analysis for Council's decision not to consider adding River Herring to the fishery).

Thus, while the proper remedy was to remand Amendment 4 to the Agency for reconsideration of whether River Herring should be added to the fishery, Defendants' Supplemental Explanation is arbitrary and capricious and contrary to the law and this Court's Memorandum Opinion because it bypassed the Council, and merely reflects NMFS's current opinion based on the undeveloped record as it existed at the time Amendment 4 was approved on November 9, 2010. Supplemental Explanation at 1. This approach fundamentally conflicts with the Magnuson-Stevens Act's structure demanding such decisions first be made by the Council, consistent with the applicable legal standard, 16 U.S.C. § 1852(h), based on the best available scientific information, 16 U.S.C. § 1851(a)(2), and that NMFS then review such decisions for compliance with the Magnuson-Stevens Act and other applicable law. 16 U.S.C. § 1854(a); Opinion at 26-33.

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standard that is at issue in this case. Supplemental Explanation at 1 ("If a stock in a fishery is determined to be overfished or subject to overfishing, it must be included in an FMP."); Council Letter at 2 ("If a stock of fish is determined to be overfished or subject to overfishing, it must be included in an FMP.").

[5] Fishery management councils do not employ their own legal counsel but rather rely upon Defendants' attorneys provided by NOAA's Office of General Council for legal advice. *See* http://www.gc.noaa.gov/sw-office.html

Moreover, Defendants admit that the Amendment 4 decision whether to include River herring and shad in the fishery was never analyzed in an Environmental Assessment. 76 Fed. Reg. at 11377 (AR 6329); Opinion at 69-70. It is inconsistent with NEPA for Defendants to now offer a *post hoc* explanation effectively approving the prior, unlawful, Council decision through a four page conclusory document that contains none of the NEPA analysis that would otherwise be required to decide what stocks must be included in the fishery in the first instance. This lack of analysis, together with the failure to develop the necessary administrative record as noted above, has substantive effects. For example, Defendants point to (their perception of) the lack of data and analysis in the Amendment 4 record as a basis for their current conclusion that river herring and shad should not be included in the fishery. Supplemental Explanation at 3-4. But this reasoning is patently circular – this is the very data and analysis that would be developed and analyzed through NEPA if the decision-making structure of the Magnuson-Stevens Act were followed.

The Supplemental Explanation fails to shed any additional light on the Council and Defendants' decision at the time Amendment 4 was approved, and fails to properly reconsider that decision consistent with the statutory scheme requiring the Council make such decisions in the first instance, based on the best scientific information available. In sum, the Supplemental Explanation is only another *post hoc* rationalization, based on an insufficient record and analysis, from the Agency and its legal counsel, and should be given no credence.[6]

[6] *See Oceana v. Evans*, 384 F. Supp. 2d 203, 225 (D.D.C. 2005) (noting that in evaluating whether an agency articulated a basis for its decision, the district court cannot rely on post-hoc rationalizations; instead, it must look to the justification provided by the agency in the record); *see also Anacostia Riverkeeper v. Jackson*, 798 F. Supp.2d 210, 241, FN 23 (D.D.C. 2011) ("Courts 'do not generally give credence to ... post hoc rationalizations' for agency action, but instead 'consider only the regulatory rationale offered by the agency' at the time of such action. *Gerber v. Norton*, 294 F.3d 173, 184 (D.C.Cir.2002)). ("The Court is therefore loathe . . . to consider new arguments in a legal brief, particularly where the Agency offers no new evidence or study in support of its late-hour conclusions.").

II. Defendants Incorrectly Assert That it is Impracticable to Manage River Herring as a Unit

Defendants have never disputed, nor could they, that River Herring school with Atlantic herring or that River Herring are caught in significant numbers in the Atlantic herring fishery. Defendants now argue, for the first time, that the best "information available at the time Amendment 4 was approved demonstrates that it was impracticable to treat shad and river herring as a 'unit' on a regional or coast-wide scale as contemplated by National Standard 3." See Supplemental Explanation at 3.[7] As justification, Defendants argue that stock assessments existing at the time Amendment 4 was approved evaluate individual river runs of fish, assert that the extent and rate of mixing in the ocean is uncertain, and claim that existing catch data does not always differentiate between river herring and shad. *See* Supplemental Explanation at 1, 3. These assertions are not supported by National Standard 3 and other applicable law, the record, or the best available science.

