New England Fishery Management Council

MID-ATLANTIC FISHERY MANAGEMENT COUNCIL

October 21, 2024

Seth Theuerkauf
Bureau of Ocean Energy Management
Office of Renewable Energy Programs
45600 Woodland Road
Sterling, Virginia 20166

Dear Dr. Theuerkauf,

Please accept these comments from the Mid-Atlantic Fishery Management Council (Mid-Atlantic Council), the South Atlantic Fishery Management Council (South Atlantic Council), and the New England Fishery Management Council (New England Council) on the call for information and nominations for a potential second round of leasing in the Central Atlantic (referred to as Central Atlantic 2).

All three Councils manage species that overlap the Central Atlantic 2 Call Area. The Mid-Atlantic Council manages more than 65 marine species[1] in federal waters and is composed of members from the coastal states of New York to North Carolina (including Pennsylvania). The South Atlantic Council manages over 64 finfish, crustaceans, and coral species and is composed of members from North Carolina to the east coast of Florida. The New England Council has primary management jurisdiction over 28 marine fishery species in federal waters and is composed of members from Maine to Connecticut. In addition to managing these fisheries, all three Councils have enacted measures to identify and conserve essential fish habitats (EFH), protect deep sea corals, and sustainably manage forage fisheries.

Our Councils support efforts to mitigate the effects of climate change, including the development of renewable energy projects, as long as risks to the health of marine ecosystems, ecologically and economically sustainable fisheries, and ocean habitats are avoided. To the extent that these impacts cannot be avoided, they should be minimized, mitigated, or compensated. While the Councils recognize the importance of offshore wind energy development to U.S. economic security and efforts to mitigate climate change, the marine fisheries throughout the East Coast are profoundly important to the social and economic well-being of communities in this region and provide numerous benefits to the nation, including domestic food security.

Our key recommendations are as follows. Additional details are provided below.

- BOEM should adopt the recommendations in the wind energy policies established by the Mid-Atlantic and New England Councils, which align with pending updates to the South

[1] Fifteen species are managed with specific Fishery Management Plans, and over 50 forage species are managed as "ecosystem components" within the Mid-Atlantic Council's FMPs.

Atlantic Council's Energy Exploration, Development, Transportation and Hydropower Re-Licensing Policy.

- The following specific areas should be excluded from all stages of offshore wind energy development and should be treated as constraints in the ongoing suitability modeling exercise:
    - Deep sea coral and sponge habitats, including all designated protection zones and other coral areas;
    - Scallop rotational areas, specifically the Elephant Trunk and the Hudson Canyon areas;
    - Areas that overlap with high activity of the surf clam fishery;
    - Habitat Areas of Particular Concern (HAPCs);
    - Hard bottom and structured complex habitats;
    - Artificial reefs;
    - Shelf break and coastal areas crucial for marine species; and
    - Shipping safety fairways.
- Other important commercial and recreational fishing and transiting areas should be modeled as low suitability for offshore wind energy development. BOEM should work with NMFS and the Councils to define these areas, to consider their relative importance, and to identify which areas to avoid for any final Wind Energy Area (WEA).
- Impacts to fishery-independent surveys must be minimized and mitigated.
- Several proposed data layers (as detailed below) should be excluded from suitability modeling at this stage as they are not highly relevant and could down-weight the importance of other more important data layers.
- Transmission planning should be considered as part of any WEA delineation as environmental impacts of transmission cables can vary substantially depending on the area.
- Fine-scale habitat mapping is needed and should be done prior to any leasing to avoid adverse impacts from offshore wind development to vulnerable habitat.
- All datasets should include the most recent information possible and should use multiple years of data where appropriate.
- BOEM should share the suitability modeling results, including the results of informative sensitivity runs, with the public and clearly articulate how the results influenced the delineation of any WEAs.

General Comments

BOEM should consider the recommendations listed in the wind energy policies adopted by the Mid-Atlantic and New England Councils.[2] These recommendations apply across all wind energy

[2] Available at https://www.mafmc.org/s/MAFMC_wind_policy_Dec2021.pdf.

projects. The Mid-Atlantic and New England Councils worked together on and adopted the same wording for these policies. The South Atlantic Council is in the process of updating their Energy Exploration, Development, Transportation and Hydropower Re-Licensing Policy[3] to include wind energy development. It is anticipated that an updated policy with language that is very similar to the Mid-Atlantic and New England policies will be approved by the South Atlantic Council no later than March 2025.

BOEM must first seek to avoid negative impacts of offshore wind energy development on marine ecosystems, ecologically and economically sustainable fisheries, and marine habitats. To the extent these impacts cannot be avoided, they must be minimized, mitigated, and compensated.

We appreciate that many improvements have been made in the offshore wind energy planning process over the past several years, including greater coordination with states, other agencies, and the public at early stages. We also appreciate the continued partnership with NCCOS and the increased transparency and opportunities for input in early stages of the analysis, including through regional data workshops.

Areas to Exclude from Wind Energy Development

As described in more detail below, the following areas should be excluded from all stages of offshore wind energy development, including construction, operations, and decommissioning for all project components, including turbines, substations, cables, and other components. These areas should be treated as constraints in the ongoing suitability modeling and removed from further consideration for Central Atlantic 2 and all other future offshore wind planning exercises. These areas are not listed in priority order.

