

6.8 Coastal Zone Management Act (CZMA)

Upon submission of Amendment 7 to the Atlantic Sea Scallop FMP and Amendment 9 to the Northeast Multispecies FMP, the Council also conducted a review of the FMPs for its consistency with the coastal zone management plans of the affected states. All the states concurred with the Council's consistency determinations. See Section 8.6 of Amendment 7 and Section 5.4 of Amendment 9 for the Council's consistency determinations. The response letters of the states are on file at the Council office. The Council has determined that the proposed action is within the scope of measures already reviewed for consistency with states' CZM plans and is, therefore, consistent with those plans. The Council has notified potentially affected states of this action and of its determination that the action is consistent with its earlier determination.

6.9 Paperwork Reduction Act (PRA)

The PRA analysis was prepared and submitted under a different cover to expedite the approval process.

7.0 GLOSSARY

Amendment - a change to a fishery management plan (see FMP). The Council prepares amendments and submits them to the Secretary of Commerce for review and approval. The Council also may make limited changes to FMPs through a "framework adjustment procedure" (see below).

Compensation trip – A trip in a closed area to harvest scallops for the purposes of funding research.

Days absent – an estimate by port agents of trip length. This data was collected as part of the NMFS weigh-out system prior to May 1, 1994.

Days-at-sea (DAS) - the total days, including steaming time that a boat spends at sea to fish.

DAS Permit - Vessels qualified to be in the limited access sea scallop fishery are required to apply for a DAS permit each year to use their annual DAS allocation.

Full-Use - Refers to a vessel with a limited access permit and which used all of its DAS, not counting the 10 DAS that it may carry-over into the next fishing year.

Zero-Use - Refers to a vessel with a limited access permit that did not report using any DAS.

Partial-Use - reported using fewer than 10 DAS less than its annual allocation. For example, a vessel which had 165 DAS in the 1997-98 fishing year but used less than 155 DAS is referred to as a partial use vessel.

History Permit - A history permit is issued to qualified fishermen who apply in writing to retain their eligibility for the limited access fishery in the future. History permits are associated with vessels that sank, were destroyed, or were sold. They may be converted into a DAS permit any time during a fishing year. (This definition is repeated below.)

Environmental Impact Statement (EIS) - an analysis of the expected impacts of a fisheries management plan (or some other proposed action) on the environment and on people, initially prepared as a "Draft" (DSEIS) for public comment. After an initial EIS is prepared for a plan, subsequent analyses are called "Supplemental".

Exempt fisheries - Any fishery determined by the NMFS Regional Administrator to have less than 5 percent regulated multispecies as a bycatch, by weight, of total catch according to 50 CFR § 648.80(a)(7).

Exploitation rate - the percentage of catchable fish killed by fishing every year. If a fish stock has 1,000,000 fish groundfish large enough to be caught by fishing gear and 550,000 are killed by fishing during the year, the annual exploitation rate is 55%.

Fishermen - the term traditionally used in New England to refer to fishers of both genders.

Fishing effort - the amount of time and fishing power used to harvest fish. Fishing power includes gear size, boat size and horsepower.

Fishing mortality (F) - (also see *exploitation rate*) a measurement of the rate of removal of fish from a population by fishing. Fishing mortality (F) is the rate at which fish are harvested at any given point in time. ("Exploitation rate" is an annual rate of removal, "F" is an instantaneous rate).

FMP - Fishery management plan. Documents describing a fishery and the rules that govern it. These documents form the basis for federal regulations for fisheries under management authority of the regional management councils. These councils are authorized to manage fisheries and are required to prepare fishery management plans by the Magnuson-Stevens Fishery Conservation and Management Act. The New England Fishery Management Council prepares FMPs and submits them to the Secretary of Commerce for approval and implementation.

Framework adjustments - adjustments within a range of measures previously specified in a fishery management plan (FMP). A change usually can be made more quickly and easily by a framework adjustment than through an amendment. For plans developed by the New England Council, the procedure requires at least two Council meetings including at least one public hearing and an evaluation of environmental impacts not already analyzed as part of the FMP.

Limited-access permits - permits issued to vessels that met certain qualification criteria by a specified date.

F_{0.1} - a conservative target fishing mortality rate used to determine allowable fishing levels.

History permit - A History Permit is issued to qualified fishermen who apply in writing to retain their eligibility for the limited access fishery in the future. History Permits are associated with vessels that sank, were destroyed, or were sold. They may be converted into a DAS permit any time during a fishing year.

Natural mortality - a measurement of the rate of fish deaths from all causes other than fishing such as predation, disease, starvation and pollution. The rate of natural mortality may vary from species to species.

