



New England Fishery Management Council

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Amendment 8 to the Atlantic Herring FMP Scoping Hearing Summary

Hilton, Mystic, CT

April 20, 2015

Hearing Officer: Doug Grout, Herring Committee Chairman

Other Council Members: Matt McKenzie, Mary Beth Tooley, Jeff Kaelin (MAFMC)

Council Staff: Lori Steele, Lou Goodreau

Attendance: Approximately 10 audience members

Mr. Grout provided some opening comments about Amendment 8 to the Atlantic Herring Fishery Management Plan (FMP), which proposes to establish a control rule for specifying acceptable biological catch in the Atlantic herring fishery (ABC control rule). He introduced Ms. Steele, Herring FMP Coordinator. Ms. Steele briefed the audience on the Amendment 8 scoping document and summarized the process and timeline for developing the amendment. After an opportunity to ask questions for clarification, scoping comments were taken from the audience regarding the scope of issues to be addressed in the amendment.

Jud Crawford, Pew Charitable Trust: I am going to make comments about the control rule specifically, as well as some other things including what I think fall out of the Council motion that precipitated this amendment in terms of the goals and important things the amendment should do. The amendment and the Council motion that launched this amendment is more about improving the FMP through a control rule. The control rule is obviously a very important part of this, but I think this amendment is very important because it is a significant initiation of EBFM. EBFM is something that the Council has been struggling with for years. We have prioritized it over and over again. This is at least one of the first times that a major fishery has engaged the EBFM crowd and worked together – the people involved with herring management plans and the people working on EBFM – and that’s an important milestone for the Council.

Mr. Crawford read a written statement into the record (see attached #1).

One of the things that can come out of this process is that the Council will have a leg up on how to develop a policy about forage fish in general. Atlantic herring is the most important one that we have a fishery for that we manage, but there are others. The amendment should pave the way for the introduction of EBFM and models that are based on multispecies or ecosystem models because I think that’s where the Council is going. It would make sense to think about some language in this amendment that would facilitate the uptake of those models.

Dave Gelfman, commercial fisherman, Chatham MA: I've been arguing for ecosystem-based management for twenty years, since the beginning of my experience with herring fishing. I hope you hurry up. How you are going to ascertain stock assessment numbers to set the thresholds for the ABC control rule – I don't know how you are going to do that. I don't think that if you took average catch for the past ten years or that kind of data – I don't think the numbers are accurate. I would urge you to carefully and conservatively set those numbers and maybe reduce greatly your expectation of what the actual herring population is and how much the ecosystem requires. It is the basic nutrients of the entire northeast system. As the previous speaker mentioned, migrating tuna, striped bass, codfish, dogfish, haddock – so many things rely on herring. To extract them from the ecosystem and use them for bait, fish pellets, whatever, is to disregard the impact on everything else and is a shame. You are going to have to very carefully think about that ABC number. How are you going to know how much the ecosystem needs? We have certainly seen that when the fishing is redirected away from an area, and in the Gulf of Maine, the herring come back in the summertime, and the ecosystem benefits heavily. But I don't know how you quantify what the actual number of fish required to do that is.

It concerns me that the overall management scheme is too optimistic already. It needs to be much more conservative and assume that there isn't anything else out there for a lot of these species to eat. It needs to be considered as the foundation of the whole system. The idea also that a conservative approach to the management could lead to further improvements in fish conservation overall in the ecosystem because of lower effort and lower bycatch would be beneficial. I've argued for years that since we don't really have much information about the actual level of bycatch, we don't know what is going on. We don't know the forage and how important it is. I would really be extremely conservative and try to take into account the fact that everything out there is eating herring when they can. The average striped bass seem to be smaller. Anecdotally, probably they are less nourished, maybe because of herring, maybe not. But it's a fairly complicated mixture between the forage and what's eating it. I urge caution, and at the same time, the faster you can do it, the better.

Chris Weiner, ABTA: I would follow-up on what Dave said. I have been all of the meetings in the last few weeks or month or so. You hear that there are all these other fish that can fill the gap, but anyone who fishes the Gulf of Maine knows that that's not true. There are sand eels off of Cape Cod sometimes, but sand eels dry up for years on end. If tuna has a choice, they will eat herring every time. That's what makes them fat. They don't get fat off sand eels. If you talk to Walt at GMRI, they will tell you that they almost lose weight and quality from sand eels. If you lose herring in the Gulf of Maine, there is nothing to fill that gap. It is very important to remember this. I keep hearing about looking at a forage-wide rule for the whole coast. The Gulf of Maine isn't what's off New Jersey and off of Virginia. You need to look at the Gulf of Maine. And I would say even more local that that. Local matters with this issue. The assessment is shaky, but there is a retrospective that is severe, but they say it's just not bad enough to throw out the assessment. Keep that in mind.