- Deep sea coral and sponge habitats, including the entirety of the Frank R. Lautenberg Deep Sea Coral Protection Zones and areas protected by the South Atlantic Council;
- Scallop rotational areas, specifically the Elephant Trunk and Hudson Canyon areas;
- Areas with high surf clam fishing activity;
- Habitat Areas of Particular Concern (HAPCs);
- Other coral areas;
- All complex habitats;
- All artificial reefs;
- The shelf break;
- Coastal areas including estuaries, mangroves, buttonwood, and mud bottom used by shrimp; and
- Proposed shipping safety fairways along the Atlantic Coast, as identified by the U.S. Coast Guard.

[3] The current version of this policy is available at https://safmc.net/documents/policy-for-the-protection-and-restoration-of-essential-fish-habitats-from-energy-exploration-and-development-activities/.

Deep Sea Coral and Sponge Habitats

Deep sea corals form ecologically important and sensitive habitats. Most deep-sea corals are slow-growing and fragile; therefore, damage caused by the installation, maintenance, operations, and decommissioning of offshore wind energy projects must be completely avoided. We recommend setting a 20 km buffer[4] around coral management areas designated by the Councils, around coral observations, and around modeled coral habitat to ensure that development activities do not impact the features of these sites.

Call Areas E and F should be removed from further consideration to help avoid negative impacts to deep sea coral and sponge habitats. Between December 2021 and August 2023, the Mid-Atlantic and New England Councils sent four comment letters to BOEM[5] recommending that Call Areas E and F not be considered for offshore wind energy development due to their overlap with deep sea coral habitats and the Frank R. Lautenberg Deep Sea Coral Protection Zones. We maintain that recommendation. These areas include known and likely coral presence. Placing wind energy structures, including foundations, inter-array cables, and export or transmission cables, in the Frank R. Lautenberg Deep Sea Coral Protection Zones would negate protections established by the Mid-Atlantic Council after a multi-year, thorough, transparent, and stakeholder-driven process. These areas were defined based on a combination of records of coral presence[6] and habitat suitability modeling.[7] Use of all types of bottom-tending commercial fishing gears (including, but not limited to, bottom-tending otter trawls, bottom-tending beam trawls, hydraulic dredges, non-hydraulic dredges, bottom-tending seines, bottom longlines, pots/traps, and sink or anchored gillnets) are prohibited within these areas, with narrow exemptions for transit, lobster trap gear, and red crab trap gear (81 Federal Register 90246, 12/14/2016; 50 CFR § 648.372). The prohibitions are not fishery-specific, and the same restrictions apply to all discrete coral zones and in the broad coral zone.

The Frank R. Lautenberg Deep Sea Coral Protection Areas extend as far south as the boundary between the Mid-Atlantic Council and the South Atlantic Council. Deep sea corals are present south of this boundary. Therefore, removing the Frank R. Lautenberg Deep Sea Coral Protection

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[4] Jones R, Fisher R, Bessell-Browne P. Sediment deposition and coral smothering. PLoS One. 2019 Jun 19;14(6):e0216248. doi: 10.1371/journal.pone.0216248. PMID: 31216275; PMCID: PMC6584000. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6584000/#pone.0216248.ref023

[5] MAFMC and NEFMC Letter to BOEM: NOI for the Central Atlantic Wind Energy Areas off Delaware, Maryland, and Virginia (8/30/23)

MAFMC and NEFMC Letter to BOEM: Central Atlantic Draft Wind Energy Areas (12/16/22)

MAFMC and NEFMC Letter to BOEM: Central Atlantic Call for Information and Nominations (6/28/22)

Letter from MAFMC to BOEM on Central Atlantic Planning Areas and Coral Protection Areas (12/27/21)

[6] NOAA National Database for Deep Sea Corals and Sponges (Database version: 20211110-0). https://deepseacoraldata.noaa.gov/. NOAA Deep Sea Coral Research & Technology Program.

[7] Kinlan, B.; Poti, M.; Dorfman, D.; Caldow, C.; Drohan, A.; Packer, D.; Nizinski, M. (2016). Model output for deep-sea coral habitat suitability in the U.S. North and Mid-Atlantic from 2013 (NCEI Accession 0145923). Threshold Logistic Outputs for Alcyonacea. NOAA National Centers for Environmental Information (NCEI). https://www.ncei.noaa.gov/archive/accession/0145923.

Areas from further consideration is necessary but would not fully accomplish the goal of avoiding deep coral habitats.

Although development of the Frank R. Lautenberg Zones focused on structure-forming corals, BOEM should also consider data on the presence of and habitat suitability for sponges. Non-encrusting sponges are structure forming epifauna, fragile, and vulnerable to anthropogenic impacts. They are also a good proxy for hard bottom; therefore, protecting areas with known or likely sponge presence can also protect other sensitive habitats.

BOEM should also remove the South Atlantic Council's identified Coral HAPCs Big Rock, 10 Fathom Ledge, and the Point[8] from further consideration to avoid negative impacts to deep sea coral and sponge habitats. These areas include known and likely coral presence, which are ecologically important to the surrounding habitats. Placing wind energy infrastructure such as foundations or cables would damage these important and sensitive habitats.