Minimum spawning stock threshold - the minimum spawning stock size (or biomass) below which there is a significantly lower chance that the stock will produce enough new fish to sustain itself over the long term.

Multispecies - the group of species managed under the Northeast Multispecies Fishery Management Plan. This group includes whiting, red hake and ocean pout plus the regulated species (cod, haddock, pollock, yellowtail flounder, winter flounder, witch flounder, American plaice, windowpane flounder, white hake and redfish).

Open access - describes a fishery or permit for which there is no qualification criteria to participate. Open-access permits may be issued with restrictions on fishing (for example, the type of gear that may be used or the amount of fish that may be caught).

Overfished - A measure of stock biomass that is below a threshold level that would provide adequate spawning activity, ie. the stock's productive capacity.

Overfishing - A level or rate of fishing mortality that jeopardizes the long-term capacity of a stock or stock complex to produce MSY on a continuing basis.

Possession-limit-only permit - an open-access permit (see above) that restricts the amount of multispecies a vessel may retain (currently 500 pounds of "regulated species").

Proposed rule - a federal regulation is usually published in the *Federal Register* as a proposed rule with a time period for public comment. After the comment period closes, the proposed regulation may be changed or withdrawn before it is published as a final rule, along with its date of implementation and response to comments.

Recruitment - the amount of fish added to the fishery each year due to growth and/or migration into the fishing area. For example, the number of fish that grow to become vulnerable to fishing gear in one year would be the recruitment to the fishery.

Regulated groundfish species - cod, haddock, pollock, yellowtail flounder, winter flounder, witch flounder, American plaice, windowpane flounder, white hake and redfish. (These species are usually caught with large-mesh net gear.)

Secretarial review process - a process, which normally takes 140 days from the time the Council, submits a plan or amendment to the Secretary of Commerce until its implementation. The Secretary of Commerce reviews and possibly approves the plan or amendment, which must meet the National Standards, of the Magnuson Fishery Management and Conservation Act and other federal laws. The other laws include the National Environmental Policy Act, the Marine Mammal Protection Act, the Endangered Species Act, the Regulatory Flexibility Act, etc.

Spawning stock biomass (SSB) - the total weight of fish in a stock that are old enough to reproduce.

Stock - a grouping of fish usually based on genetic relationship, geographic distribution and movement patterns. A region may have more than one stock of a species (for example, Gulf of Maine cod and Georges Bank cod).

TAC - Total allowable catch including all sources of fishing mortality such as discards, bycatch of the species in question in other fisheries and recreational landings.

VTS - an electronic vessel tracking system, often used to record the time a vessel is at sea on a fishing trip or to enforce closed areas.

8.0 LITERATURE CITED

Auster, P.J. and R.W. Langton. 1999. The effects of fishing on fish habitat. In L.R. Benaka, editor. Fish Habitat: Essential fish habitat and rehabilitation. American Fisheries Society, Symposium 22, Bethesda, Maryland.

Blaylock, R. A., J. W. Hain, L. J. Hansen, D. L. Palka, and G. T. Waring. 1995. U.S. and Gulf of Mexico Marine Mammal Stock Assessments. NOAA Tech. Mem. NMFS-SEFSC-363, 211pp.

Cochran, W. G. 1977. Sampling Techniques, 3rd ed. Wiley, New York.

DeAlteris, J., L. Skrobe and C. Lipsky. 1999. The significance of seabed disturbance by mobile fishing gear relative to natural processes: a case study in Narragansett Bay, Rhode Island. In L.R. Benaka, editor. Fish Habitat: Essential fish habitat and rehabilitation. American Fisheries Society, Symposium 22, Bethesda, Maryland.

Kaiser, M.J., S.I. Rogers and J.R. Ellis. 1999. Importance of benthic habitat complexity for demersal fish assemblages. In L.R. Benaka, editor. Fish Habitat: Essential fish habitat and rehabilitation. American Fisheries Society, Symposium 22, Bethesda, Maryland.

Krebs, C. J. 1989. Ecological Methodology, Harper Collins, New York.

Lux, F.E. 1963a. Identification of New England yellowtail flounder groups. Fish. Bull. 63: 1-10.

Lux, F.E. 1963b. Tagging and tag recovery data for yellowtail flounder tagged in 1955, 1957, and 1959. NMFS Woods Hole Lab Rpt. No. 63-1.