National Standard 3 states that "[t]o the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as unit or in close coordination." 16 U.S.C. § 1851(a)(3). The National Standard 1 guidelines, cited but ignored by Defendants, also provide guidance for classifying multiple stocks in a plan, and require that an FMP include a description of fish involved in the fishery. 50 C.F.R. § 600.310(d)(1). To facilitate this inclusive description, the guidelines include those stocks already in an FMP by default, and provide definitions for "non-target species" (such as River Herring caught incidentally and retained for sale or personal use) and "ecosystem component species," so that other stocks involved in the fishery can be added to the plan. *See id*. § 600.310(d)(1)-(5).

[7] *See infra* at III, p. 12 for an extensive list of other species that NMFS manages as a unit on a regional or coast-wide scale.

During briefing, the Defendants explicitly agreed with Plaintiffs that river herring and shad are "involved in the fishery" consistent with the Magnuson-Stevens Act, Defs' Opp. and Cross-MSJ at 18, but argued (instead) that the only circumstances when the Council would be required to include a stock in the fishery would be when the Secretary officially designated the stock as overfished, *id*., — a legal position rejected by this Court. *See* Opinion at 29. In search of a new justification for their failure to add these species, Defendants now claim they are not inter-related and not capable of being managed as a unit. *See* Supplemental Explanation at 3. However, nowhere in the Act, the National Standards, or the guidelines does it state that the only stocks "practicable" for Defendants to manage are targeted stocks. It is arbitrary and capricious for Defendants to twist the phrase "to the extent practicable" into an excuse for their continuing failure to manage these species when National Standard 2 requires that they rely upon the best *available* science. Managing River Herring as a unit with Atlantic herring is entirely consistent with the Act, the National Standards, their guidelines, and the objectives of Amendment 4 to implement ACLs and AMs consistent with the Magnuson-Stevens Act (Amendment 4 Objective 2) and to consider the role of herring as forage fish (Amendment 4 Objective 5). AR 236-237.

In addition to misreading the law, Defendants ignored the best *available* scientific evidence, Plaintiffs Mem. at 18-20 (Doc. 17-1), that supports a finding that River Herring could be managed as a unit with Atlantic herring. *See* AR 645-664 (herring plan development team member Cieri presentation: Estimates of River Herring Bycatch in the Directed Atlantic Herring Fishery); AR 903-919 (Cieri white paper: same); AR 665-685 (Cieri presentation: Characterization of Observer and Portside Bycatch Studies for Atlantic Herring & Preliminary Examination Overlapping Trips); AR 1506-1529 (Correia white paper using NEFOP discard data: Exploratory Figures of River Herring Bycatch in the Atlantic herring fishery (Directed

trips) for Atlantic herring PDT consideration). This body of science shows, among other things, that the amount of incidental catch of River Herring in the Atlantic herring fishery, may be equivalent to nearly *all of the commercial river landings coastwide*. AR 662.

Defendants also ignored their own data which also supports a finding that these stocks can be managed as a unit. *See* AR 5641, 6170, 6172, 6173-6176, 6178, 6179 (Catch and Discard Data for Cat. A and B permit holders (these permit holders catch 98% of the Atlantic herring) in Final Amendment 4). This scientific evidence shows that in the directed trips (targeting herring and mackerel) by Category A and B permit holders, the catch of blueback's, alewives, and other unidentified herring that was kept and sold, was significant and far exceeded any other species caught incidentally by a large margin. AR 6172.

Finally, NMFS's assertion that management of River Herring is "impracticable," *see* Supplemental Explanation at 1, 3, is contradicted by its actions in Amendment 5, where it analyzed alternatives for catch caps and bycatch avoidance plans for River Herring in federal waters using the very same data it now claims is insufficient. *Id.* According to Defendants' Supplemental Explanation, in order for it to be practicable to manage River Herring as a unit, there would first have to be coast-wide stock assessments, evidence of the extent and rate of mixing of river herring and shad in the ocean traceable to each different natal river on the East Coast, catch data that always differentiates between river herring and shad, and information that links fish caught in the ocean traceable to each from different natal rivers on the East Coast). *Id.* This is an arbitrary and capricious standard, especially in view of the fact that both the New England Council and the Mid Atlantic Councils have examined the best *available* science and determined that an Alosine catch cap (a catch limit incorporating catch of all four species of River Herring together) as an interim measure in the herring and mackerel fisheries is feasible.