BOEM should work with NOAA's Deep-Sea Coral Research and Technology Program to ensure all available coral and sponge data have been integrated into the analysis. It is important to note that the Central Atlantic 2 Call Areas have not been adequately surveyed for the presence of deep-sea corals and sponges. Therefore, a lack of coral or sponge records and/or poor habitat suitability based on a predictive model should not necessarily be interpreted as a lack of coral or sponge presence. The Councils strongly urge BOEM to develop high-resolution bathymetric maps for areas of the EEZ where seafloor terrain is poorly understood and offshore wind energy development may be considered, including where corals might be located. These types of maps were fundamental to the New England Council's development of coral management areas for the canyons south of Georges Bank, and similar mapping should be prioritized for the Central Atlantic region. If other areas of coral habitat are identified through future work, negative impacts to those areas must also be avoided.

Scallop Rotational Areas

Atlantic sea scallop rotational areas should be treated as constraints in the suitability modeling exercise given the high economic importance of this fishery, the high overlap with the Call Area, and the gear type used, which are incompatible with offshore wind energy projects. Scallop rotational areas are management units that open and close to maximize scallop yield and minimize bycatch and habitat impacts. The New England Council has been successfully utilizing rotational management in areas that overlap with the Central Atlantic 2 Call Area since 1998, when the Hudson Canyon South and Virgina Beach areas were closed through Emergency Action. In the Mid-Atlantic, these rotational areas have remained largely the same since their inception in the late 1990's, with the majority of fishing activity, and subsequent fishery revenue, occurring in areas known as the Elephant Trunk and Hudson Canyon South. The relative importance of the rotational areas is underscored by NMFS' assessment of impacted FMPs within the Call Area, which notes scallops would be the most impacted of the FMPs in terms of revenue over the time series. NOAA Fisheries reports that 127,365,000 pounds of scallop

[8] See the Latitude and Longitude for all South Atlantic Coral HAPCs: https://www.ecfr.gov/current/title-50/chapter-VI/part-622/subpart-K/section-622.224

landings in meat weight worth 1.46 billion dollars in revenue (2023 USD) have come from within the Call Area over the last 16 years (NMFS, October 15, 2024). Looking ahead, the 2024 independent scallop dredge survey of the Elephant Trunk area detected a strong cohort of scallops, and the area may close in 2025 and 2026 to protect these animals and improve yield per recruit. The overlap of this area with the Call Area is shown in Appendix Figure 1, with percentage of overlap included in Appendix Table 1. The most appropriate coordinates for scallop rotational areas that should be avoided are shown in Appendix Figure 2. Additional information on the overlap between the scallop fishery and the Call Area can be found in GARFO's Fishing Footprints socioeconomic reports.

Areas with High Surf Clam Fishing Activity

Areas with high surf clam fishing activity should be treated as constraints in the suitability modeling for similar reasons as described above for the scallop fishery, including economic importance, the high overlap with the Call Area, and the gear type used. For example, based on the Fishing Footprint data provided by NOAA Fisheries, 104,923,000 pounds of surf clam landings, corresponding to $83,821,000 of ex-vessel value (in 2023 dollars), were harvested within the Call Area over the last 16 years through 2023 (NMFS, October 15, 2024). The distribution of commercial surf clam fishing effort has changed over time, as shown in Figures 6 through 8 of the 2024 Surf Clam Fishery Information Document.[9] Most of the overlap with the Call Area is in the northern part of the Call Area off southern New Jersey through Maryland. BOEM should consult with NOAA Fisheries, the Mid-Atlantic Council, and the surf clam fishing industry to consider how to best consider spatial data on the surf clam fishery, including the changing distribution over time, and areas to exclude for any offshore wind development.

Habitat Areas of Particular Concern

Habitat Areas of Particular Concerns (HAPCs) are subsets of Essential Fish Habitat (see next section) that are rare, particularly susceptible to human-induced degradation, especially ecologically important, and/or located in an environmentally stressed area. Given their importance and vulnerability, HAPCs must be excluded from all future stages of offshore wind energy development and should be included as constraints in the ongoing suitability modeling.

Two HAPCs designated by the South Atlantic Council overlap the Call Area: the Charleston Bump and Shrimp HAPC. Although the Charleston Bump HAPC is a broad area, three different surveys[10] have shown or predicted that coral is present. The Shrimp HAPC, namely the mud

[9] This and other Fishery Information Documents for Mid-Atlantic Council species are available at https://www.mafmc.org/fishery-performance-reports.

[10] Mapping and Geomorphic Characterization of the Vast Cold-Water Coral Mounds of the Blake Plateau https://www.mdpi.com/2673-7418/4/1/2;

NOAA Deep Sea Coral Research and Technology Program Southeast Deep Coral Initiative (SEDCI) 2016-2019: Final Report https://spo.nmfs.noaa.gov/sites/default/files/TM_OHC9.pdf

Predictive Deep-Sea Coral Modeling: https://www.researchgate.net/publication/374841877_Data_Synthesis_and_Predictive_Modeling_of_Deep-sea_Coral_and_Hardbottom_Habitats_Offshore_of_the_Southeastern_US_Guiding_Efficient_Discovery_and_Protection_of_Sensitive_Benthic_Areas

bottom inshore habitat, should be avoided when planning transmission cable layout and placement.

The Mid-Atlantic Council has designated all native species of macroalgae, seagrasses, and freshwater and tidal macrophytes in any size bed, as well as loose aggregations, as HAPC for summer flounder. These habitats should also be avoided; however, given that they are not spatially delineated, they must be considered in other ways beyond the ongoing suitability modeling effort to define Wind Energy Areas. For example, nearshore construction activities, including the placement of export cables, should not occur in these areas.

