June 30, 2008

Patricia Kurkul, Regional Administrator
National Marine Fisheries Service
One Blackburn Drive
Gloucester, MA 01930

RE: Herring Amendment 4 Scoping Comments
Via email

Dear Ms. Kurkul,

The Northwest Atlantic Marine Alliance (NAMA) wishes to provide comments relative to the scoping process for Amendment 4 to the Herring FMP. NAMA is committed to supporting local fishing communities in New England and the Northeast in their efforts to revive ailing marine ecosystems and recover healthy fisheries. We believe in the willingness and ability of community based fishermen, anchored in a history and geography of fishing fertile waters of the Northwest Atlantic, to seek sound scientific information to add to their own breadth of knowledge of the marine environment and apply it all to plans and actions that will recover and sustain a fishery ecosystem that can support themselves and future generations of local fishermen.

The industrial herring fleet, which was invited into the Gulf of Maine by the federal government in the early 1990s and has expanded significantly since then, presents a particularly troublesome challenge to efforts of local fishing communities to bring back a healthy ecosystem that supports their traditional fisheries. These commercial fishermen are being asked or required time and time again to cut back or cease their normal fishing activities to allow the resource to recover. It’s taking longer than expected and even now more closures are being proposed. And yet, the Atlantic herring fishery is permitted to continue with little change in allowable catch and in what type of gear is taking the majority of the catch. While many community based fishermen are asked to give up their livelihoods to recover one fishery, others, many of them tied to the fiscally and physically mobile international fleet, continue un-hobbled because the New England Fishery Management Council and NMFS Northeast Regional Office fail to make the connections between one fishery and another.

In this context, we wish to make it clear that NAMA strongly believes that any areas closed to groundfish fishing should be closed to all fisheries except those that are known not to interact with or have bycatch of groundfish.

NOAA’s commitment to adopting the principles of ecosystem based management and the precautionary approach should be paramount in regional management schemes, consistent with broad national and international agreement that ecosystem sustainability and precautionary decision making are two key goals for modern fishery management. With amendments to the Magnusson Act, the US has adopted principles of management that take into account ecological requirements of the fishery system; and the US government has signed onto treaty after treaty that agrees to manage fisheries and other activities with a precautionary approach.
While the commitment to these principles is clear, the path of implementation is not. NAMA believes Amendment 4 offers an opportunity for NMFS and the northeast regional Council to establish an implementation path for the Atlantic herring fishery. This would open the door to precautionary ecosystem-based management for all fisheries in the Gulf of Maine and Georges Bank. Not only is this an opportunity, it is imperative that these principles be implemented quickly, because they are the foundation, not the icing, of fisheries management that is ecologically, socially and economically sustainable for generations to come. All too often the concepts in this paragraph are reduced to policy rhetoric. It is time they become tangible, implementable, and measurable.

To that end, NAMA recommends that the Amendment 4 to the herring fishery management plan include:

- a process for (1) assessing the ecosystem and the full role of Atlantic herring as forage for recovering fisheries populations, endangered species, and other non-fishery species; (2) estimating requirements for herring by all identified predators, especially fisheries species in recovery and endangered species; (3) determining real time distribution of forage utilization; and (4) allowing for uncertainty and variability in natural herring mortality;

- options for herring management that addresses size and distribution of catch on a daily basis as well as annually;

- provisions for estimating bycatch on the basis of models until a monitoring program to refine these estimates can be implemented. The potential consequences of bycatch likely associated with the midwater trawl fishery are so profound as to warrant immediate action;

- provisions for the assessment and mitigation of the impacts of the herring fishery on herring habitat, other fisheries habitat, and endangered species habitat;

- prescription for precautionary actions that avoid undesirable consequences while the proposed monitoring is implemented and the results analyzed;

- establishment of a program for developing and applying the necessary technology and methodology for live fish monitoring toward better adaptive management; and

- a precautionary and ecologically sustainable formula for determining annual TACs, and a socially and ecologically responsible and responsive system for allocating portions of the TAC.

More detailed comments are provided below.

Why Amendment 4?
While implementation of ecosystem based management and the precautionary approach should have been the first order of business, Amendments 1, 2, and 3 are already taken, and Amendment 4 offers the appropriate context. As stated in the call for scoping comments: “The goals of the amendment are to improve monitoring of catch in the Atlantic herring (herring) fishery and to manage the fishery at long-term sustainable levels…. The best possible scientific information is always desirable in implementing the precautionary approach and ecosystem-based management. So a goal of improved monitoring goes
hand in hand with applying these critical principles. Sustainability has become far more than maintaining high catch levels. Implicit in that goal is maintaining an ecosystem that can support healthy populations of all fishery species in a management area for generations into the future. Thus the goal of managing the fishery at long-term sustainable levels can only be reached through the implementation of precautionary and ecosystem-based management actions.