See NEFMC's Selection of Final Measures Herring Amendment 5, available at: http://www.nefmc.org/herring/index.html; *see also* MAFMC's Amendment 14 DEIS available at: http://www.mafmc.org/fmp/msb_files/msbAm14current.htm.

III. Defendants Wrongly Claim that the Best Available Information Was Insufficient to Support a Finding that River Herring are in need of Conservation and Management

The Supplemental Explanation conjures up a variety of smoke screens (e.g., inadequate data, ASMFC management in state waters, and biased comment letters) designed to obscure and confuse the relevant legal standard for adding stocks to a fishery, ignore or dismiss valid scientific information, and ultimately attempt to justify their conclusion that conservation and management of River Herring in federal waters is unnecessary. As this Court explained in its Memorandum Opinion, the Magnuson-Stevens Act requires an FMP or amendment for all stocks in need of conservation and management. *See* 16 U.S.C. § 1852(h)(1); see also Opinion at 3-5.

Fishery Management Plans must include conservation and management measures to prevent overfishing, rebuild overfished stocks, and promote the long-term stability of the fishery. *Id*. § 1853(a)(1)(A). The Act defines "conservation and management" as measures that rebuild, restore, and maintain the resource, including those designed to ensure that irreversible or adverse effects on the marine environment are avoided. *See* 16 U.S.C. § 1802(5). In addition, the National Standard 7 guidelines provide guidance on federal management when a stock has not yet been designated as overfished, and criteria for when "conservation and management measures" are required for those stocks. These conditions include: importance to the nation, the condition of the stock, and the extent to which it is already *adequately* managed. *See* 50 C.F.R. § 600.340. However, once a council develops an FMP, NMFS must review it, and ultimately, approve, disapprove, or partially approve the FMP as consistent with the National Standards and applicable law. 16 U.S.C. § 1854(a)(1)(A), (a)(3).

While NMFS makes passing references to the law, citing 16 U.S.C. § 1852(h)(1) and 1853(a)(2) in its statutory background section, its analysis (Section III) never applies the statutory conservation and management standard, or even references the statutory definition and related National Standard 7 guidance, and ultimately fails to evaluate in any meaningful way whether River Herring require conservation and management. *See* Supplementary Explanation at 3-4. Instead, Defendants continue to rely heavily upon the statutory standard that requires the axiomatic addition of stocks designated as "overfished" or "subject to overfishing" by the Secretary. *See* Supplementary Explanation at 1, 3-4. Defendants' arguments that these are the only triggers for adding stocks to a fishery are not supported by the Act and were explicitly rejected by this Court: the standard is whether a stock is capable of being managed as a unit and requires conservation and management. *See* Opinion at 29.

Moreover, the information NMFS relies on for its conclusion that River Herring are not in need of conservation and management, and thus should not be added to the fishery, is also incomplete and does not reflect the best available science (even at the time of the Amendment 4 decision). Most notable among the scientific information NMFS *failed* to consider in Amendment 4 is the underlying data and materials used to justify its listing of river herring (bluebacks and alewives) as *species of concern*. *See* 71 Fed. Reg. 61022 (Oct. 17, 2006); Plaintiffs Supp. Mem. (Doc. 35-0) at 6. Similarly, the underlying data and materials that supported its finding that a listing of river herring under the Endangered Species Act "may be warranted" was not considered. 76 Fed. Reg. 67652 (Nov. 2, 2011); Plaintiffs Supp. Mem. (Doc. 35-0) at 6.

In addition, NMFS cannot rely upon ASMFC management measures designed to manage directed fisheries in in state waters to justify its own inaction in federal waters. Plaintiffs

showed, and Defendants never challenged, that River Herring are caught in significant amounts in the Atlantic herring fishery in federal waters. Plaintiffs Mem. at 14-15; *see also* AR 5641, 6170, 6172, 6173-6176, 6178, 6179 (Catch and Discard Data). While state sustainable fishery plans described in its Supplemental Explanation are potentially valuable to address catch of River Herring in state waters, they do not obviate the need for management in federal waters.

