New England Fishery Management Council
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Eric Reid, Chair | Thomas A. Nies, *Executive Director*

MEMORANDUM

DATE: January 12, 2022

TO: Habitat Committee

FROM: Habitat Plan Development Team

SUBJECT: Southern New England Habitat Area of Particular Concern

A Council priority for 2022 is to consider the designation of a new Habitat Area of Particular Concern (HAPC) in Southern New England. This memo provides some background on HAPCs and habitat management in Southern New England, identifies a potential problem statement and objectives for this action, and lists sources of information to consider when drafting and evaluating alternatives.

Background

A Habitat Area of Particular Concern (HAPC) is a designated area with essential fish habitat (EFH) that receives additional attention from Fishery Management Councils and NOAA Fisheries when commenting on Federal and state actions and for establishing higher conservation standards and restoration efforts. HAPCs do not implement fishing restrictions. Specific habitat types or areas with EFH are denoted as HAPC based on one or more of the following criteria (OHA2 Volume 2):

1. Importance of:

    a. *Historic Ecological Function* – area or habitat feature previously provided an ecological function for managed species such as predation protection, increased food supply, and spawning sites but no longer provides this function due to degradation.

    b. *Current Ecological Function* – area or habitat feature currently provides an ecological function for managed species.

2. *Sensitivity to Anthropogenic Stresses* – area or habitat feature is particularly sensitive to adverse anthropogenic fishing or non-fishing activities; sensitivity level determined by absolute value or relative to other areas/habitat features for a particular managed species.

3. *Extent of Current or Future Development Stresses* – area or habitat feature facing an existing or foreseeable on-going development-related threat such as offshore wind development.

4. *Rarity of the Habitat Type* – habitat feature is considered rare (occurs infrequently, is uncommon, highly valued; spatially or temporally very limited or a unique combination thereof) within New England or for a life history stage of a managed species).

The NEFMC uses HAPC designations to emphasize the importance of an area to a particular function or stress that is currently occurring or likely to occur soon. HAPCs do not inherently require a fishing closure in the area. The Council uses Habitat Management Areas (HMAs) to implement fishing restrictions that are intended to minimize the adverse effects of fishing on EFH. Sometimes HAPCs and HMAs overlap spatially, either fully or partially such that there can be an HAPC that is subject to HMA-based gear restrictions.

Other Councils use HAPCs to guide fisheries management and to encourage mitigation of non-fishing impacts. In 2015, the North Pacific Fishery Management Council designated six areas of relatively high skate egg concentrations (equivalent to skate nurseries) as HAPCs in the Bering Sea and Aleutian Islands Management Area because the areas are rare and provide an important ecological function (Federal Register Vol. 80). Adverse effects from fishing and other human activities were not known to effect skate populations within these HAPCs, however, the North Pacific Council anticipated that designating the areas as HAPCs will allow for additional scrutiny for any proposed and existing activities including cable laying, seismic exploration, and fishing. The South Atlantic Fishery Management Council designated all Council Managed Areas also as EFH HAPCs to emphasize the importance of evaluating all habitats as needing further scrutiny during the EFH consultation process.

In the Southern New England region, there is an Inshore Juvenile Cod HAPC in state waters, which is a subset of juvenile cod EFH. The HAPC was approved by the New England Council during Omnibus Habitat Amendment 2 because of the area's important historic and current ecological function (protection from predators and prey resource readily available for cod), the habitat's sensitivity to anthropogenic activities, and the importance of the habitat for other fish species. There is also a Juvenile Cod HAPC in the Great South Channel. (Map 1).

