

New England Fishery Management Council¹

50 Water Street, Mill 2
Newburyport, MA 01950
978-465-0492
Fax: 978-465-3116
www.nefmc.org

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Ecosystem-based Fishery Management Plans

Pilot Project Underway

The New England Council is in the initial stages of embarking on the development of an ecosystem-based approach to fisheries in the Northeast. A NOAA Fisheries Service grant to the Council is supporting a one-year pilot project that is focused on three primary objectives. These include efforts to:

- Identify issues relevant to ecosystem approaches to management through stakeholder interaction
- Identify data and technical needs related to the relevant issues
- Develop a blueprint for creating a Fishery Ecosystem Plan for New England fisheries

As a first step, the project is focusing on education at the both Council and public levels. Concurrently, work is proceeding with NOAA's National Ocean Service on eco-GIS tools to help managers by providing visual representations of fisheries and ecosystems data. The emphasis is on spatial representation of fishing effort data and improved habitat mapping. Armed with these and other management tools, the Council will build on baseline information already contained in its management programs and actively integrate existing elements into a cohesive and overarching approach to management.

As fish stocks in New England continue to rebound, the difficulties in maintaining a "single-species" approach to management will likely be compounded as the lines between the management of individual fisheries blur. Ecosystem approaches to fisheries management, ideally, will allow the New England Council to integrate all of these considerations, and many others, into fishery management plans.

IFQs and Other Rights-Based Programs

Sector Allocation

Individual Fishing Quotas and other share-based management systems still spark debate in New England. In the midst of discussions about input versus output controls, the Council adopted a grass roots cooperative program based on fishing history, rather than develop a full -ledged quota allocation system.

Working with hook fishermen from Cape Cod, the NEFMC's innovative approach allows the formation of self-defined harvesting sectors. Implemented recently as part of a major amendment to the Council's Multispecies Fishery Management Plan, sector rules promote flexibility as members allocate the catch of fish among sector participants and within the confines of overall conservation restrictions on amount of catch, method of fishing and fishing areas. If successful, the formation of sectors will provide strong

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incentives to rationalize fishing effort and a more direct role in the responsible management of fishery resources.

Under the rules developed by the Council, groups must apply to NOAA Fisheries to be considered a sector. NOAA reviews the specifics of a charter that must address the internal allocation of fish among members. The Council determines how the sector will operate in terms of its impact on the fishery and allocates a quota share to the sector. Once fish have been allocated to a sector, members may, in turn, allocate the fish among themselves in any way they choose. Sector membership is not restricted, but as a practical matter such programs will likely work best for fishermen who fish in the same area with similar gear. About 60 longline fishermen currently participate in the existing sector program.

Improvements in the Scientific Review Process

SAW Process Changes

The Northeast region uses a formal scientific peer-review process for evaluating and presenting stock assessment results to managers. The Stock Assessment Workshop, or SAW, uses an established protocol to prepare and review assessments for fish stocks off the New England and Mid-Atlantic coasts. Assessments are prepared by SAW working groups (federally led assessments) or Atlantic States Marine Fisheries Commission technical assessment committees (state led assessments) and are reviewed by a panel of stock assessment experts called the Stock Assessment Review Committee or SARC. Advice is provided to partner management bodies including the New England and Mid-Atlantic Fishery Management Councils and the Atlantic States Marine Fisheries Commission.

The overall SAW process is steered by the Northeast Regional Coordinating Council (NRCC), a group made up of the region's executives—the New England and Mid-Atlantic Council chairs, vice-chairs and executive directors; the Atlantic States Marine Fisheries Commission executive director; and NOAA Fisheries Service Regional Administrator and Science and Research Director. Collectively, the group chooses the stocks to be reviewed, terms of reference for those assessments and the overall process and protocol used by the SAW.

Over the last year the NRCC evaluated the SAW process and made revisions to clarify that ownership of the final step of the process—development of management advice consistent with the accepted assessment—is the responsibility of the Regional Council or Commission that manages the stock, rather than the peer review panel. As a result, the traditional model used over the course of the last 20 years has been revised in 2004 to implement this very important change. Effects of the change will be evaluated over the next year to determine if it achieves the desired outcome.