As part of its direction to the Council, NMFS also claims "unique management challenges" inherent in species like River Herring that cross jurisdictional boundaries. *See* Letter to Council Exhibit 2 (Doc 42-2 at 3). However, NMFS already manages a plethora of stocks in multiple FMPs, including FMPs that cross the jurisdictional boundaries of the New England Council (NEFMC), the Mid-Atlantic Council (MAFMC), the ASMFC, and even NMFS FMPs: Atlantic herring (NEFMC/ASMFC), Atlantic mackerel (MAFMC/ASMFC), bluefish (MAFMC/ASMFC), summer flounder (MAFMC/ASMFC), Scup (MAFMC/ASMFC), spiny dogfish (MAFMC/NEFMC/ASMFC), Gulf of Maine and SNE winter flounder (NEFMC/ASMFC), and coastal sharks (federal (NMFS) FMP/ASMFC). *See* http://www.nefmc.org/; http://www.mafmc.org./; http://www.asmfc.org/. It is irrelevant and arbitrary to rely on the fact that River Herring and Shad have separate stock assessments and different management measures as an excuse for lack of management. All 20 of the managed species in the Northeast Multispecies FMP, for example, meet these criteria; yet that fact has not precluded NMFS from managing them as a unit. *See* http://www.nefmc.org/nemulti/index.html.

NMFS further relies heavily on the assertion that the ASMFC has not previously requested NMFS to create an FMP for River Herring in federal waters. *See* Supplemental Explanation at 2-3. This statement does not tell the full story. In fact, NMFS is well aware that the ASMFC, as well as both the New England and Mid-Atlantic Councils, were concerned

enough over the catch of River Herring to request emergency action to regulate catch of River Herring in federal waters during Amendment 4. *See* Exhibit 1. In its May 27, 2009 Letter to Gary Locke, the Executive Director of the ASMFC cited concerns about coastwide depletion and significant declines in most river runs, and pointed out that "bycatch of river herring in federal fisheries has become a significant concern, as it may be having considerable impact on stock status." Exhibit 1 at 1. The ASMFC concluded its letter with a plea: "We urgently need monitoring and management programs to minimize the impacts of by catch on river herring." *Id.* NMFS refused that urgent request for emergency action. Exhibit 1 at 18.

Finally, this Court already found that any reliance on the Atlantic Herring Plan Development Team document that NMFS again cites in its Supplemental Explanation at 3-4 is arbitrary and capricious, stating, "[t]hat document does not explain why an estimate could not have been generated prior to issuance of Amendment 4, nor why the Council could not at the very least have devised an interim Acceptable Biological Catch control rule based on the best available science, as it did in Amendment 4 for Atlantic herring." Opinion at 24.

In sum, NMFS ignored best available science that River Herring are in need of conservation and management and unlawfully relied on management in state waters for its inaction in federal waters

IV. Defendants Wrongly Assert That it Would be Duplicative to Manage River Herring in Federal Waters

Defendants' last attempt to justify inaction is to claim, for the first time, that managing River Herring in federal waters would be "impracticable and unnecessarily duplicative" under National Standard 7. *See* Supplemental Explanation at 4. National Standard 7 provides that "[c]conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication." 16 U.S.C. § 1851(a)(7). As support, Defendants cite the same

insufficiencies it used for earlier justifications discussed above – that the limited stock status information was related primarily to state waters and their own catch data for federal waters is "uncertain." *Id.* Further, NMFS absurdly claims that it would be duplicative to manage River Herring in federal waters when they are managed in state waters. The ASMFC's management plan does not include management measures addressing the catch of River Herring in any federal fisheries, therefore the ASMFC plan is irrelevant for the purposes of regulating their catch in federal waters. *See* Amendment 2 to the Interstate Fishery Management Plan for Shad and River Herring (May 2009), § 6.8 available at: http://www.asmfc.org/.[8]