**Incorporating Ecosystems and Precaution into Amendment 4**
To be ecosystem-based, the management of a single fishery must consider its interactions and impacts upon other species including other fishery species. To be in compliance with the Sustainable Fisheries Act, NMFS must “include management measures in the plan to conserve target and non-target species and habitats, considering the variety of ecological factors affecting fishery populations.”

**A. Fishing for forage**
Amendment 4 should outline a process for (1) assessing the ecosystem and the full role of Atlantic herring as forage for recovering fisheries populations, endangered species, and other non-fishery species; (2) estimating requirements for herring by all identified predators, especially fisheries species in recovery and endangered species; (3) determining real time distribution of forage utilization; and (4) allowing for uncertainty and variability in natural herring mortality. The species most vulnerable to localized forage depletion are recovering fishery species – e.g. groundfish and pelagic tuna and billfish – and endangered or imperiled species – e.g. salmon, sea turtles, several whale species, and sea birds. The availability of herring for a restricted fishery can be determined only after all ecosystem needs have been accounted for. Equally as critical as an accurate formula for determining the total amount available for fishing is determining the most sustainable mode of taking those fish in a pattern that does not impact the role of herring as forage. Generally the most sustainable fishing mode is one that mimics natural predators in the ecosystem. This brings into question scale and efficiency of the gear and boats, numbers of boats, and pattern of fishing. Advances in management of forage fisheries are being proposed for krill in the Southern Ocean, where to protect against depletion of forage for numerous important and imperiled species, a mosaic of rotating open and closed areas is proposed to respond to fluctuations in the environment and predator feeding habits – a type of planned inefficiency that should be a critical requirement for fisheries taking forage from the ecosystem. This kind of innovative management would also minimize impacts on genetic diversity of the fished species. We suggest that Amendment 4 consider options for herring management that addresses size and distribution of catch on a daily basis as well as annually.

**B. Bycatch of endangered species and recovering fishery species**
Amendment 4 should include provisions for estimating bycatch on the basis of models until a monitoring program to refine these estimates can be implemented. The potential consequences of bycatch likely associated with the midwater trawl fishery are so profound as to warrant immediate action.

The non-target populations at greatest risk of being adversely affected by midwater trawling include numerous imperiled or endangered species of mammals, seabirds and fish, as well as depleted fishery species such as groundfish species and pelagic fish such as Atlantic salmon, which migrates through those very waters that are sieved in large volumes by the midwater trawlers. At-sea survival has been identified as the biggest problem for the recovery of Atlantic salmon.
The problem with bycatch of depleted populations is that the numbers may seem small, but the smaller and more threatened the natural population is, the greater the impact of the killing of each individual animal. It is not just the loss of that animal but the loss of all its potential progeny. The chances of ever being able to accurately monitor the bycatch of Atlantic salmon is miniscule, and yet the chances of the endangered Maine runs of that species recovering is severely compromised by every adult fish taken from the Gulf of Maine and surrounding waters.

In the case of groundfish, it is widely recognized that the midwater trawl fishery has a bycatch of these fish – either juveniles above the bottom waters or adults and juveniles caught when the trawl happens to scrape bottom. Again, whatever the quantity of bycatch of these fish, it will have a significant effect on the recovery of the depleted populations. Furthermore, to close groundfishing to local fishermen whose livelihood is threatened if they cannot fish; and yet to allow the incidental killing of those same fish, thus increasing the time it will take for recovery, is a social injustice beyond comprehension. The Council has not taken the issue of bycatch seriously. It is essential that Amendment 4 address this vital issue by curtailing and punishing the bycatch of depleted fishery species and endangered species, whatever that requires.

C. Habitat considerations

Amendment 4 should provide for the assessment and mitigation of the impacts of the herring fishery on herring habitat, other fisheries habitat, and endangered species habitat. The initial step should be to superimpose all identified Essential Fish Habitats that have been described as overlapping with permitted herring fishing areas. In addition, critical habitat or identified habitat for endangered species should be superimposed on this map. This exercise should be a part of the Environmental Impact Statement (EIS) for Amendment 4. This will assist the eventual coordination of management regimes for various fisheries species whose habitats overlap and affect each other, and NMFS will finally be able to begin true ecosystem based management.

D. Precaution means action now

The precautionary approach is risk averse and calls for action even in the face of uncertainty due to incomplete scientific information. It is imperative that Amendment 4 prescribe precautionary actions that avoid undesirable consequences while the proposed monitoring is implemented and the results analyzed.

There is enough reason to believe that the midwater trawl fishery has a bycatch of groundfish and of pelagic fish like endangered Atlantic salmon. In addition to bycatch, many of these troubled and endangered populations feed on herring and their recovery depends upon sufficient food where and when they need it. The midwater trawl fishery poses potential competition for food, a problem on both short term and long-term scales. When a tandem tow captures a large percentage of the herring in that place at that time, it deprives predators in the area. Precautionary fisheries management within an ecosystem should always be mindful of the weakest fishery population.