Other Coral Areas

The South Atlantic Coral EFH designation contains identified reef areas and areas that are likely to have corals. These areas should be removed from any offshore wind leasing consideration.[11]

All Complex Habitats

Complex habitat is defined in NOAA Fisheries' March 2021 Recommendations for Mapping Fish Habitat[12] as: 1) hard bottom substrates; 2) hard bottom substrates with epifauna or macroalgae; and 3) vegetated habitats (e.g., submerged aquatic vegetation and tidal wetlands). Several species rely on complex habitats for shelter, especially during their early life history, for refuge from water flow and predation, and for feeding opportunities. Offshore wind energy development (including installation, maintenance, and decommissioning of turbine and substation foundations, scour protection, cables, and other project components) can alter and convert complex habitats in ways that can impair these habitat functions. Furthermore, hard bottom is generally incompatible or technically challenging with the placement of anchors, cables, and fixed foundations. Any surveyed areas that include cobble and boulder sediments would be disturbed by anchoring or installation of cables and should be avoided.

Artificial Reefs

There are many artificial reefs within the Central Atlantic 2 Call Area. Artificial reefs can serve similar habitat functions as described in the previous section for hard bottom habitats. Many artificial reefs are important fishing areas for gear types such as hook and line and pots/traps. Artificial reefs are popular recreational fishing spots, but some are also used for commercial fishing. Several artificial reefs were intentionally created for the purpose of creating new structured habitat to attract recreational fishery species. Appropriately placed artificial reefs have been shown to increase species richness and abundance in the surrounding areas. For these reasons, areas with artificial reefs are unsuitable for offshore wind energy development and should be treated as constraints in the ongoing suitability modeling.

BOEM should work with NOAA Fisheries and the states to determine the most appropriate data sets for the locations of artificial reefs. It may be appropriate to access artificial reef data from

[11] Coral EFH visualization: https://myfwc.maps.arcgis.com/apps/webappviewer/index.html?id=961f8908250a404ba99fac3aa37ac723

[12] Available at https://media.fisheries.noaa.gov/2021-03/March292021_NMFS_Habitat_Mapping_Recommendations.pdf?null.

multiple datasets into one combined artificial reef layer to avoid double counting the same reefs in the suitability modeling.

BOEM should reach out to individuals who fish on artificial reefs in this region, as well as scientists and managers, to seek consensus on the appropriate buffer distance between offshore wind energy construction, maintenance, and decommissioning activities and artificial reefs. The Mid-Atlantic Council has been involved in some conversations with BOEM and the state of New Jersey on this topic in the past. However, to our knowledge, an appropriate buffer distance has yet to be agreed upon.

The South Atlantic Council has identified 27 Special Management Zones (SMZs)[13] surrounding known artificial reefs in the Call Area. SMZs established under the Mid-Atlantic Council process that overlap with the Call Area include 5 SMZs off New Jersey (Ocean City Reef, Wildwood Reef, Deepwater Reef, Cape May Reef, and Townsend Inlet Reef) and three SMZs off Delaware (Delaware Artificial Reefs #9, #10, and #13). These SMZs were established to address gear conflicts as they were used by multiple gear types in commercial and recreational fisheries. As with all artificial reefs, these SMZs should be removed from consideration. Running cables or establishing infrastructure within the SMZs, and all other artificial reefs, must be avoided.

The Shelf Break

The shelf break should be avoided for all stages of offshore wind energy development. The shelf break marks the boundary between the continental shelf and the oceanic slope. In this unique habitat, upwellings deliver high nutrient water to marine life, creating a hot spot for unique organisms and diverse habitats. Additionally, the shelf break provides a migration corridor for many species, and impairing species movement with wind energy structures could interrupt migration patterns. We suggest using a spatial buffer of 20 km around the shelf break to mitigate acoustic, hydrodynamic, and sedimentary effects to these important habitats. Precaution is appropriate given that the effects of offshore wind energy structures on ocean circulation in this region are not well understood and are the subject of ongoing analyses.

Development of offshore wind energy projects in Call Areas E and F would require transmission cables to cross the shelf break, which would detrimentally impact sensitive habitats in those areas. This provides further justification for removing the entirety of Call Areas E and F from further consideration.

Port Access Route Study (PARS) Fairways

We recognize that the U.S. Coast Guard proposed a system of shipping safety fairways along the Atlantic Coast in January 2024. These proposed fairways overlap the Central Atlantic 2 Call Area, which is highly problematic. Any overlap should be removed from further consideration for offshore wind development. We recognize that BOEM considered the previously proposed fairways during the initial Central Atlantic 1 development and the proposed fairways were

[13] See the latitude and longitude for all SAFMC special Management Zones: https://www.ecfr.gov/current/title-50/chapter-VI/part-622/subpart-I/section-622.182#p-622.182(a)

changed. It is important that BOEM continue to engage with the U.S. Coast Guard to avoid any overlap with future WEA.

Important Areas to Consider in the Weighting Scheme

Spatial information for the following areas should be considered in the suitability modeling, with weighting that is appropriate to reflect their importance.

- Important commercial and recreational fishing and transiting areas
- Fishery independent survey areas

Unlike the areas described in the previous section, our Councils are not recommending that these areas be included as constraints at this stage, rather, we recommend designating these areas as low suitability for offshore wind development. Additional considerations for these areas are summarized below.

