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September 29, 2015

Thomas A. Nies
Executive Director
New England Fishery Management Council
50 Water Street, Mill 2
Newburyport, MA 01950

RE: Comments on Supplemental Notice of Intent to Prepare an Environmental Impact Statement; Scoping for Amendment 8 to the Atlantic Herring Fishery Management Plan, RIN 0648–XD784

Dear Executive Director Nies:

These comments are submitted on behalf of the Sustainable Fisheries Coalition ("SFC") in response to the call for scoping comments on the issue of "localized depletion" for potential consideration in Amendment 8 to the Fishery Management Plan ("FMP") for Atlantic Herring. 80 Fed. Reg. 50825 (Aug. 21, 2015). The SFC is a trade group representing the social, economic, and legal interests of its participants in the Atlantic herring and mackerel fisheries. SFC's participants are O'Hara Corp., Ocean Spray Partnership, Irish Venture, Western Sea Fishing Co., Cape Seafoods, Northern Pelagic Group, LLC ("NORPEL"), Seafreeze, Ltd., Lunds Fisheries, Inc., and the F/V *Darana R.* All appreciate this opportunity.

The notice seeks comment on the New England Fisheries Management Council's intent to expand the purpose of Amendment to the issue of "localized depletion" ("LD") of herring in "near shore" waters. As a general matter, the notice defines LD as "harvesting … more fish than can be replaced either locally or through fish migrating into the catch area within a given time period." *Id.* at 50825. No definition of "near shore" is provided. The Council seeks input on "how to define, measure, evaluate impacts, and minimize inshore, localized depletion in the herring fishery." *Id.*

The Amendment 8 goal to "address localized depletion in inshore waters" was added by the Council at its meeting in June 2015. As stated, this goal presupposes that such a thing as LD exists in some biologically relevant sense.[1] This assumption strikes SFC as inappropriate, particularly

[1] Notably, as was discussed at length at the June 2015 Council meeting, this goal was not directed at the issue of user conflicts in near shore areas. For instance, during the June meeting, Herring Committee chair Doug Grout noted observed that this was not a biological issue, but a matter driven by user conflicts. The Council, however, specifically declined to add reconsideration of

given, as discussed below, the Council has long made definition and identification of potential LD a research priority but has not yet done so. Thus, in the broadest sense, the public is being asked to comment on solutions to an undefined phenomenon which may or may not be occurring in locations that are equally ill-defined.

To say the least, this is not likely to lead to informed comment. However, SFC below endeavors to address the questions presented.

Our overarching conclusion is that, beyond these definitional failures, there is no scientific evidence to support the existence of LD. Thus, it puts the cart before the horse to use Amendment 8 to develop management measures to a concern that may not exist. Rather, the Council should make it a priority to utilize existing tools developed under the herring research set-aside program ("RSA") to investigate whether an ecosystem-level problem even exists. Furthermore, as this goal appears aimed at a very specific spatial conflict in a limited geographic area,[2] that issue should be taken up directly in a separate action (if not through mediated dialogue among interested groups). Any such subsequent action should be honest about the problem and objectives, not muddled with biological issues in an amendment dealing with ecosystem issues.

General Comments

The issue of localized depletion has been much discussed, but has neither been adequately defined nor, as far as SFC is aware, identified in any major oceanic fishery. Amendment 1 to the Herring FMP tangentially addressed this issue when it established a purse seine/fixed gear only area from June through September each year in Area 1A. In that instance, however, the measure was largely justified by concerns about "the health of the inshore [herring] stock component," and the high concentration of harvest during months when the inshore component was spawning.[3] No similar biological concerns have, at least as yet, been identified with respect to other subcomponents of the herring stock, particularly any related to their "near shore" status.

Nor have the Scientific and Statistical Committee ("SSC") or Herring Plan Development Team ("PDT") raised any concerns regarding LD at this time, or at any other time since the development of Amendment 1 10 years ago. The status of the herring resource is excellent, with biomass more than twice that needed to produce maximum sustainable yield ("MSY") and fishing mortality rates are below target levels. Overall, the Atlantic herring resource is currently being managed on a basis more conservative than recommended by advocates for precautionary forage fish management, such as the authors of the Lenfest Forage Fish Task Force report. For more than a decade, the population has been maintained near or at historically high levels, while producing catch levels that have supported all facets of the herring fishery, a growing Gulf of Maine lobster fishery, and exploding populations of marine mammals.

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herring management areas as an objective or otherwise modify the language to address this issue as a spatial conflict among resource users.