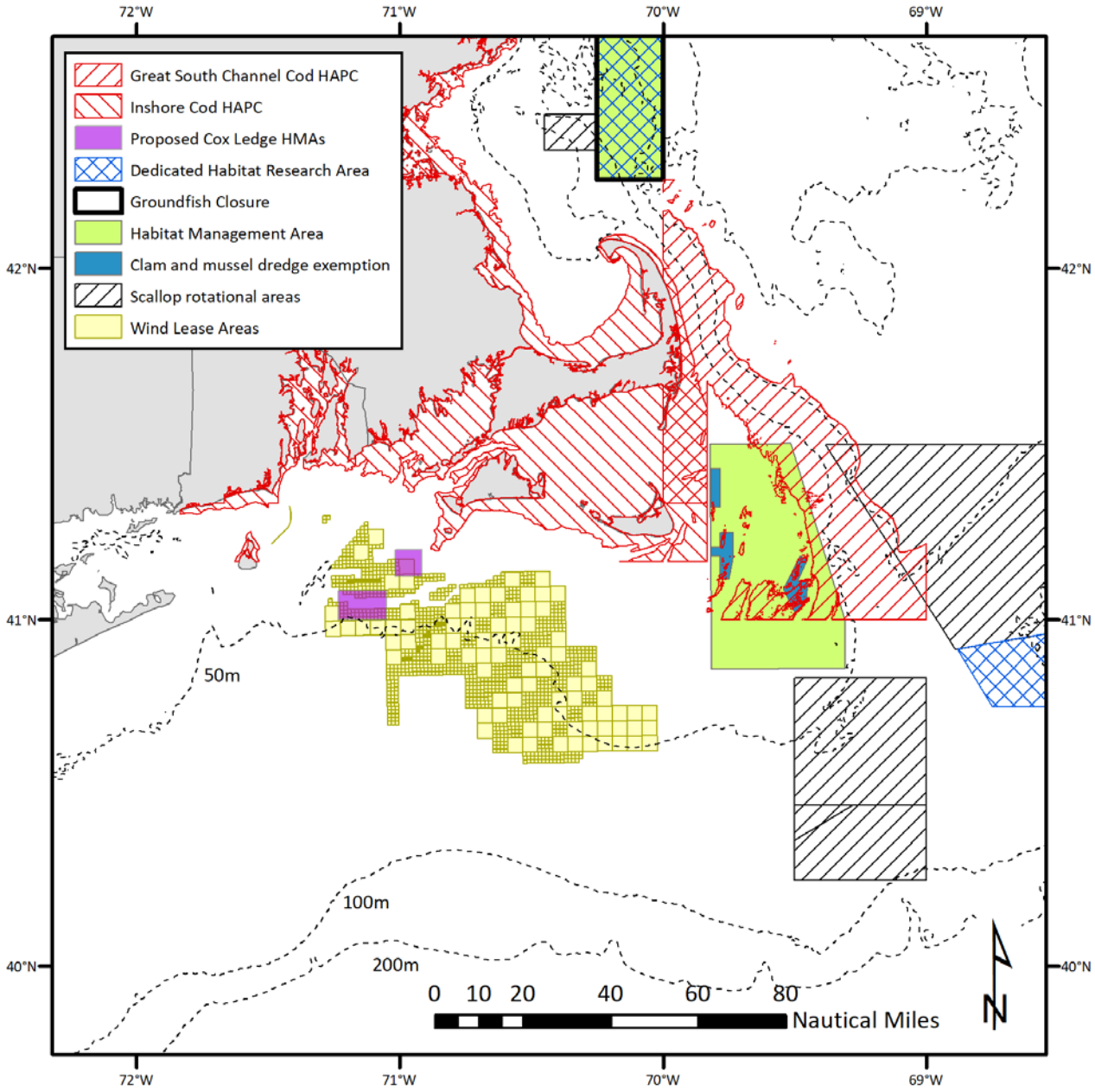
In addition to these HAPCs, there are other habitat, groundfish, and scallop management areas designated or previously proposed in SNE (Map 1).

1. The Cox Ledge HMA (purple) was recommended in Omnibus Habitat Amendment 2 but disapproved by NOAA Fisheries as the limits on ground cable length measure did not clearly demonstrate minimization of adverse effects from fishing and thus did not comply with the Magnuson-Stevens Act. The recommendation would have also created an HMA prohibiting hydraulic clam dredges but was disapproved due to lack of information on gear performance, how habitat impacts would change from a potential change in area swept, and how industry costs would change with a change in fishing time.

2. The Great South Channel HMA (light green) prohibits the use of mobile bottom-tending gear, except for three exemption areas (blue) that allow surfclam and mussel dredging (McBlair, Fishing Rip, Old South). The area was designated because it has complex benthic habitat, is important for juvenile cod and other groundfish species, and is particularly susceptible to fishing impacts. Other research, habitat management, and groundfish areas in effect following Omnibus Habitat Amendment 2 implementation are also shown.

3. Scallop rotational management areas are shown in black hatching, and wind lease areas are shown in yellow.

Map 1. Map of Great South Channel and inshore juvenile cod HAPCs, Cox Ledge proposed HMA, current HMAs, research areas, and scallop rotational areas, and overlapping wind lease areas.