Important Commercial and Recreational Fishing and Transiting Areas

Several commercial, for-hire, and private recreational fisheries take place within the Call Area. For example, based on NOAA Fisheries Fishing Footprint data, fisheries managed by our Councils with high overlap based on landings or revenue include commercial sea scallops and surf clam fisheries, as well as for-hire fisheries for black sea bass, bluefish, summer flounder, red hake, gray triggerfish, dolphinfish, and blueline tilefish. This is not to say these are the only fisheries that should be considered, and the limitations of the Fishing Footprint data must be taken into account.

Areas with substantial commercial or recreational fishery overlap, including areas used for transit, are not suitable for offshore wind energy development. Our Councils do not recommend that these fishing areas be included as constraints in the suitability modeling at this stage; however, thorough consideration must be given to the appropriate methods for defining these areas and their relative weight in the suitability analysis.

BOEM should coordinate early and often with NOAA Fisheries (GARFO and SERO), as well as the ACCSP, to ensure all relevant data on commercial and recreational fishing and transit are considered, to understand the limitations of each data set, and determine how to appropriately incorporate confidential data. For example, vessel monitoring system (VMS) and Automatic Identification System (AIS) data are spatially precise; however, many important fisheries in our regions are not required to use VMS (e.g., black sea bass, summer flounder, scup, bluefish, golden and blueline tilefish, spiny dogfish, Declared out of Fisheries, monkfish, all for-hire and private recreational fisheries, and all fisheries managed by the South Atlantic Council except for Rock Shrimp off Georgia/Florida) or AIS (e.g., vessels smaller than 65 feet). Vessel Trip Reports (VTRs) are required for all vessels with federal commercial or for-hire recreational permits for species managed by the Mid-Atlantic and New England Councils. VTRs are therefore much more comprehensive than VMS; however, VTR data also have limitations. For example, VTRs are not required for private recreational fishing. VTR data in general are less spatially precise than VMS given VTRs only provide a single point that is representative of where a fishing trip occurred. In the South Atlantic, commercial and charter logbooks should be considered. These

contain single point locations similar to VTRs but contain information that could bolster the spatial analysis.

Spatial data are especially lacking for private recreational fishing. Novel approaches such as analysis of georeferenced cell phone application data may be useful for assessing private recreational fishing effort, but also have limitations.[14] Additionally, citizen science approaches and state-based surveys could fill in recreational data gaps and help inform BOEM on where private recreational fishing takes place.

Given the limitations of all these data sets, it will be important to work with commercial and recreational fishery participants to understand fishing and transit patterns that are not captured in the available data.

When considering landings and revenue data, BOEM should consider ways to ensure that fisheries with the highest values do not unintentionally negate the importance of other fisheries. As we have stated in past comment letters to BOEM, fisheries importance should not be measured solely based on dollar value or volume of landings. BOEM should also consider other metrics of socio-economic importance (e.g., a seasonally or locally important fishery, or a lower value species that is used as bait for a higher value species).

Patterns in fisheries landings, revenues, the distribution of fishing effort, and transit can vary seasonally and across years for a variety of reasons. Therefore, we generally recommend using the most recent 10 years of data to account for these variations when defining important fishing and transiting areas. We also recommend caution when using averages to summarize fisheries data as averages may not accurately describe the importance of fisheries. When considering scallop landings and revenues, it is important to note that the spatial distribution of fishing effort is impacted by rotational management areas, as previously described.

It is also important to consider that fisheries will be impacted by the many other wind energy projects already in development along the East Coast. We are very concerned about cumulative impacts from offshore wind energy development on commercial and recreational fisheries.

Fishery-Independent Survey Areas

We continue to have significant concerns about the cumulative impacts of offshore wind energy development on fisheries independent surveys. Degradation of the quality of data collected from these surveys could translate into greater uncertainty in stock assessments, the potential for more conservative fisheries management measures, and resulting impacts on fishery participants and communities. We are encouraged by BOEM's commitment to working with NOAA on long term solutions to this challenge through the regional programmatic Federal Survey Mitigation Program including the development of Northeast Fisheries Science Center (NEFSC) fisheries survey mitigation plans.[15] Nevertheless, cumulative impacts to NOAA Fisheries scientific surveys need to be correctly described and appropriately considered through all stages of

[14] For example, see DePiper, G., D. Corvi, S. Steinback, D. A. Arrington, R. Blalock, and N. Roman. 2023. Leveraging data from a private recreational fishing application to begin to understand potential impacts from offshore wind development. ICES Journal of Marine Science. 2023 (00) 1-11. 11 p. DOI: 10.1093/icesjms/fsad154

[15] https://www.fisheries.noaa.gov/event/peer-review-draft-nefsc-fisheries-survey-mitigation-plans

offshore wind energy development with a focus on minimizing impacts rather than relying on mitigation.

Data Layers <u>Not</u> Recommended for Inclusion in the Suitability Modeling at this Stage

We appreciate that BOEM has provided a detailed list of data layers under consideration for suitability modeling. Based on our understanding of the suitability modeling methods, inclusion of a high number of data layers can down-weight the importance of any single data later. In addition, "double counting" of some information can inappropriately reduce the importance of other data. We have reviewed the list of potential data layers provided by BOEM and recommend that EFH (with the exception of South Atlantic Coral EFH) and several fishery management areas established by our Councils ***<u>not be included</u>*** in the suitability modeling at this stage. For the reasons described below, these potential data layers are not the best sources of information for evaluating suitability for offshore wind energy development. Other data sources, as summarized in the prior sections of this letter, are better suited for identifying important commercial and recreational fishery areas, important and sensitive marine habitats, marine species distributions, and other relevant considerations.