[2] For example, were this a concern over impacts on other fish stocks or predators, there would be no reason to limit scoping to near shore waters.

[3] Amendment 1 to the Atlantic Herring FMP Final Supplemental Environmental Impact Statement ("FEIS"), at 93-94 (May 3, 2006).

Beyond the biological justification (lacking here), Amendment 1 also forth-rightly addressed a perceived user conflict issue. The temporal purse seine/fixed gear season Amendment 1 created was developed in part to address concerns expressed by those gear types, as well as other fishermen and the whale-watching industry. In the current instance, Amendment 8 lacks any recognition that such conflicts are driving this new objective. With no evidence that LD is occurring, these concerns are the new goal's sole driver, a point recognized by many Councilmembers during the June debate.

By avoiding confronting this as a spatial conflict among various user groups, the public is in the position of directing comments at the strawman issue of LD. In that regard, SFC presents scientific research on the issue of LD, as well as examples of how this issue has been approached by other management bodies as a scientific matter. Following those examples, particularly given the utter lack of an identified biological concern (save for the most general observation made during the meeting that ecosystem-based fishery management should take spatial considerations into account), the proper course would be to initiate a scientific research program designed to determine whether a problem exists and to develop solutions specific to identify concerns, if any.

As a matter of administrative procedure, however, SFC strongly objects to being denied the opportunity to directly address the real concern of this objective. A scoping process aimed at addressing perceived user conflicts in the near shore parts of Areas 1B and 3 would elicit an entirely different set of comments than those responsive to the current request. As the Council has chosen to address this as a matter of LD, then any management response in Amendment 8 should be based on scientific investigation or at least on a clear identification of the biological concerns to be addressed, supported by scientific literature. As shown below, there is no such evidence.

I. Defining and Measuring Localized Depletion is Impossible in the Absence of a Defined Ecosystem or Predator/Prey Concern Likely Caused by Sporadically Concentrated Harvest

The notice suggests LD exists "when harvesting takes more fish than can be replaced either locally or through fish migrating into the catch area within a given time period." 80 Fed. Reg. at 50825. As, by definition, harvesting fish involves their removal, LD must mean something more if it is to be considered a problem. To rise to that level, the removal of herring from an area must have a significant and more than transitory impact on other species.

To rise to such a level, at least three conditions would have to be met. For one, the time element must be of sufficient duration to adversely affect foraging behavior and success. Secondly, that impact must be spread over a significantly wide area as, like herring, its marine predators are all highly mobile. If predator and/or prey stocks do not demonstrate any strong site fidelity or smaller scale stock structure without significant migration, then any effects of localized harvest are likely to be swamped by natural movement and large-scale environmental processes.[4] Thirdly, the

[4] *See, e.g.*, Erlandson, Jon M., and Torben C. Rick. "Archaeology meets marine ecology: the antiquity of maritime cultures and human impacts on marine fisheries and ecosystems." *Annual Review of Marine Science* 2 (2010): 231-251, 169 ("Localized depletion is not necessarily equivalent to the degradation of a wider ecosystem, however, as heavy local exploitation can be

predator must either be uniquely dependent on herring or there must be an absence of other prey species, such as menhaden, sea robins, scup, whiting, shad, river herring, squid, shrimp, sand lance, etc., in fishing area. If other prey is available, the temporal loss of herring from fishing is not likely to have consequential ecosystem impacts.

An example of an LD definition used in scientific literature which somewhat captures these elements is: "Localized depletion is the hypothesis that intense fishing pressure may cause small-scale effects on local densities of the target fish—effects that are disproportionate to the managed overall harvest mortality rate."[5] This definition, however, does not specify what these small-scale effects might entail or provide a clear roadmap to identifying specific problems or even LD's existence.

Undoubtedly some will offer the definition of LD offered in the Lenfest Forage Fish Task Force's report, "Little Fish, Big Impact."[6] Specifically, "localized depletion … is a reduction, through fishing, in abundance or biomass in a specific area." *Id.* at 14. "Localized depletion occurring in key foraging areas and at critical feeding times may have a major effect on predators that have little ability to find more distant patches of abundant prey." *Id.* The citations Lenfest provides for this assertion all relate to precautionary management of krill in the Scotian Sea, an area under no single nation's control, and involve land-based predators of concern in Antarctica.[7] The only other example of potential LD involves impacts on seabirds in the North Sea.