Even if there is enough herring out there, that doesn't mean anything for Jeffrey's or Platt's, or even the Gulf of Maine in general. Herring is what matters. There is not what I would like to see. Somehow, you have to look at the local and spatial aspects of everything. As any fisherman on any side of this issue knows, the ocean is not one big area of fish. There are a lot of little important areas that make up the fisheries. You can't just look coastwide. There are some mackerel that pass through at times, but tuna are the best predators we have in the Gulf of Maine,

and they rarely eat mackerel, it's so hard for them to catch. So, I don't know how cod or pollock or anything else is going to find a way to get high up in the water column and eat mackerel. Even though we have some mackerel passing through, and there are some shad and some squid, but herring is all that matters – even a small amount of herring. We were looking at consumption data the other day – which I'm not sure I would be relying much on that because who knows how or where it was collected – but one of the scientists was saying that a small percentage of the diet is herring. That 20% of herring could make a lot of difference in terms of fat. A small amount of herring could be all of their nutrition for the year. Herring is what drives everything in this region.

We hear a lot about the value of the herring fishery. In my opinion, herring is a lot more valuable for the other predators. Every fishery relies on it. Lobster bait is important, but I think there is going to be plenty of lobster bait no matter how you go down this road. The more important thing is recognizing how important forage is. I don't know what that means in terms of the control rule, but be careful with it. This isn't just any other stock. If there is no herring, all of the work that we have done for groundfish and tuna is useless. I don't know what to do, but I would be careful. I have heard talk at a Committee meeting about maybe we should act as if herring biomass has no impact on the health of other species. Anyone that is a fisherman will laugh at that. I hope that this was a joke because of course the food base matters for the predators. The good fishermen know how to find where the food is because that's where the predators are. I hope that you recognize the fact that the main purpose of herring in this ecosystem is food. Even if what you do doesn't change the numbers much, start by recognizing that. Hopefully you will be more conservative because we all rely on this.

Patrick Paquette, recreational fishing advocate from MA: I am also a partner in a business called Striper Tackle. We make rubber baits and own two charter boats that fish in Nantucket and Vineyard Sound. We market our bait to pretty much all of the waters that this Council addresses. We market rubber bait that mimics herring and sand lance. Between my advocacy and these other business interests, there are two specific stories or reasons that I feel show why this amendment needs to move forward. The first is a story of Stellwagen Bank and the western Gulf of Maine. The recent assessment shows that menhaden used to be present, but not anymore in the western Gulf of Maine. Plants have disappeared as recently as 1993. ASMFC isn't even using NH, Massachusetts, and Maine surveys in their assessment. That was one of our bait fish and key forage species. There isn't a fisherman or an employee of the State of Massachusetts who deals with fishing that would not stand before this microphone and swear that when we put the outfall pipe that was needed in Boston to process sewerage, the sand eels on Stellwagen were cut by orders of magnitude to the point where when there is an aggregation that it becomes an event that we speak of in meeting rooms. Herring is our last major prevalent bait.

Last year, under the guise of the mackerel fishery, and with herring set-aside, we saw the herring fleet expand up on to the Bank. It was the mackerel fleet, but they were also fishing herring. Anglers are concerned about what happens if yet another forage species that is key to that vibrant area is fished down. The same thing happens except years later, we are far more along in the process, anywhere from Hyannis to Monomoy, we have a robust fishery in the Spring. It begins with squid and krill, and then the herring comes in, and the striped bass fishery is busy. We book two trips a day up until the herring fleet goes to work. At that corner where 1B, 2, and 3 meet – when the fleet comes in and works that corner – when the fleet is done fishing, our striped bass move up past P-Town or down to Block Island. We lose them because our forage has been

broken up. I really hope that the control rule will consider spatial effects – not just about how many there are, but where we are harvesting them. That is important. I know what localized depletion is when we have forage and we have predators, and then we have the industry hit the area hard, and our predators move. And we follow them, but it changes. It's one thing to be someone who can get someone to pay you to take them fishing. But if you are a recreational angler or tourist who is renting a house or going to a beach – the tourist in Chatham or Hyannis is not going to want to go to Block Island to go striper fishing. They are not going to want to go up to Plymouth to go fish in a different area. We are hoping that the spatial component can be addressed.