EFH is defined as "those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity." EFH designations require additional consideration before any federal agencies are allowed to carry out activities in those areas. EFH must be considered before BOEM approves any wind energy development activities in areas that overlap with EFH, including considerations for development of avoidance, minimization, mitigation, and monitoring measures. EFH designations are useful for triggering additional considerations and consultations; however, they are generally not well suited for defining the most important habitats because they often cover very broad areas. It is also worth noting that the Mid-Atlantic Council, in collaboration with the New England Council, is in the process of developing an Omnibus EFH Amendment concurrently with a review of EFH for all Mid-Atlantic Council managed species. [16] Additionally, the South Atlantic Council is working on a five-year plan to improve their EFH criteria, which could change the definition of EFH for all South Atlantic Council FMPs. For these reasons, we recommend that EFH designations other than the South Atlantic's Coral EFH not be used as a data layer in the ongoing suitability modeling.

Several fishery management areas established by our Councils are included in the list of potential data layers for suitability modeling. When considering whether to include any fishery management areas, BOEM should evaluate the purpose of the management area and whether that purpose is relevant to this spatial planning exercise. Many of these areas were implemented to achieve objectives such as reducing bycatch, minimizing gear conflicts, or protecting human health. These areas do not necessarily represent areas of highest abundance of any species or the most important fishing areas. Therefore, we recommend that the following areas included on the list of potential data layers **<u>not</u>** be included in the suitability modeling exercise at this stage:

- Scup Gear Restricted Areas (GRAs)
- Scup transfer at sea boundary

[16] More information is available at https://www.mafmc.org/actions/omnibus-efh-amendment.

- Surf clam environmental degradation closures
- *Illex* fishery mesh exemption area
- Summer flounder sea turtle protection area
- Southern New England dogfish gillnet mesh exemption area
- Southern New England regulated mesh area
- Southern New England exemption area
- Southern New England monkfish and skate trawl exemption area
- Southern New England monkfish and skate gillnet exemption area
- South Atlantic Fishery Management Council Rock Shrimp VMS

We understand that the list of potential data layers currently posted on the BOEM website is in the process of being updated. It is worth noting that this database was at least partially updated during the public comment period without clear rationale on what and why certain data layers were changed and includes some erroneous links. For example, specific information and concerns on scallop fishery-related data layers is included in Table 3 of the Appendix. As far as we understand, this data layer update was only provided to the Central Atlantic 2 data workshop participants and has not yet replaced the version on BOEM's website. The same information should be made publicly available. If new fishery management areas are added to this list, BOEM should consult with NOAA Fisheries and the Councils to determine which areas are most relevant.[17]

Other Comments

BOEM should consider how to best incorporate data from the NEFSC fisheries independent trawl surveys and the South Atlantic Deepwater Longline Survey to provide information on the distribution of potentially impacted marine species and their habitat usage. It is important to note that the distribution of fishing effort is influenced by many factors in addition to the distribution of target stocks (e.g., fishery regulations, market factors, availability of other target species, and other factors). Therefore, the suitability modeling exercise should include both fishery dependent and fishery independent data to get a more complete picture of species distributions and to more comprehensively evaluate potential suitability for offshore wind energy development.

BOEM should share the suitability modeling results, including the results of informative sensitivity runs, with the public and clearly articulate how the results influenced the delineation of any WEAs. It is worth noting that sensitivity runs for suitability analysis were done for the Gulf of Maine NCCOS suitability modeling. This information should be shared when the draft WEAs are published to inform public comment prior to finalization of the WEAs and identification of lease areas. Ideally, the analysis should be peer reviewed.

Our Councils remain concerned that the locations and impacts of offshore export cables are not given the same level of analysis and thorough consideration as the location of lease areas.

[17] In 2023, the fishery management councils released a report summarizing conservation areas within the U.S. Exclusive Economic Zone. This report may be useful for determining which habitat conservation areas may be most relevant for BOEM to consider. More information is available at https://www.mafmc.org/newsfeed/2023/us-fishery-management-council-report-conservation-areas.

Transmission planning should be considered as part of any WEA delineation as environmental impacts of transmission cables can vary substantially depending on the area and given what is technologically and economically feasible. As previously stated, depending on where power is brought to shore, these cables could impact important fishing grounds and sensitive habitats, including HAPC designated by the Mid-Atlantic Council and the South Atlantic Council and the shelf break. We recommend that BOEM develop requirements for coordinated transmission across multiple lease areas and projects such as shared cable corridors. BOEM should consider the recommendations discussed during the March 2024 workshop on offshore wind energy transmission hosted by the Mid-Atlantic Regional Council on the Ocean.[18]

When planning the development of lease areas, the entire life cycle of the project needs to be considered. All projects should be designed to avoid or minimize impacts on ecosystems including when the project has been decommissioned and materials need to be removed. Contingency plans need to be in place for catastrophic events. Decommissioning should include coordination with state and federal agencies to determine ownership, permitting, and monitoring of potential reef development, colonization, and the potential for subsequent recreational/commercial uses following removal of project components (e.g., foundations, cables, cable armoring, and scour protection).