Draft problem statement and rationale

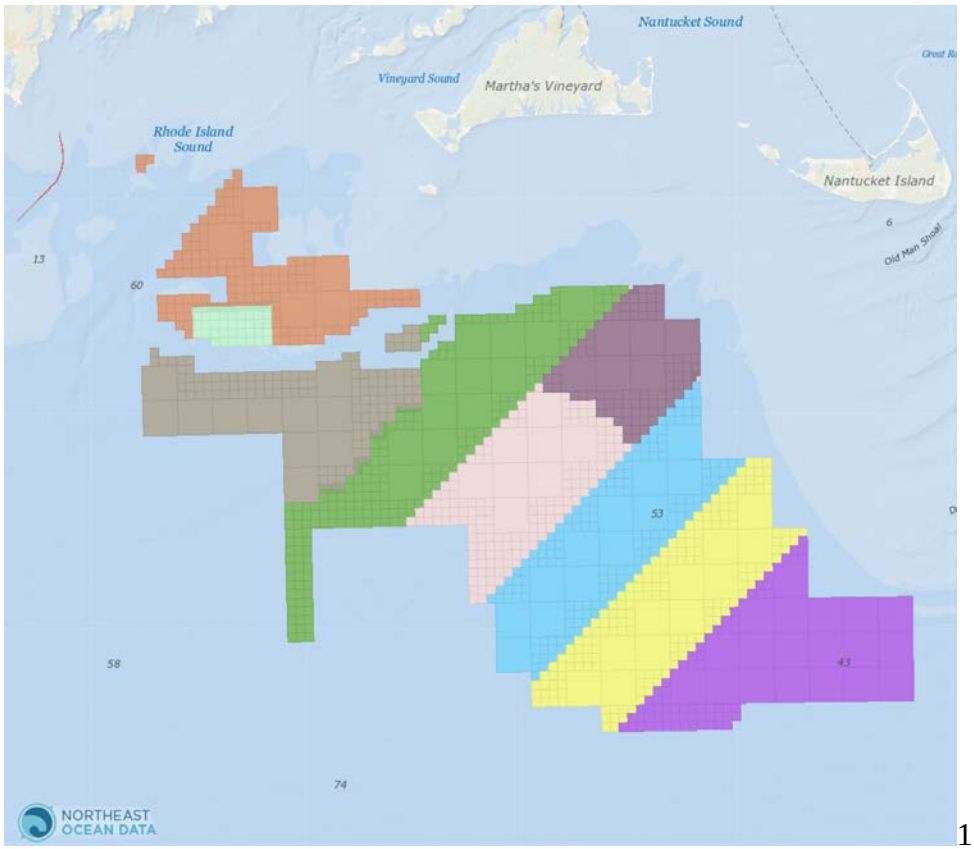
A new Habitat Area of Particular Concern (HAPC) in Southern New England is needed to provide conservation focus for specific New England Council-managed species with EFH in the area. This is due to concerns about impacts from offshore development, specifically offshore wind in the near term, and possibly offshore aquaculture in the future. Other factors and activities that could impact EFH in the Southern New England region include climate change, shipping, dredging, storm events, beach nourishment, non-point source pollution, and other land use changes/conversions.

There are 9 active renewable energy leases in Southern New England, each of which could support multiple projects. Two projects are already permitted (Vineyard Wind I and South Fork), while the remaining are either undergoing environmental review, site assessment, or the development of construction and operations plans (Map 3). Impacts associated with wind development include habitat alterations and conversion associated with installation of turbines, cables, and scour protection materials, and anthropogenic acoustic disturbance that hampers fish communication. These and other issues are described in the NEFMC Offshore Wind Energy Policy (December 2021). Fishery species will likely be affected by and need additional protection from these impacts.

The HAPC would apply to New England Council-managed species, such as Atlantic cod for spawning protection and potentially sea scallops and other species due to concerns over habitat conversion. This action will amend one or more fishery management plans, depending on the focal species, but will be a framework to the Northeast Multispecies plan at minimum. Offshore wind development is likely to adversely affect squid and other Mid-Atlantic-managed species, but these issues will not be directly addressed through this HAPC designation because these species are not managed by the New England Council.

The HAPC designation will support the EFH consultation process. This process provides non-binding conservation recommendations to mitigate the impacts of projects. A Council HAPC designation would underscore and emphasize the importance of specific locations and habitat features. The Council's process and the associated documentation and information sources used to support the designation can be referenced during EFH consultations.

*Map **2**. Active renewable energy leases in Southern New England.*



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Draft objectives

The Plan Development Team developed the following draft objectives for consideration by the Committee. The HAPC designation should:

