March 31, 2010

Dear Members of the New England Congressional Delegation,

Whether you represent a coastal district or not, the future of the region's fishing fleet and our ocean should be on your agenda. Considering the importance of seafood to our regional food system, the importance of healthy small businesses to our local economies and the necessity of an abundant ocean that support the larger ecosystems that sustain us all, we don't have to be coastal residents, fishermen or marine advocates to support steps that ensure neither our fishermen or the fisheries are compromised. Therefore, we, the undersigned are writing you to ask for your unified support of New England's Fleet Vision.

From 2003-2005 over 250 individuals from Maine to New Jersey responded to a Fleet Vision survey that asked the following questions:

1. If anything is possible, what is your vision for the future of the groundfishing fleet?
2. Why is the future of the groundfishing fleet important to you?
3. How can your vision of the groundfishing fleet be most effectively implemented, and what might you do to help?

The survey was followed up with in person workshops in six locations along the coast, where local fishermen and others in the fishing communities came together to voice their ideas. In summary, all the responses called for a New England fleet that is diverse, economically viable, environmentally sustainable and managed through a participatory governance structure.

We are now presenting this vision to the New England Fisheries Management Council at their invitation as they explore ways of achieving a better decision-making process with a vision to guide them. We would like you to be aware that this discussion is going on, and we hope the Fleet Vision that represents the broad fishing community of the Northeast, as described below, is something you can and will support, especially with those in the regional NMFS office who are involved with groundfish management.

The compatibility of the New England Fleet Vision Project with the Magnuson Stevens Act is remarkable, even though it was not developed with the legislation in mind. The four overarching conclusions of the Vision for the Future of the New England fishing fleet are clearly reflected in the current MSA, most specifically in the ten National Standards, TITLE III, Sec. 301, as indicated below. We believe adopting the vision would actually assist the Council in adhering to all ten National Standards for the first time.

DIVERSITY: A geographically distributed commercial and recreational fleet that includes all gear types and boat sizes.

[Standard 4] Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.
[Standard 6] Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

ECONOMIC VIABILITY: An economically viable, safe, and sustainable fleet that works with shoreside infrastructure to supply seafood and job opportunities for coastal communities.

[Standard 5] Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.
[Standard 8] Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirements of paragraph (2), in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.
[Standard 10] Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

GOVERNANCE: Participatory, accountable, and decentralized governance structures at various scales that include local involvement in decision-making and maintain an adaptive regulatory environment.

[Standard 7] Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.
(b) GUIDELINES.—The Secretary shall establish advisory guidelines (which shall not have the force and effect of law), based on the national standards, to assist in the development of fishery management plans.

ENVIRONMENTAL RESILIENCE: Fishery stakeholders who exhibit stewardship of resources that is consistent with the long-term health and restoration of the marine ecosystem.

[Standard 1] Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield

> from each fishery for the United States fishing industry.
> *[Standard 2]* Conservation and management measures shall be based upon the best scientific information available.
> *[Standard 3]* To 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.
> *[Standard 9]* Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

In addition, Sec 303. *Contents of Fishery Management Plans* mandates that each fishery management plan:

> (9) include a fishery impact statement for the plan or amendment (in the case of a plan or amendment thereto submitted to or prepared by the Secretary after October 1, 1990) which shall assess, specify, and analyze the likely effects, if any, including the cumulative conservation, economic, and social impacts, of the conservation and management measures on, and possible mitigation measures for—
> (A) participants in the fisheries and fishing communities affected by the plan or amendment;
> (B) participants in the fisheries conducted in adjacent areas under the authority of another Council, after consultation with such Council and representatives of those participants;

In addition to compatibility with the MSA and 10 National Standards the NE Fleet Visioning outcomes match, almost identically, a recent Northeast Science Center study conducted by the Social Science Branch. The group of scientists indentified five performance areas (Distributional Outcomes, Financial Viability, Stewardship, Governance, and Well-Being) to conduct research to measure the socio-cultural and economic performance of catch share management. The Social Science Branch's performance areas validate the relevance of the NE Fleet Visioning outcomes and provide scientific tools to measure the outcomes. Similarly, the New England Fishery Management Council's 2006 Ecosystem Pilot Project, through a series of workshops and surveys, came up with results that closely tracked the Fleet Visioning outcomes. The values emphasized in that project were diversity of fishing, effective governance based on sound science, healthy ecosystem and fish stocks, and healthy fishing communities (socio-economics).