The Councils recommend coordination with researchers to consider possible multiple uses for wind platforms, such as innovative monitoring technologies to collect acoustic telemetry, meteorological data, and exploration of innovative sampling technologies, as well as new floating offshore wind energy technologies. Monitoring should occur at least two years before, during, and after construction for the life of the project at regular intervals. Consideration should be given to include low risk and minimally invasive research projects into fishery monitoring plans earlier than two years, if feasible, to accrue as much baseline data as possible. Research and monitoring need to be conducted through the project's timeline and at project and regional scales to understand project-specific and cumulative effects on aquatic species, habitats, and ecosystems. Important research topics include, but are not limited to, acoustic issues, including impacts of geotechnical and geophysical surveys, benefits of applying additional noise dampening technology during construction or operations, and differential acoustic impacts of larger vs. smaller turbines on the ecosystem, especially impacts on fish behavior. All monitoring and research data should be made publicly available on a timely and regular basis, while protecting fishermen’s confidential business information.

Conclusion

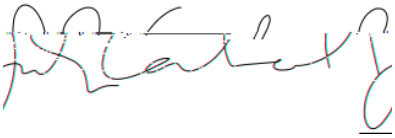
We appreciate the opportunity to provide comments to BOEM to ensure that issues of social and ecological importance are considered through the next steps for Central Atlantic 2. We look forward to working with BOEM to ensure that any wind development in our region avoids and minimizes impacts on the marine environment and can be developed in a manner that ensures coexistence with our regional fisheries.

[18] The final report of this workshop is available at https://www.mafmc.org/s/MARCO-Offshore-Wind-Transmission-Siting-Workshop-March-2024-Summary.pdf

Please contact us if you have any questions.

Sincerely,

Dr. Christopher M. Moore
Executive Director, Mid-Atlantic Fishery Management Council



John Carmichael
Executive Director, South Atlantic Fishery Management Council

Dr. Cate O'Keefe
Executive Director, New England Fishery Management Council

Appendix

The figures and data tables included below denote the overlap between the Call Area with the Atlantic sea scallop fishery. The New England Council can provide these shapefiles to BOEM if desired.

Overlap with Scallop fishery:

Figure 1. Central Atlantic Call Area 2 overlaid with scallop survey and estimation areas (Scallop Area Management Simulator (SAMS) areas), and the Elephant Trunk and Hudson Canyon South Scallop Rotational Areas.

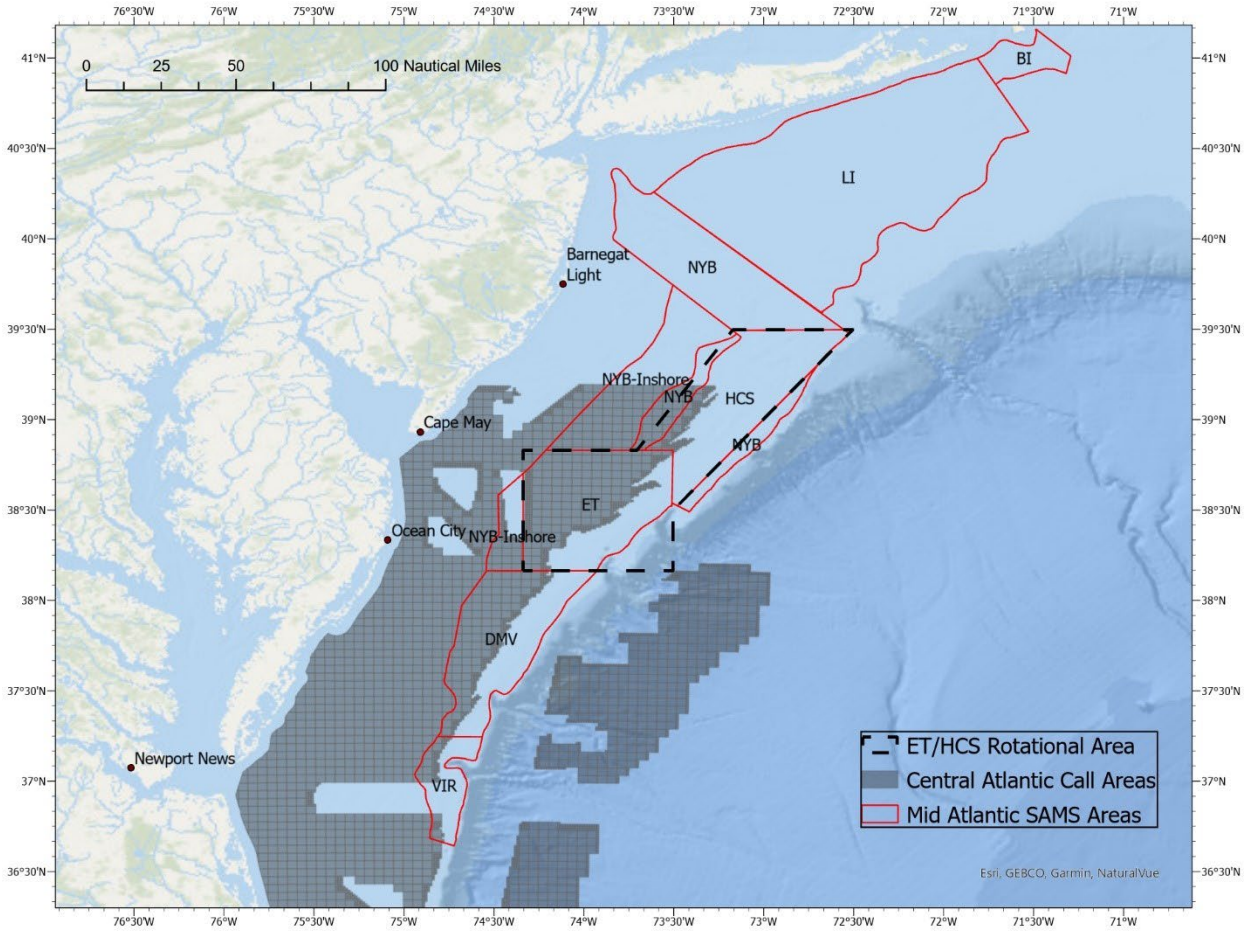


Table 1. Percentage of Central Atlantic Call Area 2 overlap with Scallop SAMS areas, shown in Figure 1.