Moreover, Defendants cannot rely on a promise to gather more scientific information in the future in order to consider managing River Herring as part of the Atlantic herring fishery to satisfy its current legal obligations. *See Anacostia*, 798 F. Supp.2d at 242 (courts consider rationale offered by the agency at the time of its action). Agencies must make decisions based on the best scientific information available at the time of the decision. *Sw. Ctr. for Biological Diversity v. Babbitt*, 215 F.3d 58, 60 (D.C. Cir. 2000) (best available science requirement "prohibits the Secretary from disregarding available scientific evidence that is in some way better than the evidence he relies on") (citation omitted). As discussed above, there was sufficient scientific information available at the time Amendment 4 was approved, and additional supporting scientific information that has become available since, that fully support adding River Herring as a stock in the fishery. There is no rational connection between the facts found and choices made here by NMFS.

[8] Although not at issue here, the Atlantic Coastal Fisheries Conservation and Management Act includes provisions authorizing NMFS to issue regulations that are compatible with the state waters plan and consistent with the Magnuson-Stevens Act's national standards. *See* 16 U.S.C. § 5103(b)(1). No such regulations have been issued for River Herring.

Conclusion

For these reasons, Defendants' Supplemental Explanation is arbitrary and capricious and not in accordance with law. It should be given no weight.

Dated: September 25, 2012

Respectfully submitted,

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Compliance Committee Report to ISFMP Policy Board

May 2, 2012

Committee Attendance:
Jim Gilmore, Chair
Dennis Abbott
Robert Boyles
Bill Cole
John Duren
Adam Nowalsky
David Simpson
Jack Travelstead

Staff:
Bob Beal

Relevant ASMFC Guidance Documents

- ASMFC Rules and Regulations language regarding calling meetings (*Attachment 1*)
- ISFMP Charter language regarding Emergency Actions (*Attachment 2*)
- ISFMP Charter language regarding delayed implementation (*Attachment 3*)
- Addendum XVI to the Summer Flounder, Scup, and Black Sea Bass FMP language regarding delayed implementation *(Attachment 4)*

Discussion Summary

The Compliance Committee met twice via conference call to respond to the charge from the Commission Chair, Paul Diodati. The Committee divided the tasking into four components.

The practice and adequacy of the procedures for calling a board meeting

The Committee reviewed the guidance contained in the Commission Regulations and determined the current language is appropriate for calling meetings. The Committee did not recommend any changes. The Committee agreed there are benefits and justification for maintaining the current process. The procedure of the Commission Chair calling ordinary and extra-ordinary board meetings provides the following:

- Consistent criteria for calling meetings across all boards
- Consideration of approved Action Plan and budget
- Encouragement for boards to make decisions in the four scheduled Commission meetings
- Consideration of consequences of board action that might impact all states.

The meaning, application, and adequacy of the definition of an emergency

The Committee reviewed the language in the ISFMP Charter that defines an emergency. The Committee also was provided with a description of how difficult it was to develop and approve the current emergency language. The Committee agreed the current emergency provisions in the Charter provide adequate flexibility to address unforeseen issues through board action. The

requirement to approve emergency actions by 2/3 vote reduces the potential for boards to overuse this option. The Committee provided the following reasons for maintaining the current emergency language in the Charter.

- The Commission has infrequently used emergency actions to modify FMPs in response to urgent, unforeseen, and serious conservation issues (8 emergency actions since 2001).
- Modifying the definition of an emergency would be difficult given the range of emergency provisions in states laws.
- Modifying the emergency language to increase flexibility for boards my result in more frequent use of emergencies to adjust management. This will decrease transparency and public participation.
- Crafting language in the Charter to increase flexibility for all FMPs may not be possible or will result overuse of emergency actions.

Commission's ability to respond to state(s) deviating from an FMP

The Committee reviewed the options available to the Commission to respond to a state implementing regulations that are not consistent with the compliance requirements in an FMP. The Committee agreed the non-compliance provisions in ACFCMA are adequate and effective in addressing issue where there is a conservation impact. However, the Committee indicated there are not sufficient options to address short-term non-compliance and deviations that don't impact conservation. The Committee agreed to the following:

- The recent actions regarding scup highlighted deficiencies in the system to address deviations from FMPs.
- Staff should explore the legal issues involved with penalizing states through actions such as reduced future quotas, reduce ACFCMA funding, etc.
- Consideration should be given to including delayed implementation provisions in other FMPs and removing the link to conservation to invoke delayed implementation penalties.
- State deviations from an FMP cause significant problems for all states and for the Commission process.