Another thing that I am hoping the control rule considers is age and size structure of the fishery. It has been discussed openly that this assessment has been relying on one and maybe now a second year class. And this could be one of the reasons for this retrospective pattern re-emerging, because we are basing this on one year class. We know that some of the market in the industry has shifted to a lot more fish being trucked up to the Canadian sardine plants. We know that we have a lot smaller herring in the bait catch. I am hoping that this control rule will help management go back to having a healthy spread of year classes in the fishery and that we protect these big year classes when they come through so that we can be feeding this fishery for all of us, not just one part of the industry.

Another thing that I hope this does is that I hope we elevate the discussion when it comes to tradeoffs of values. The way we are managing the fishery currently, it's just about harvest by one industry. I do believe that forage and the value as it relates recreational fishing and feeding the predators, as it relates to the whale watch boats is important. We have 16 whale watch boats on Cape Cod. Just today, NMFS made an announcement about humpback whales, and I think that eight of those DPSs are around Cape Cod. They feed on herring. We need to have some solid accounting for their ecological role, and not just have it be an afterthought. We should designate or allocate an amount of fish, not an uncertainty buffer, but an actual amount of fish to be left in the water for those other reasons, based on some assumption of value. We will submit longer written comments.

Erica Fuller, Earth Justice: Without repeating the comments we made in Danvers, I have a few additional points to make. Ms. Fuller read a written statement into the record (see attached #2).

Tyler Archer, Fisheries Program Lead, CT Fund for the Environment, Save the Sound: We have about 7,000 members in the Long Island Sound region. Without repeating what has been said, I would like to say that I agree with the general sentiment that we need to protect the forage fish and that herring are essential for the diet of most of the big fish that we go after – stripers, whales, tuna, endangered species, and marine and ocean birds. I would like to touch on a few things that I don't think have been mentioned yet. One, there has been fairly recent precedent for success under a program like this. A couple years ago, the ASMFC set a total allowable catch for menhaden. And since then, we have seen the menhaden reduction industry, principally Omega, experience record profits under the system. And there has been 300 billion more fish left in the ocean for these predators to eat. This is good conservation and stewardship. We are getting good economic benefits out of this, and also the ecological importance of these forage fish.

Second, I would also agree with the fisherman who was saying that we need to be cautious and conservative with these stock assessments. Stock assessments need to be credible and well-defined. We need to have a good understanding of where the fish are, where they are located and how many there are, so that the predators have enough to eat when and where they need them. Again, the ASMFC lowered the limit for striped bass. In CT, we can only take one, when we used to be able to take two. That's a 50% cut, that hurts recreational fishing and commercial fishing. We just need to make sure that we understand where the herring are and how many there are and what we can do to protect them as best we can. I would also definitely agree that we need to set an ABC control rule that is well above the MSY so that there is a buffer between what the industry needs and what the ecosystem needs. And as stock assessments start to decline, we get into a position where we can regulate the industry more so that the whole ecosystem as a whole does not collapse.

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Monday, April 20, 2015

#1 Jud Crawford

Herring A8 Hearing

This Amendment, and the Council motion that launched it, is about much more than improving the herring FMP with a new control rule. The control rule is important but the contribution that this amendment can make to launching EBFM in New England is also very important.

The Amended FMP must ensure that catches are managed so that herring are maintained at higher biomass making them available as a food source for predators throughout the range of Atlantic herring and at times and in places where predators use them.

Managing Atlantic herring must:

1. Protect the herring stock
2. Protect stocks that depend upon herring
3. Getting M right is important for a reliable stock assessment – but does not deal with this issue of dependent predators and herring population levels needed for them.

Overarching goals for the amendment:

1. *Establish a control rule for the Atlantic herring fishery that accounts for herring's role as forage in the ecosystem;*
2. *Establish reference points within an Ecosystem Based Fisheries Management (EBFM) context;*
3. *Manage Atlantic herring as forage fish within an ecosystem context;*
4. *Develop ecological guidance on managing forage fish in general;*

Ecological tradeoffs to consider – consequences of over-harvesting herring

- Decreased food for depleted groundfish that are under federal rebuilding programs (e.g., cod)
- Decreased food for marine mammals protected by federal laws and managed for population recovery (e.g., humpback and fin whales, Harbor porpoise and Atlantic White-Sided dolphins)
- Depletion of herring forage for seabirds including threatened and endangered species (e.g., roseate and common terns, and Atlantic puffins)

- Depletion of food for long-distance migrants such as bluefin tuna hunting seasonally in the Gulf of Maine for herring and other forage fish.