SAMS area	% overlap with Call Area
Hudson Canyon South (HCS)	10%
Delmarva (DMV)	55%
New York Bight Inshore (NYB)	49%
Elephant Trunk (ET)	68%
New York Bight (NYB)	66%
Virginia Beach (VIR)	28%

Figure 2. Elephant Trunk and Hudson Canyon South Rotational Access Areas (as one polygon), with coordinates.

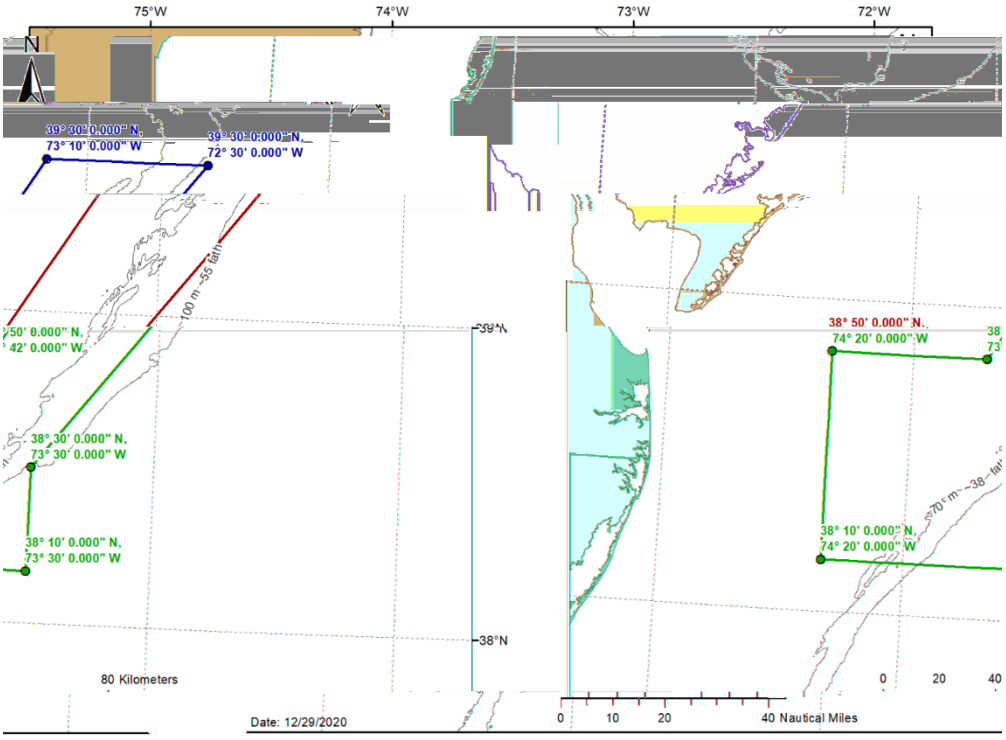


Table 3. New England Council feedback on Atlantic sea scallop-related data layers provided to Central Atlantic 2 data workshop participants on October 16, 2024 (e.g., Version 2, not the version on BOEM's Central Atlantic webpage).

Focus	Session Tab	Row	Subsession	Dataset	Time series	Comment
Scallop	Natural Resources	51	Survey Data	sea scallop biomass, meat weight (kg) - draft	1966-2014	Update and extend the data range to include more recent survey information. This will entail working with VIMS, as VIMS (not NMFS) has been completing the dredge survey of the Mid-Atlantic. This data should be available from NMFS in the dredge database, or through Dr. David Rudders at VIMS.
Scallop	Natural Resources	52	Survey Data	Sea Scallops 2003-2012 Abundance	2003-2012	Extend the data range to include more recent survey information. Work with Dr. Kevin Stokesbury's SMAST lab for access to data.
Scallop	Natural Resources	111	Survey Data	Sea Scallop Relative Abundance		The link in the excel table is broken, unclear what this dataset represents.
Scallop	Fisheries & Aquaculture	13	Boundaries & Management Areas	Sea scallop rotational Areas Fishing Year 2024	2024 Only	To better reflect past and future scallop rotational management areas, use boundaries provided in letter, which include Elephant Trunk and Hudson Canyon.
Scallop	Fisheries & Aquaculture	15	Boundaries & Management Areas	Atlantic Sea Scallop Rotational Areas	2023 Spatial Management.	For this process, use one layer for rotational areas that overlap with the call area. Use boundaries noted in comment above, remove this layer.
Scallop	Fisheries & Aquaculture	22	Fisheries Survey Data Products	NEFSC Sea Scallop Survey		NEFMC can provide a polygon file of areas that are surveyed for scallops annually.
Scallop	Fisheries & Aquaculture	30	Landings	NOAA NEFSC Fishing Footprints: FMP Landings and Revenue, Gear Type Landings and Revenue 2011-2020		NEFMC supports using this data layer.