- National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1995. Status Reviews for Sea Turtles Listed Under the Endangered Species Act of 1973. National Marine Fisheries Service, Silver Spring, MD, 139pp.
- New England Fishery Management Council (NEFMC). 1998a. Amendment 7 to the Atlantic Sea Scallop Fishery Management Plan, Volume I. NEFMC, Saugus, MA. 136 pp.
- NEFMC. 1998b. *Omnibus Essential Fish Habitat Amendment* (Amendment #11 to the Northeast Multispecies FMP, Amendment #9 to the Sea Scallop FMP, Amendment #1 to the Monkfish FMP, Amendment #1 to the Atlantic Salmon FMP, and Sections of the Atlantic Herring FMP). Saugus, MA.
- NEFMC. 1999a. Framework Adjustment 11 to the Atlantic Sea Scallop Fishery Management Plan and Framework Adjustment 29 to the Northeast Multispecies Fishery Management Plan. . NEFMC, Saugus, MA. 205 pp.
- NEFMC. 1999b. 1999 Scallop Fishery Management Plan SAFE Report. . NEFMC, Saugus, MA. 171 pp.
- NEFMC. 1999c. Framework Adjustment 13 to the Atlantic Sea Scallop Fishery Management Plan and Framework Adjustment 29 to the Northeast Multispecies Fishery Management Plan. . NEFMC, Saugus, MA. 40 pp.
- Northeast Fisheries Science Center (NEFSC). 1999a. 28th Northeast Regional Stock Assessment Workshop. NMFS, Woods Hole, MA. 304 pp.
- Northeast Fisheries Science Center (NEFSC). 1999b. Report of the 29th Northeast Regional Stock Assessment Workshop. NMFS, Woods Hole, MA. 304 pp.
- Poppe, L.J., J.S. Schlee, B. Butman, and C.M. Lane. 1989. Map showing distribution of surficial sediment, Gulf of Maine and Georges Bank. U.S. Geological Survey Miscellaneous Investigations Series, Map 1-1986-A.
- Robinson, William E., H. Arnold Carr, and Jessica Harris. 1993. Assessment of juvenile bycatch and codend survivability in the Northeast fishing industry – second year’s study. NOAA Award No. NA26FD0039-01/
- Royce, W.F., R.J. Buller, and E.D. Premetz. 1959. Decline of the yellowtail flounder (*Limanda ferruginea*) off New England. Fish Bull. 146: 169-267.
- Sainsbury, K.J., R.A. Campbell, R. Lindholm and A.W. Whitlaw. 1997. Experimental management of an Australian multispecies fishery: examining the possibility of trawl-induced habitat modification. In E.K. Pikitch, D.D. Huppert and M.P. Sissenwine, editors. Global Trends: Fisheries management. American Fisheries Society, Symposium 20, Bethesda, Maryland.
- Valentine, P.C. and R.G. Lough. 1991. The sea floor environment and the fishery of eastern Georges Bank. U.S. Geological Survey, Open-File Report 91-439.

Valentine, P.C., T.J. Middleton and J.T. Malczyk. In Preparation. Sun-illuminated seafloor topography and backscatter intensity of the Great South Channel region, western Georges Bank: U.S. Geological Survey Geologic Investigations Series Map I-XXXX, scale 1:40,000 (in preparation).

Waring, G. T., D. L. Palka, K. D. Mullen, J. W. Hain, L. J. Hansen, and K. D. Bisack. 1997. U.S. and Gulf of Mexico Marine Mammal Stock Assessments. NOAA Tech. Mem. NMFS-NE-114, 250 pp.

Waring, G. T., D. L. Palka, P. J. Clapham, S. Swartz, M. C. Rossman, T.V.N. Cole, K. D. Bisack, L. J. Hansen. 1999. U.S. Atlantic Marine Mammal Stock Assessments. NOAA Tech. Mem. NMFS-NE-116, 182 pp.

9.0 ACKNOWLEDGEMENTS

Much of the data, analyses, and graphics included in this document were the result of hard work by the employees of NMFS (Woods Hole) and CMAST (New Bedford). The data for Closed Area I and Closed Area II would not have been gathered without the hard work and efforts by the crew and captains of the F/V Santa Maria and the F/V Kathy Marie that participated in the experimental fishery and the partnership between CMAST and the Fishermen's Survival Fund. Special thanks should go to Dr. Paul Rago, Dr. Kevin Stokesbury, Dr. Steven Murawski, and Dr. Dvora Hart for their expert assistance in preparing the analyses and graphs contained in this document. Draft text and analyses were also contributed by technical staff members including Andrew Applegate, Demet Haksever, Patricia Fiorelli, Michael Pentony, and Thomas Nies.

10.0 WRITTEN COMMENTS