Increasing the Flexibility for species management boards

The Committee agreed that additional flexibility should be provided to the species management boards especially in the case of fully rebuilt stocks. The Committee determined that modifying the Charter to provide flexibility would not be appropriate. Given that FMPs differ significantly, it would likely not be possible to create generic language to address the specifics of each FMP. The Committee agreed on the following statements:

- Each species board should consider modifying FMPs to provide increased flexibility for in-season adjustment if the stock is fully rebuilt. Not all FMPs will need to be modified.
- The FMPs already include conservation equivalency provisions that provide flexibility to the states.

- The transparency and public comment process should be considered when boards explore details to increase flexibility.

Committee Recommendations

The following are recommendation made by the Committee for consideration and approval by the ISFMP Policy Board. These recommendations are intended to use the existing Board and FMP structure to develop species-specific provisions to additional flexibility for healthy stocks.

1. No changes are needed to the ASFMC guidance documents regarding the emergency action provisions or the procedures for calling a meeting.
2. The species management boards should consider modifying the FMPs to provide increased flexibility for in-season adjustments if a stock is in healthy condition. Boards should consider provisions to address harvest rates that are higher or lower than anticipated.
3. The species management boards should consider modifying FMPs to establish penalties for delayed implementation of required management measures. The boards should determine if there must be a "conservation impact" to invoke delaying implementation penalties.
4. The following species management boards should report to the Policy Board regarding plans for addressing additional flexibility and delayed implementation. These species were selected based on stock status and FMP characteristics.
    - Summer Flounder, Scup, and Black Sea Bass
    - Bluefish
    - Atlantic Herring
    - Striped Bass
    - Northern Shrimp
5. The Commission should continue to use the existing non-compliance provisions in the ACFMCA when state regulations are not consistent with FMP requirements and this negatively impacts conservation of a species.
6. With the expanded use of conference calls and web-based meetings, the Commission should consider developing protocols to address public comment, participation, and conduct during these meetings. There have been examples of effective and disruptive public participation in Board/Section conference calls.

Attachment 1

RULES AND REGULATIONS

Article II. MEETINGS

SECTION 1. MEETINGS. Annual, semi-annual and other meetings of the Commission shall be held at the call of the Chair. Upon the written request of five states, submitted to the Executive Director, the Chairman shall call a meeting of the Commission. The Commission shall also conduct meetings of committees, sections, boards, advisory panels or other groups such as are established to assist in carrying out the Commission's responsibilities. Such meetings shall be called by the Executive Director with the approval of the Commission Chair. The Executive Committee shall establish guidelines for meetings, including meetings conducted by conference call or teleconference. A public notice will be provided at least two weeks prior to all meetings of the Commission and its various bodies, and at least 48 hours notice will be provided for any meetings held by conference call or teleconference; provided exceptions to these notice requirements may be granted by the Commission Chair.

Attachment 2

ISFMP CHARTER

Section Six. Standards and Procedures for Interstate Fishery Management Plans

(10) Emergencies - A management board/section may, without regard to the other provisions of Section Six (c), authorize or require any emergency action that is not covered by an FMP or is an exception or change to any provision in an FMP. Such action shall, during the time it is in effect, be treated as an amendment to the FMP.

(i) Such action must be approved by two-thirds of all voting members (i.e., entire membership) of the management board/section prior to taking effect. The decision may be made by meeting, mail, or FAX ballot in the case of an emergency.

(ii) Within 30 days of taking emergency action, the states and the Commission shall hold at least four public hearings concerning the action, including at least one in each state that requests it.

(iii) Any such action, with the exception of public health emergencies, shall originally be effective for a period not to exceed 180 days from the date of the management board/section's declaration of an emergency, but may be renewed by the management board/section for two additional periods of up to one year each, provided the board/section has initiated action to prepare an FMP, or initiated action to amend the FMP in accordance with Section Six(c). Emergency actions taken to address a public health emergency shall remain in effect until the public health concern ceases to exist (this determination to be made by the management board/section). The management board/section may terminate an emergency action at any time with approval of two-thirds of all voting members (i.e., entire membership).