We believe the four focus areas identified in the NE fishing community's Fleet Visioning process offers a clear and simplified way of moving fisheries management forward so that all the MSA standards are encompassed at once, which was clearly the intent of Congress when it was passed. The Council has acknowledged the need for a Vision to guide their decision making and this vision would lead them toward full implementation of the MSA at long last.

We also believe this vision offers a platform that can unite the entire New England Congressional Delegation to speak in one voice and know they are promoting a Vision of the New England fleet that their fishing community constituents stand behind.

Sincerely,

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Mr. Paul Howard, Executive Director, New England Fishery Management Council
Mr. John Papalardo, Chairman, New England Fishery Management Council
Ms. Patricia Kurkul, Regional Administrator, National Oceanic and Atmospheric Administration/National Marine/Fisheries Service

Comments on the Proposed Rule for NE Multispecies Amendment 16
0648-AW72
Submitted to Patricia A. Kurkul, Regional Administrator
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We, an ad hoc group of scientists advising fishermen and fishing communities in New England, are writing because we feel **the Proposed Rule for NE Multispecies Amendment 16** has serious scientific shortcomings. Specifically, we believe the Amendment fails to recognize the best available science, which implies the need for fishery management (fishing restraints/quotas) to be implemented at a local, fine scale as well as the single broad scale proposed by the Amendment. We understand the difficulty of making a transition from our current broad scale of management, however, we feel the scientific problems ignored by Amendment 16 and the resulting biological, economic and social consequences are too important to hide under the rug.

We support the general direction towards sectors and stricter controls; however, like any policy, the devil is in the details. Policies that appear good in principle can have unintended consequences that thoroughly defeat their primary purpose. In the case of amendment 16, there is a very large scientific problem that we believe will confound its intended economic and conservation effects. One of the fundamental principles of resource management is the need to match the spatial organization of management with the spatial structure of the ecology being managed. This matching is important because it allows us to directly connect the biological results of fishing activity to the ongoing evaluation of specific management practices and to improvements in the science. Stewardship is equally dependent on this same connection. But this feedback is largely lost when regulations are implemented at a single broad scale while ignoring the multiple scales relevant to the demographics of groundfish ecology.

In the last decade a series of studies in New England, Atlantic Canada and many other locations around the world have revealed localized stock structures that occur at a much finer scale than has been assumed for purposes of assessment and management. Here in New England, the Council has known for a long time and has tried to adapt management to multiple spawning areas for cod in the Gulf of Maine; just this last month, a report from the Massachusetts DMF revealed very localized cod spawning areas and concluded like so many other studies that many groundfish populations are loyal to particular spawning grounds in a way that is very much like salmon. [We have attached to this letter a partial, but still substantial, bibliography of scientific publications relevant to the finer scale aspects of fish populations.]

This new scientific evidence about local stocks is really evidence that ocean populations and ecosystems operate at multiple scales — from very local to very broad. We would contend that all the evidence we have about the ocean populations and all our theoretical knowledge of ecosystems is consistent with the organization of populations at multiple spatial and temporal scales. In practice, the important implication is that we have to

manage fisheries at multiple scales, not just a single large scale, if we hope to be able to learn, adapt and conserve the resource.

The most important negative aspect of overly broad, single scale management is that individual or group quotas simply shift the so-called ‘race to fish‘ from a race in time to a race in space. Amendment 16 will give fishermen strong incentives to allocate their fishing activity to times and places that yield the best (private) economic result. With multiple stocks governed by a single quota, and management rules operating on a large scale, the biological results of these allocations will be very hard to predict. While at times, the results will probably be benign, there will be other times, depending on the local peculiarities of fish aggregations and the timing of fishing, when populations (spawning groups) may be driven below viable thresholds and lost, just as has happened in the past. Even if this occurs only occasionally, it is still a long-term and very serious form of overfishing.

Amendment 16 does nothing to prevent and may, in fact, encourage this kind of outcome. This is because the same strong incentives that will drive the spatial allocation of fishing effort also will push fishermen towards large scale technology appropriate for fishing over the broad extent of management boundaries. Large scale technology combined with efficient search capabilities is a sure fire recipe for the quick ‘cropping’ of local stocks in the early stages of recovery and may be one of the reasons why broad scale catch shares have had such a dismal biological record elsewhere. Two recent studies, one in Science (Costello, et al.) and one in the Publications of the National Academy of Science (Essington), both of which surveyed mostly broad scale fisheries, indicated that even with rigorous catch share policies there is little or no evidence of biological recovery. One need only look next door at the fate of Canada’s Bay of Fundy cod stock, and the fishermen that depended on it, for evidence here. All of this will not only produce conservation problems but will lead, rather quickly, to fleet consolidation and the concentration of landings and markets in two or three ports. The communities and economic infrastructure necessary to support conservative harvesting technology appropriate for finer-scale ecology will have no economic base.