Control rule – SS Assessment Available

1. Target: maintain the stock biomass at or above a target biomass (B_{target}) appropriate for Atlantic herring as a key forage species within the Northeast US Continental Shelf Large Marine Ecosystem:

$$B_{\text{target}} = 75\% B_0 \quad \{\text{substantially above } B_{\text{MSY}}\}$$

2. Cutoff: temporarily suspend fishing when or if the stock biomass falls below an appropriate cut-off biomass (B_{cutoff}):

$$B_{\text{cutoff}} = 40\% B_0$$

3. Biomass-dependent catch rate: adjusts catch rate (F) systematically as the stock biomass falls below the target; thus, the **overfishing definition should be conditioned on stock biomass**;

Backstop Control Rule – no acceptable SS Stock Assessment

Data poor rule: $\frac{1}{2}$ Median Catch – most recent 10 years.

NOAA Technical Memorandum NMFS-SEFSC-616

EBFM and New Models – A8 should pave the way for adopting updated reference points and control rules based on

- Multi-species models
- Ecosystem models

#1 Jvd Crawford

Am 8 Scoping

#2

Erica Fuller

Erica Fuller speaking obo Earthjustice

First, I want to thank the Council again for initiating Amendment 8 and Staff for the work they've already done. Without repeating the comments made in Danvers on behalf of our clients in *Flaherty v. Bryson*, I have a few additional points to make.

Last year, the Council passed a motion that shows a commitment to several important and interrelated goals:

1. *Developing ecological guidance on managing forage fish;*
2. *Managing Atlantic herring as forage fish within an ecosystem context;*
3. *Establishing reference points within an Ecosystem Based Fisheries Management context; and*
4. *Establishing a control rule for the Atlantic herring fishery that accounts for herring's role as forage in the ecosystem.*

These commitments should be formally adopted as goals of Amendment 8. Not only do they improve protections for Atlantic herring but they ensure abundant food for the other species that depend upon herring as prey. **They are particularly important as part of Amendment 8 because the New England Council doesn't have a Forage Fish Policy and the RPWG expressly rejected addressing forage considerations in the Council's Risk Policy.**

In the last 5 months, the Herring and EBFM PDTs have done a great deal of work to provide ecological guidance on herring's role as forage to the Council in June as part of Amendment 8. Recognizing that science is not perfect and that data gaps remain, certain basic ecological principles should be considered when developing a long term control rule for herring especially in the face of changing ocean conditions and increased demand for forage species:

- Atlantic herring play a crucial role in our regions food web transferring energy from plankton to larger predators;
- Their schooling behavior and response to environmental conditions can cause large shifts in abundance, distribution or both;
- Certain predators are opportunistic and feed on a variety of lower trophic level species, however, others are selective and increased abundance will help to ensure that herring of the right size and age, are in the right places and at the right times, for these predators;
- Even for non-selective predators, herring has a higher nutritional value than other prey species - meaning less distance traveled to feed, increased fecundity, increased recruitment, and increased biomass; and finally
- It's risky to assume that even if herring populations crash, that another prey species (like sand lance) will necessarily fill the void.

New England has made more than its share of short-term economic decisions with catastrophic results for groundfish. All indications are that Atlantic herring is not overfished and that biomass is in good shape right now - making this the best time to adopt a long term control rule with the least economic

impact on the fishery and communities that depend upon its removal. However, to increase resiliency in the ecosystem, catch limits for herring should be set in a precautionary manner that accounts the high degree of variability in populations and its importance to the ecosystem, other fisheries, and other businesses, that all depend upon leaving sufficient biomass in the water for predators. **To provide the greatest overall benefit to the Nation, a long term control rule for herring should both: (1) maintain sufficient biomass to protect the marine ecosystem; and (2) implement an effective cutoff that closes the fishery immediately when biomass dips too low.**

Finally, although the degree of the retrospective pattern in the most recent herring stock assessment update was significant enough that Staff expected it to be rejected, it wasn't ultimately rejected by the review panel and a new benchmark has not been scheduled. This means that instead of short term catch advice while waiting an expedited benchmark, the SSC will be asked to provide an ABC recommendation, once again using an interim control rule for potentially the next three years. The SSC must account for this increased scientific uncertainty when it makes its ABC recommendation for herring later this summer. Earthjustice also urges the Council to take advantage of the ecological guidance provided by the PDTs in conjunction with Amendment 8 and account for herring's role as forage when it sets catch limits for the 2016-2018 specifications.

#2 Erica Fuller