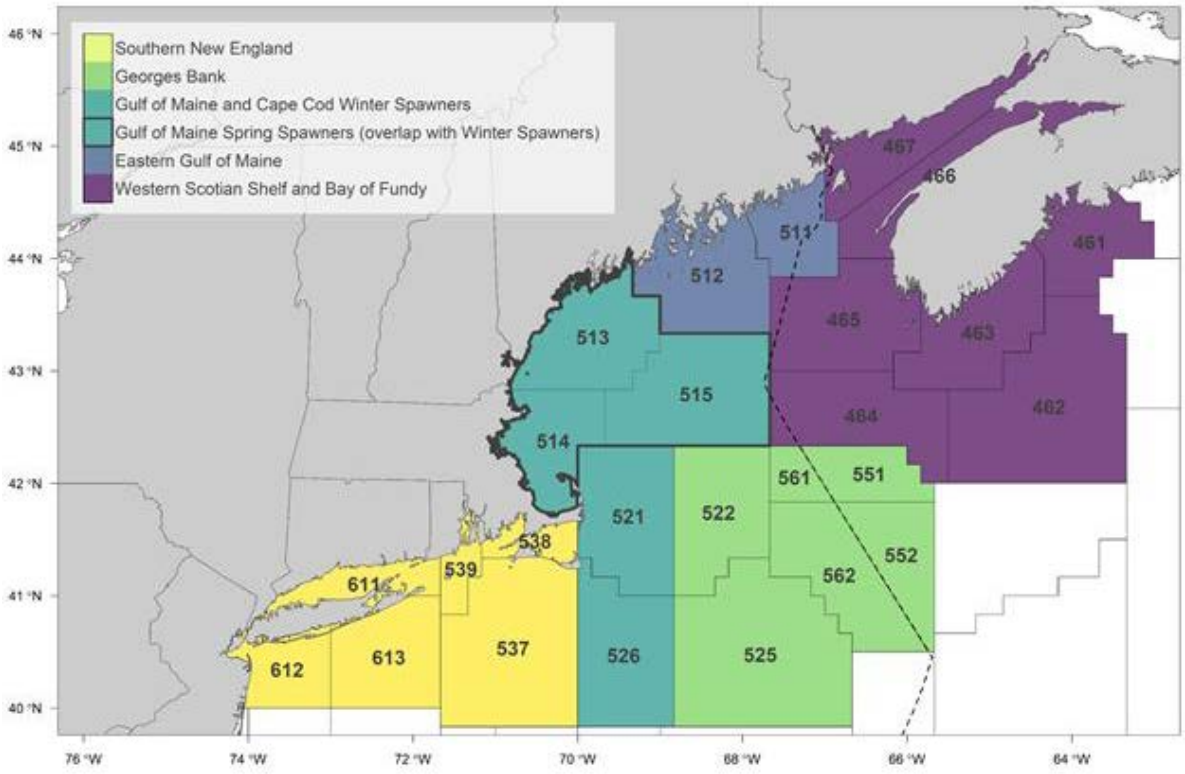
- Encompass locations and habitat features that are important to NEFMC-managed species, including
    - Coordinates that spatially bound the designation.
    - A list of habitat features, i.e., sediment types, associated structures, and/or prey species that are part of the designation.
- Identify life history stages (e.g., juvenile, adult) or activities (e.g., feeding, spawning) that the HAPC supports.
- Be more specific and focused than overlapping EFH designations so that the HAPC adds value to the EFH consultation process.
- Support development of conservation recommendations that lead to improved groundfish spawning protection, including protection of localized spawning contingents or sub-populations of stocks (e.g., Atlantic cod).
- Support development of conservation recommendations that lead to improved protection of critical groundfish habitats especially refuge for critical life history stages.
- Support development of conservation recommendations that will avoid and minimize other impacts to fish habitats.

Sources of information

Habitat and species information and data will be used to inform the designation of the HAPC. For habitat information, the Plan Development Team will consider using sediment data from U.S. Geological Survey, University of Massachusetts Dartmouth's School of Marine Science & Technology, and any available offshore wind project data that are available. For species information, the PDT will consider incorporating results from the Atlantic Cod stock structure working group, passive acoustic monitoring data, The Nature Conservancy's scour protection report and related information, the Northeast Regional Habitat Assessment information including trawl survey data, and literature related to potential impacts of development on habitats.

The 2020 Atlantic Cod Stock Structure Workshop concluded that instead of the two management unit stocks (Gulf of Maine and Georges Bank units), there are five distinct biological cod stocks, including Georges Bank cod in the eastern part of the region. This proposed five biological stock determination is based upon genetic variation, movements, spawning locations and seasons, and larval dispersal.

Map 3. Proposed biological stock structure of Atlantic cod in NAFO division 5 and adjacent division 4X. Source: Atlantic Cod Stock Structure Working Group 2020.



Next steps

As requested by the Committee and the Council, the Plan Development Team can continue to refine the problem statement, rationale, and objectives for the HAPC. In addition, the Plan Development Team can continue to consider HAPC examples from other regions, assemble spatial data and relevant literature, consult with experts (e.g., Northeast Fisheries Science Center staff who have conducted acoustic research in the region and members of the Groundfish Plan Development Team on cod issues), identify focal species and elements of their essential fish habitat to include within the designation, and draft spatial boundary alternatives.