When fisheries science operates at a single broad scale it is misled by noisy feedback, which obscures all but the broadest long-term trends. Similarly, when fishermen operate at a broad scale, the feedback they receive about the results of their actions is noisy and incomplete. While, in principle, fishermen with catch shares should have strong stewardship incentives, the reality is that because management is not organized to provide appropriate feedback, they will be unable to act upon those incentives. For all practical purposes the benefits will not exist. Basically, fishermen will only be able to respond to the threat of penalties if they exceed their quota. Unfortunately, a single quota applied to multiple stocks of the same species will yield haphazard results that threaten to extirpate local stocks.

While the evidence for multiple scales is not completely certain, neither is the scientific evidence for managing at a single broad scale. The current practice is really more a scientific or management habit, one that dates back to the late 1940s (Halliday and Pinhorn). Nevertheless, we expect proponents of Amendment 16 would

argue that the uncertainty about finer scale stock structure is one reason why we have to continue managing at a single broad scale. In fact, this uncertainty is precisely why there is a need for a different approach. When confronted with scientific uncertainty the law requires a precautionary policy, i.e., one that minimizes the damage of being wrong. Multi-scale area management is far more precautionary than broad scale management because if the science behind it turns out to be wrong we will have lost little. Multi-scale management preserves ecological feedback about our actions and allows it to be aggregated to a broader scale; it does not stop us from learning; it does not foreclose a transition to larger scale technology and it does not artificially preserve markets and communities that might stand in the way of both economic efficiency and resource conservation. On the other hand, if the assumptions about broad, single scale management are false, as current developments in science certainly suggest, management will not acquire meaningful fine-scale feedback and, consequently, will seriously impair its scientific ability to adapt, learn and manage in a way that is consistent with the aspirations of the law. In short, from a precautionary perspective, Amendment 16 is an extraordinarily risky and legally vulnerable approach to fisheries management. This vulnerability will hang like a threatening cloud over regulatory processes and the economic decisions of the industry.

We understand the difficulty of moving to multi-scale management. Current data series and survey practices are adapted to broad scale management and will be difficult to decompose in a way that is appropriate to multi-scale management. Managing stocks that cross boundaries is difficult and a transition to multi-scale management will be costly for both the industry and management. Nevertheless, the cost of continuing to manage at a broad scale are very high — persistent stock depletion as has occurred elsewhere and the economic and social consequences that flow from depletion.

In summary, over the years management at a single broad scale has had disastrous biological, economic and social results in New England. Amendment 16 does nothing to address these problems. At the same time, it puts in place economic mechanisms in the form of sectors and transferable quotas that will accelerate the use of broad scale technology and fleet consolidation; this will set up conditions for the continued depletion of the groundfish resource, the on-going loss of jobs and economic opportunities and the continuing erosion of the once vibrant fishing communities of New England.

We emphasize that these pessimistic conclusions are not mere speculation, but flow directly from the new scientific evidence that has verified the presence of salmon-like spawning site fidelity in many, if not most, groundfish populations. If that evidence is correct, Amendment 16 violates a fundamental principle of fisheries management and all the dire consequences we list above are likely to follow. We also want to make it clear that the scientific concerns about scale that we raise here are not meant as an objection in principle to catch shares or sectors; nevertheless, when sectors and shares are implemented at a single broad scale the evidence is that their potential benefits will be squandered.

It may be too late at this stage for the Council and/or NMFS to take steps to bring Amendment 16 into conformance with what is rapidly becoming ‘best available science’, but it is crucial for the Council to immediately

signal its intention to quickly address the scale issue — that is, to move to multi-scale area management — in order to forestall the personal, business and scientific investments that will lock us into a perpetually depleted fishery. In order to give substance to those intentions we request the council (1) to ask the scientific and statistical committee to address (a) the issue of multi-scale ecology and management from both a biological and social perspective and (b) from the perspective of available data and survey methodology, and (2) that the Council begin the process of designing one or several pilot management programs for the purpose of learning about the practical issues of multi-scale management.

Sincerely,

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