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combined with residential mobility in a sustainable economic strategy."); Hanselman, Dana, *et al*. "Localized depletion of three Alaska rockfish species." *Biology, Assessment, and Management of North Pacific Rockfishes. Alaska Sea Grant, University of Alaska Fairbanks* (2007): 493-511 (finding intensive localized fishing had varying impacts of different stock depending on hyperstability, migration, or target switching); Borkman, David G., and Theodore Smayda. "Multidecadal (1959–1997) changes in *Skeletonema* abundance and seasonal bloom patterns in Narragansett Bay, Rhode Island, USA." *Journal of Sea Research* 61.1 (2009): 84-94 (local availability of migratory menhaden in Narragansett Bay tied to multidecadal changes in planktonic production); *see also* Lee, *infra* n.10 (importance of environmental factors); Haddon, *infra* n.16 (importance of migration).

[5] Conners, M. Elizabeth, and Peter Munro. "Effects of commercial fishing on local abundance of Pacific cod (*Gadus macrocephalus*) in the Bering Sea." *Fishery Bulletin* 106.3 (2008): 281-292.

[6] Pikitch, Ellen, *et al*. "Little fish, big impact: managing a crucial link in ocean food webs." Lenfest Ocean Program, Washington, DC 108 (2012).

[7] *See, e.g.*, Plagányi, Éva E., and Doug S. Butterworth. "The Scotia Sea krill fishery and its possible impacts on dependent predators: modeling localized depletion of prey." *Ecological Applications* 22.3 (2012): 748-761; Watters, G.M., *et al*. (2008). "A risk assessment to advise on strategies for subdividing a precautionary catch limit among small-scale management units during stage 1 of the staged development of the krill fishery in Subareas 48.1, 48.2 and 48.3. CCAMLR document WG-EMM-08/30; Hill, S. L., *et al*. (2009). "The risk to fishery performance associated with spatially resolved management of Antarctic krill (*Euphausia superba*) harvesting. ICES Journal of Marine Science, 66 (10), 2148–2154; Hewitt, R, *et al.* (2004). "Options for allocating the precautionary catch limit of krill among small-scale management units in the Scotia Sea." *CCAMLR Science*, 11, 81–97.

The Lenfest definition may thus have some utility for this particular sub-set of predators; *i.e.*, land-based avian and marine mammal populations.[8] In this regard, however, there is scant evidence of adverse impacts on coastal species inhabiting the near shore areas where the herring fishery is conducted. Indeed, populations of marine mammals such as grey and harbor seals in the region have been increasing at substantial rates. This may increase competition in near shore waters, but is not indicative of a low forage base, either overall or temporally.

As discussed below, peer reviewers of the Atlantic States Marine Fisheries Commission's rigorous attempt to investigate the potential for LD of menhaden in the Chesapeake Bay have attempted to lay out more functional definitions. *Infra* at Part IV.B. One of the takeaways from that exercise is that generalized or vague definitions of LD have little utility as they allow individuals to arrive at different conclusions based on the same set of objective facts.

In light of these considerations, the absence of an identified and specific ecosystem problem or even a single (or set of) of predator-prey interaction(s) that Amendment 8 would address makes it impossible to provide a meaningful definition of LD. Nor, without a clearly defined problem can the public suggest – or the Council rationally develop – management solutions.

This public comment process is only likely to elicit a wish list of measures that individuals, businesses, and organizations would like to see implemented in order to further their economic, social, or environmental interests. The Magnuson-Stevens Act, however, does not sanction a process of appeasement of the most vocal and persistent stakeholders. It creates an orderly, science-based administrative process for considering and balancing competing interests and objectives. While SFC would be content with the status quo, its participants request only that if the Council chooses to pursue the issue of LD that it do so on an impartial, scientific basis. That would begin with defining the problem, which should be done by the Council in the first instance.

II. The Council Should Utilize Tools It Has Developed to Investigate Whether and Where LD Exists

To further that goal, it is important to bear in mind that the Council has already embarked on a scientific path. Notably, for the 2008/2009 fishing year, the Council established a research priority "to define localized depletion on a spatial and temporal scale."[9] In order to meet this priority, the Council funded, through the herring RSA program, a research project proposed by the Gulf of Maine Research Institute ("GMRI") entitled: "The Effects of Fishing on Herring Aggregations."

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[8] *But see infra* at Part III (discussing studies of Pacific cod depletion around Steller sea lion rookeries which found little evidence of near shore depletion of mobile pelagic fish).