Peer Review and Best Available Data for Essential Fish Habitat (EFH)

In order to complete a comprehensive amendment that garners public support and uses the best available scientific information, the Council is working with NOAA Fisheries to incorporate new scientific peer review components into the EFH designation process. The initiative is intended to facilitate efforts to: (1) review the current designation methodology and investigate alternatives for identifying important habitats and their characteristics for Northeast managed species; and (2) evaluate the potential effects of fishing gear on EFH.

To date, the Council has worked with the Northeast Regional Coordinating Council to establish a Habitat Evaluation Working Group. This group is charged with investigating new and innovative methods and tools for designating EFH and is operating under the guidance of a regional steering committee with broad representation from both regional science and management partners.

The Council also will establish a Gear Effects Working Group in late 2005 to evaluate the effects of fishing gear on EFH, and present their findings to a peer review workshop. It is expected that this working group will include fishing industry and other outside participants.

MPA and Cold Water Coral Initiatives

MPAs

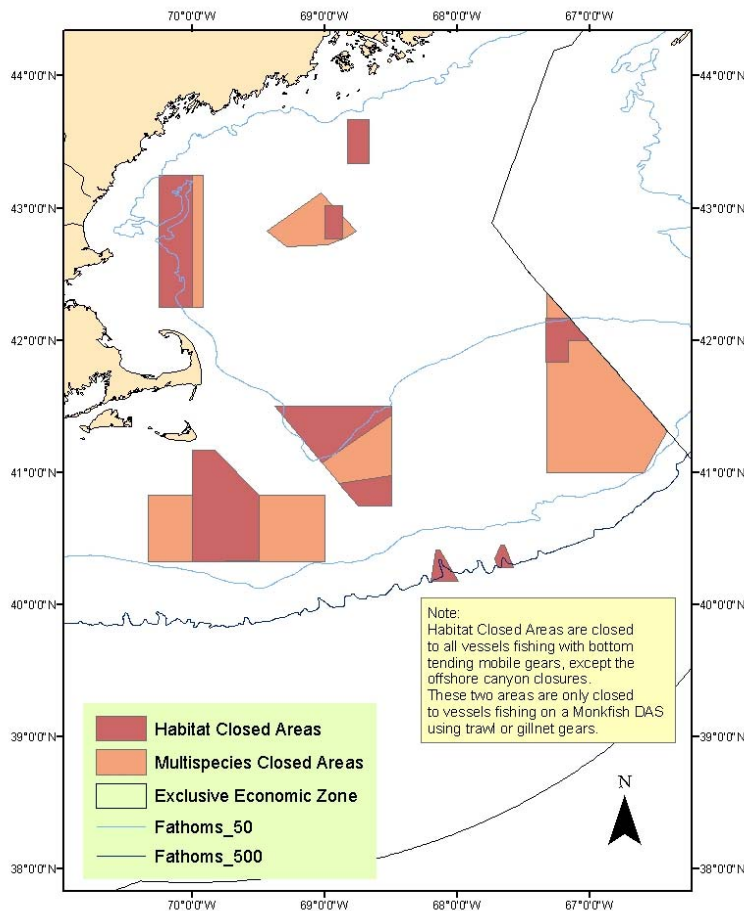
The Council is developing a policy on Marine Protected Areas not only to guide the implementation of the Executive Order on MPAs, but also to more effectively address the issue in the development of its Habitat Omnibus Amendment. Through a grant from the MPA Center, the Council has scheduled several MPA/EFH Education and Outreach Workshops. Information compiled at those events will directly assist the Council in the developing its policy and will further longer-range goals by providing general education on basic ecology, the role of habitat in fisheries and the science of marine protected areas.

The New England and the Mid-Atlantic Fishery Management Councils also have proposed to close Oceanographer and Lydonia Canyons to minimize the potential impacts of the directed monkfish fishery on deep-sea canyon habitats under Amendment 2 to the Monkfish Fishery Management Plan. Within these canyon habitats, a variety of species, including cold water corals, have been found and are known to provide structured habitat and shelter for some species of demersal fish and invertebrates.