(iv) Definition of Emergencies. The provisions of this subsection shall only apply in those circumstances under which public health or the conservation of coastal fishery resources or attainment of fishery management objectives has been placed substantially at risk by unanticipated changes in the ecosystem, the stock, or the fishery.

Attachment 3

ISFMP CHARTER

(h) **Procedure to Address Management Program Implementation Delays** –Each species management board shall evaluate the current FMP, amendment, and/or addendum to determine if delays in implementation have impacted, or may negatively impact, the achievement of the goals and objectives of the management program. Each of the species management boards, with the assistance of the respective technical committee if necessary, will conduct this evaluation and provide, in writing, a summary of its findings to the ISFMP Policy Board. Each species management board that determines that there is a negative impact due to delayed implementation will provide the ISFMP Policy Board a proposed timeline to develop an amendment or addendum to address delayed implementation.

If the ISFMP Policy Board determines that an amendment or addendum should be developed to address delayed implementation, the amendment or addendum should, at a minimum, include any penalties and repayments for delays in implementation, the minimum notification time that Commission staff must provide a state/jurisdiction prior to requiring an in-season management adjustment; and establishment of a reporting and tracking system for management changes.

Attachment 4

Addendum XVI to the Summer Flounder, Scup and Black Sea Bass FMP

The addendum is intended to provide a species-specific mechanism of ensuring that a state meet its obligations under the plan in a way that minimizes the probability that a state's delay in complying does not adversely affect other states' fisheries or conservation of the resource. These measures are deemed critical for the long term conservation of the species. This Addendum does not propose to modify the existing compliance review and sanction process that is described in the ASMFC guidance documents and the ACFCMA. This Addendum also does not propose to modify the existing conservation equivalency procedures for summer flounder, scup, and black sea bass. States have the ability to adopt measures that are more conservative than those approved by the Board.

Issue 1: Delayed Implementation of Commercial Regulations

A) Failure to adopt annual adjustments to minimum fish size for summer flounder, scup, and/or black sea bass

B) Failure to adopt initial Winter I trip limits by January 1 and Winter II trip limits by November 1 for the scup fishery.

C) Failure to adopt reduced scup trip limit for the Winter I and Winter II periods when required due to established triggers.

For each day that a state does not implement these commercial measures, an equal number of days during the same or equivalent time period will be closed in the following fishing season. For example, if a state does not implement appropriate minimum fish sizes for the first 2 weeks of the fishing season, in the following year the season would be closed for the first 2 weeks of the season. Similarly, if a state does not reduce scup trip limits for the Winter I or Winter II periods as required by established triggers, the following fishing season would be closed for an equal number of days the delay occurred after the trigger had been met.

D) Failure to close the black sea bass fishery and/or the summer scup fishery after the state quota has been reached.

The ASMFC allocates the black sea bass coastwide commercial quota and the summer scup commercial quota to states from Massachusetts to North Carolina. The ASMFC also monitors state landings to prevent individual states from exceeding their quota. The NMFS monitors the coastwide black sea bass and scup quota and closes the commercial fishery in federal waters when the coastwide quota has been reached. An individual state has the potential to exceed their state quota to the level that contributes to the NMFS closing the federal commercial coastwide fishery before all states have the opportunity to harvest their individual state allocation. This scenario has the potential to result in inequities between state and federal permit holders.

If a state fails to close its black sea bass and/or its summer scup fishery after the state quota has been reached, states will compensate pound for pound for up to 25% of the original state quota. Any overages beyond 25% of the state quota are compensated for at 1.5 times.

Issue 2: Delayed Implementation of Recreational Regulations

The following proposed compensation strategies would be applied to a state even if that state did not exceed its recreational harvest limit.

A) Failure to adopt Board-approved size limits for summer flounder, scup, and/or black sea bass

B) Failure to adopt Board-approved seasonal closures for summer flounder, scup, and/or black sea bass

C) Failure to adopt Board-approved possession limits for summer flounder and/or scup by the date the current season opens.

D) Failure to adopt Board-approved possession limits for black sea bass by Jan 1 or the date the current season opens, whichever is later.