[9] *See, e.g.*, L. Steele, Memo, "Priorities for Herring Cooperative Research/Research Set-Asides for the 2010 Fishing Year" (Sept. 25, 2008), *available at* *http://archive.nefmc.org/herring/council_mtg_docs/Oct2008/Doc3Memo%20Council%20re%202010%20RSApriorities%20FINAL.pdf*.

Id. This project examined the use of developing a hydroacoustic sonar technique to characterize herring aggregations and develop an objective basis for defining localized depletion.[10]

Failure to harvest the full set-aside prevented development of a definition of LD. The GMRI research team did, however, succeed in developing a "before-after-control-impact" technique that can be used to answer this question. It was the first to utilize two different sonar systems, positioned aboard two mid-water trawl vessels engaged in pair-trawling operations. Herring abundance was measured ahead of the net, then one of the vessels broke off to measure abundance in the tow path. The funding constraints did not allow sufficient tows to develop statistically significant fishing impacts. Notably, however, no effect was detected in the limited tows analyzed.

The key takeaway from this project is that the Council had made defining LD a research priority after Amendment 1, going so far as approving a research project to achieve this goal. Circumstances did not allow for development of a meaningful definition, but did produce a methodology that can be used to investigate if, in fact, LD is occurring. Ignoring this past work and abandoning a rigorous scientific approach to the question, the Council is now plunging forward with "addressing" a problem no one can say even exists. That is the wrong track.

III. Analogous Research Suggests Localized Depletion of Herring is Unlikely to Exist

It is unlikely that herring fishing in near shore waters – whether intensive and concentrate efforts by purse seiners in the Gulf of Maine or mid-water trawlers on the back side of the Cape – is resulting in levels of depletion likely to impact other species.

In contradistinction to the amount of concern expressed about localized depletion, direct research on LD is sparse. Perhaps one of the studies most analogous to the Atlantic herring fishery was conducted by NMFS researchers over a three year period in the North Pacific.[11] The study was motivated by the coincidence of a sharp decline of Steller sea lion populations in the Aleutian Islands and more intensive mid-water trawl effort on Pacific cod during the early months of the year. *Id.* at 261. The prevalent theory was that competition between the fishery and foraging sea lions was a contributor to the latter's population decline. *Id.*

Using adjacent trawl restricted areas near a sea lion rookery as a control, this study measured abundance in areas heavily fished from January through March during each of the three years. Catch volumes in the research area of about 64 square kilometers were substantial. *See id.* at 287 (Figure 3). Sampling was conducted before and after the season. *Id.* at 283.

As the researchers reported:

> Final results of the study clearly indicated very similar values of seasonal change in Pacific cod abundance (σ) in both the trawled and untrawled portions

[10] Stockwell, J., *et al.*, "Effects of Fishing on Herring Aggregations," NOAA Project Code 08-HERR-03, at 1 (Undated), attached hereto.

[11] Conners, M. Elizabeth, and Peter Munro. "Effects of commercial fishing on local abundance of Pacific cod (*Gadus macrocephalus*) in the Bering Sea." *Fishery Bulletin* 106.3 (2008): 281-292.

> of the study area. We did not see the differences in slope that we would have expected to result from strong localized depletion in the trawled zone.

Id. at 287. They found "that Pacific cod in our study area were highly mobile over much shorter time scales than previously assumed," thus casting doubt "on the assumption of a closed local pool of fish that is reduced by local removals." *Id.* at 289. These results mirrored another study using hydroacoustic study of the same issue on walleye pollock. *Id.* at 290 (citing Barbeuax et al. 2005). In each case it was found "attenuation of fishery-removal effects by rapid fish movement." *Id.*

Like herring, Pacific cod and walleye pollock are highly abundant, schooling pelagic fish. They also, like herring, are highly mobile and dispersed over large areas. There is thus little reason to think that different results would be obtained in near-shore New England waters if the Council were to pursue the issue of localized depletion scientifically, as it should. Notably, these results are consistent with Councilmember Terry Alexander's observation regarding the Gulf of Maine purse seine fishery in June that herring tend to fill in an area on an overnight basis.

Another study relevant to the issue of interest here was conducted by a University of Rhode Island researcher looking at potential effects of herring harvest on search times for whale watching vessels.[12] The study used data from whale watching operators from Rhode Island through Maine for the years 2002 to 2006, herring fishing effort from NMFS' VMS and VTR databases, and environmental information from the Gulf of Maine Ocean Observation System. Prepub. Draft at 9-11. The two overlapping whale watching/fishing areas studied were Jeffrey's Ledge and Stellwagon Bank. The author examined the "hypothesis … that intense fishing leads to lower stocks of whales (as well as the valued fish that feed on herring)." *Id.* at 3.