Cold Water Coral Protection

Cold water corals are known to exist in some of the submarine canyons in the area that is identified for increased offshore fishing under the monkfish amendment. Corals are not currently included in the EFH descriptions for any species in the Northeast region, but grow on hard substrates and are particularly vulnerable to damage or loss by mobile bottom trawl gear and gillnets.

The possible expansion of the offshore monkfish fishery, either spatially into new areas or in terms of increased fishing intensity in existing areas, increases the probability of adverse impacts to EFH, canyon habitats, and, accordingly, cold water corals. The proposed closures are intended as a precautionary measure to prevent any potential adverse impacts of an expanded offshore monkfish fishery on EFH and offshore canyon habitats. These additional deep-sea canyon habitat closures will add 116 square nautical miles to the network of habitat closed areas, totaling over 2,800 square nautical miles.



Stock Rebuilding Success Stories

Northeast Multispecies Programs

One of the most noteworthy developments over the past year was the approval and implementation of a major management action known as Amendment 13 to the Council's Northeast Multispecies (Groundfish) Fishery Management Plan. Providing for the management of 19 stocks, the program calls for further reductions in fishing effort through a number of innovative programs to help mitigate the economic impacts of the effort reductions. While there have been growing pains associated with implementation, the Council is cautiously optimistic that the program will achieve its biological objectives, even as it remains concerned about the economic and social impacts on the fishery.

- For those who criticize effort controls as ineffective, preliminary landing statistics suggest that Amendment 13 may help blunt that criticism. With data available for five months (41 percent) of the fishing year, preliminary landings for all stocks are less than 41 percent of the target Total Allowable Catches (TACs). This is a significant improvement from earlier years when target TACs were often exceeded within the first half of the fishing year. With seven months remaining, it is too early to declare victory, but the initial data is promising.
- A special access program into a closed area returned the highest landings of Georges Bank yellowtail flounder in recent history. For the first time in three years it appears the yellowtail flounder TAC will be harvested. The Council already has submitted changes to this program to improve the economic returns.
- A second special access program using longline gear harvested over one million pounds of haddock while catching about 20,000 pounds of cod. This sector allocation program – the result of an industry-led experiment – demonstrated that fishermen can benefit from selective fishing techniques that target healthy stocks while avoiding those that are at much lower levels of abundance. The program has led to increased interest in longline fishing on Georges Bank.
- A program that allows vessels to lease fishing time (days-at-sea) was adopted to help reduce the negative economic impacts effort reduction measures. The program has proven popular for vessels of all sizes, with over 10 percent of the allocated days-at-sea entering the leasing market. The Council will review this program carefully to ensure it does not threaten mortality objectives.
- Fishing for trans-boundary stocks of cod, haddock, and yellowtail flounder on Georges Bank is closely coordinated with Canada's Department of Fisheries and Oceans. Quotas have been adopted for these stocks, although implementation has proven difficult. For example, while it appears the U.S. will catch its quota of yellowtail flounder, the catches of cod and haddock are likely to fall far short. This situation provides biological benefits, but the fishing industry is critical because the haddock quota was expected to provide opportunities for large offshore vessels to mitigate the economic consequences of effort reductions.
- Groundfish assessment updates will be completed in August, 2005. The Council will consider adjustments to the management program based on these assessments.

Georges Bank haddock continues to prove that effective fishing mortality controls can lead to rapid rebuilding of New England groundfish stocks. Recent trawl surveys indicate that the 2003-year class of haddock may be the largest ever observed. Both stock size and allowable harvests are expected to increase rapidly over the next few years as these haddock enter the fishery. The Council had begun to address concerns that this rapid growth will lead to increased discards before the fish reach legal size.

Successful Innovations in Scallop Management

The Council adopted a major change in its sea scallop management strategy in 2004 by moving to an area rotation system. Given that measures became effective beginning in July 2004, it is too early to definitively measure effects on the scallop resource and the environment, but preliminary information shows positive results.

The management program has reduced effort by about 40 percent while reducing scallop mortality and associated environmental effects by as much as 80 percent. Over time, there has been a fivefold increase in total biomass, and although fully rebuilt, overfishing was occurring in 2003. The new program is expected to eliminate this situation.