Precaution applies to the whole ecosystem and the fisheries it supports. So it is important to assess all the fisheries of the ecosystem and the wellbeing of the fishermen. Clearly as things are now, the groundfish fishermen are taking the full brunt of the restrictions required for recovery of fish populations. Since the problem is one of the ecosystem, not just individual species of fish, a
A precautionary approach would be to distribute the hardship among all fisheries and thus soften the impact on any one. Precautionary fisheries management within an ecosystem should always be mindful of the most burdened fishing communities. NMFS should consider this when drafting Amendment 4 and its EIS.

**Monitoring as part of Amendment 4**

More information is always helpful for effective precautionary, ecosystem-based management. NAMA is therefore supportive of requests to improved monitoring of the Atlantic herring fishery and to collect more information about how much is being caught where, what is the bycatch, etc. Nevertheless, this effort must be accompanied by interim management that errs on the side of caution with respect to bycatch and impacts on critical predators. The need for more information is not an excuse for no additional regulation.

The community of local fishermen’s organizations and NGOs has asked that NMFS require observers on 100% of the mid-trawl fishery at all times when they are fishing. There seems to be some leniency as to who provides and pays for the observers, since it is recognized that NMFS cannot “afford” to supply observers for the entire fleet fishing under current regulations. NAMA supports the request for 100% observers, but we believe there must be guarantees that they be completely objective and protected so their collection of data is not influenced by stakeholders. There are two ways 100% coverage can be achieved: increasing the number of observers available, or decreasing number of boats fishing at the same time. The latter option may be more realistic, and it would accomplish the goal of precautionary measures to reduce catch and bycatch until more information is available.

Another goal of monitoring that should be addressed in Amendment 4 is the development of methodology for real time assessments of living populations. Many have called for real time reporting of actual catch measurements, which is minimal and it is shocking that is not already being done. Counting dead fish is only part of the needed information, however. The ability to estimate quantity and distribution of living fish in real time, or close to it, is sometimes used to exploit/deplete fish more efficiently, but it could be used to manage fisheries more effectively. *Amendment 4 should establish a program for developing and applying the necessary technology and methodology for live fish monitoring toward better adaptive management.*

**The Question of Allocations**

*Amendment 4 should establish a precautionary and ecologically sustainable formula for determining annual TACs, and a socially and ecologically responsible and responsive system for allocating portions of the TAC.*

Required TACs should be based on sound scientific information, consideration of all ecosystem needs, and precaution in estimating uncertainties. Determination of TACs for herring has not followed these criteria, so it is premature to allocate portions of the TAC to any specific groups. Furthermore, basing allocations on catch history is neither precautionary nor ecologically sound. *Amendment 4 should improve standards for TACs and establish an ecologically and socially sound system for allocations.* For example, the greatest proportion of the TAC should be allocated to the fishing entities that cause the least collateral damage to the ecosystem, not to those that have invested the most in their vessels and been most efficient in capturing herring in the past.
The TACs first must be calculated based on a formula that adequately accounts for ALL the needs of the ecosystem and recovering fisheries and endangered and threatened species. If it is determined that a positive TAC should be available for the year, the following should be considered in determining allocations:

- What are the lobster bait needs and should they be met solely by herring or are there alternative sources?
- After the bait requirements have been met, if there is remaining TAC to be allocated, local fishermen/users/markets should be given priority.
- Once the TAC is properly calculated, on what basis should allocations be made? We suggest the following, and there may be others
  a) ability to meet the lobster bait requirements with the least damage to the ecosystem and the best value to the lobstermen
  b) gear and operations with 0 or minimal bycatch,
  c) gear and operations with 0 or minimal habitat damage,
  d) ability/willingness to operate within the allocation limit,
  e) the least impact on other forage for the ecosystem,
  f) the greatest benefit to local fishing communities,
  g) cost effective operation.

- Historic catch should have nothing to do with allocations, as it hardly makes sense to create the potential to repeat a history of overfishing and/or fishing that depletes the ecosystem.

CONCLUSION:
Supporting Fishing Communities

NAMA recommends that the development of Amendment 4 and all other aspects of the herring FMP and amendments be guided by principles of precaution, ecology, and community involvement. Local fishermen and their communities are an integral part of the marine ecosystem, and they posses a body of knowledge about that system that significantly enriches what is known by science. During the recent period of crisis in many fisheries, these communities have developed a self-awareness of their role in the ecosystem and a sense of responsibility toward future generations of fishermen. It is now critical that they be given a voice in management decisions meant to foster recovery of the fishery ecosystem. Whether sectors, areas, and/or other types of community-focused management are most appropriate for the herring fishery needs to be left flexible until the synergy of all fisheries with overlapping habitats can be fully accommodated, and until the communities themselves can play a prominent role in decision making and in bearing the responsibility for decisions made.

We appreciate this opportunity to provide these comments. Please feel free to contact me at boyce@namanet.org or at 301-972-7028 should you have any questions or need further information about NAMA’s position.

Sincerely,

Boyce Thorne Miller
Science and Policy Coordinator