In sum, the study found that while the overall explanatory power of the model was low,[13] fishing effort lagged by seven days (but *not* contemporaneous fishing) had a negative impact on search times in the Jeffrey's Ledge area. *Id.* at 13. The same results for Stellwagon Bank were not significant. *Id.* More importantly, however, the size of the effect was extremely small. *Id.* Of far greater impact on search times by whale watching vessels were the effects of the movement of herring inshore to spawn and high visibility. *Id.* Another highly significant variable was year, a "dummy" variable "included to control for large scale oceanographic processes." *Id.*

To show the relative difference in the importance of these factors, spawning herring decreased search times by a factor of 17 and high visibility decreased them by a factor of 7, while fishing effort in the previous days increased search time on Jeffrey's Ledge by only a factor of 0.7. *Id.* (Table 3). As the author concludes: "Our results suggest that while fishing has a statistically significant impact on sightings, this magnitude of this effect is fairly small. Sightings seem to be determined mostly by large scale oceanographic processes." *Id.* at 1.

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[12] Lee, Min-Yang. "Economic tradeoffs in the Gulf of Maine ecosystem: Herring and whale-watching." *Marine Policy* 34.1 (2010): 156-162, prepublication copy attached.

[13] At most, the model was only able to account for 17 percent of the variation in whale watching trip length. *See id.* at 13 and Table 3 (reported R^2 values).

That this study showed no effect from fishing on Stellwagon Bank or from fish effort conducted at the same time as whale watching trips is significant. Stellwagon is fished by mid-water trawlers, a gear type of particular concern to advocates of the LD theory, while Jeffrey's Ledge is in the Area 1A purse seine/fixed gear area. The finding of a no significant impact of contemporaneous fishing effort on search times stands in stark contrast to anecdotal claims frequently reported to the Council. However, the most important findings here is that the factors of greatest impact are environmental and thus beyond the ability of managers to control.

IV. The Investigation of Potential LD of Menhaden in the Chesapeake Bay

Concerns over the issue of localized depletion are not unique to Atlantic herring. Similar concerns had long been expressed relating to the amount of menhaden taken from the Chesapeake Bay, both in absolute numbers and as a percentage of total annual coast-wide harvest.[14] Similar to the Council's action in Area 1A taken in Amendment 1, the ASMFC initially responded by instituting a "precautionary" cap based on recent harvest levels to avoid a significant expansion of the Bay fishery. *Id.* at 2. This discrete measure, though unsupported by scientific evidence that the fishery was causing problems, was meant to maintain the status quo while the question of LD was investigated. *Id.* Further, managers had a reasonable basis concern, given that the Chesapeake Bay is an important nursery for both menhaden and striped bass.

Rather than assume a problem and rush to a regulatory solution, the Atlantic States Marine Fisheries Commission developed and initiated a multi-pronged research program to measure and assess whether LD was occurring and, if so, its potential impacts. The Council should follow this disciplined, science-based approach.

A. The Menhaden Research Program

Addendum III identified a specific research program aimed at determining whether LD was occurring in the Bay, such as by exacerbating mycobacteriosis in striped bass or causing other biological problems. This research program consisted of four areas of investigation designed to help answer the question of LD; specifically to –

(1) determine menhaden abundance in Chesapeake Bay;
(2) determine estimates of menhaden removals by predators;
(3) evaluate the rate of exchange of menhaden between Bay and coastal systems; and
(4) conduct larval studies to determine recruitment to the Bay.

Id. at 2-3. For purposes of the investigation, LD was defined as "a reduction in menhaden population size or density below the level of abundance that is sufficient to maintain its basic

[14] ASMFC, Addendum III to Amendment 1 to the Interstate FMP for Atlantic Menhaden (Nov. 2006), *available at* http://www.asmfc.org/uploads/file//546b96d4AtlMenhadenAddendumIII_06.pdf.

ecological (e.g. forage base, grazer of plankton), economic and social/cultural functions."[15] The ASMFC further elaborated that LD "can occur as a result of fishing pressure, environmental conditions, and predation pressures on a limited spatial and temporal scale." *Id.*

The National Oceanic and Atmospheric Administration ("NOAA") Chesapeake Bay Office funded certain research projects designed to meet the four identified investigatory areas. After these yielded some preliminary findings, NOAA and ASMFC held a peer review conducted by the Center for Independent Experts ("CIE") to evaluate progress and assess how well the projects were meeting the goal of identifying the potential for LD.

None of the individual studies purported to answer question of whether LD was occurring, but did further the objective of providing an empirical basis for answering the question. For instance, as one reviewer noted, the question of site fidelity is particularly important. "For local depletion to occur the stock would need to be relatively site attached."[16] This reviewer went on to note that menhaden are highly migratory and (wide-spread) larval dispersal is effected by large oceanic processes. *Id.*

Likewise, the reviewers agreed that removals by predators is a key piece of evidence. One, however, noted that it "is necessary to understand the dynamics of the prey as well as those of the predators." Maguire, *supra* n.15, at 8. He went to observe "this is not a simple question to resolve: predator – prey relationships are likely to change as the abundance and distribution of predators, prey and competitors are changing," and they are effected by environmental factors like climate change. *Id.*

Beyond the specifics of the research priorities and interim results, the reviewers noted the overarching importance of identifying and defining the problem. This is of particular relevance to the issues raised in this Notice, which offers a far less detailed than that developed by the ASMFC. With regard to the latter, one reviewer observed:

> This definition would not consistently lead to the same conclusion following an evaluation of the available information: based on the same information, one observer could conclude that localized depletion is occurring while a different one might conclude the opposite. This is possible because the quantity of menhaden needed for each of the basic ecological, economic and social/cultural function is not quantified. Therefore, depending on their own, generally unstated objectives, different observers could legitimately reach different conclusions from the same information.

Id. at 4. Another states: "Unfortunately, while it is possible to use such a definition it does not offer any suggestions about how to measure the basic ecological, economic, and social/cultural

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[15] Maguire, J.J. "Report on the evaluation of the Chesapeake Bay Fisheries Science Program: Atlantic Menhaden Research Program Laurel, MD, April 22-24, 2009," at 4 (May 2009), appended hereto.

[16] Haddon, M. "Review Research on Atlantic Menhaden (*Brevoortia tyrannus*), at 8 (April 2009), appended hereto.

functions mentioned in the definition. What is left, in the absence of performance measures that relate to local depletion, is conflict." Haddon, *supra* n.16, at 8.

Ultimately, the questions raised by stakeholders, managers, and researchers regarding menhaden in the Chesapeake Bay remain unanswered. This experience and approach, however, do provide some lessons for the Council as it investigates LD in New England waters.

B. Lessons From the ASMFC Approach

The first of these is that as elusive as answers are to achieve in a large, but otherwise confined and discrete estuary like the Chesapeake Bay, identifying and disaggregating fishing from environmental effects in the open ocean are likely to be more difficult. Mobility, competition, tides, temperature, and a host of other factors all at play in the marine ecosystem are likely to confound easy answers.

But that the answers may be difficult to find does not excuse the Council from taking an empirical, science-based approach to the question. Tools like those developed by GMRI exist to begin investigating this topic. Studies similar to those undertaken elsewhere can also serve as models to research whether or not LD is occurring and, if so, where and at what scale.

Most importantly, before any disciplined investigation can even begin, a clear definition of the problem must be developed. It is wholly inappropriate to start the management process by asserting the localized depletion must be addressed and then ask the public to define what LD, in fact, is. The ASMFC took into consideration a specific set of biological concerns, attempted to develop an encompassing definition of the problem, established a research program designed to establish whether identified problem was related to the concerns, and then sought independent expert opinion on the entire approach.

The herring fishermen and public deserve a no less rigorous approach in this instance.

Conclusion

For all the reasons specified above, the Council should reconsider the third goal established for Amendment 8. At the very least, its focus should be on developing an approach to determine if LD is actually occurring within the herring fishery. It is not rational to "address" a problem that can neither be identified nor defined. Thus far, no reasonable or reasonably likely adverse biological or ecosystem consequences stemming from sporadically intensive inshore fishing have been identified. If they can be, then the Council should amend its priorities to include a research program to test whether they have merit and then fund such research through the RSA.

To the extent the Council would like to deal with user conflict concerns specific to mid-water trawlers operating in some areas, those should be confronted directly and on that basis. There are likely various mitigation measures that could be developed to provide all user groups fair access to the resource. It does the public a disservice to cloth this conflict as a matter of LD when the issues are really social and economic. The public deserves an opportunity to address those issues directly.

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SFC appreciates this opportunity to comment and the agency's thoughtful consideration of these comments. If you require any further information or have any questions, please do hesitate to contact me.

Sincerely,

Shaun M. Gehan

Counsel for the Sustainable Fisheries Coalition

ENCLOSURES

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