

DEPARTMENT OF THE INTERIOR

Bureau of Ocean Energy Management

[Docket No. BOEM-2022-0072]

Draft Wind Energy Areas – Commercial Leasing for Wind Power Development on the Central Atlantic Outer Continental Shelf (OCS)

AGENCY: Bureau of Ocean Energy Management (BOEM), Interior.

ACTION: Draft Wind Energy Areas; request for comments.

SUMMARY: This Draft Wind Energy Area (WEA) notice (the notice) invites public comment on the Draft WEAs on the OCS offshore the U.S. Central Atlantic coast. BOEM will consider information received in response to this notice to identify Final WEAs as part of the Area Identification (Area ID) process. Those interested in providing comments and information regarding site conditions, resources, and multiple uses in close proximity to or within the Draft WEAs should provide the information requested in section 8, “Requested Information from Interested or Affected Parties.” BOEM may or may not offer a lease for a commercial offshore wind energy project within the Draft WEAs after further government consultations, public participation, and environmental analyses.

DATES: Submit your comments on the Draft WEAs no later than 11:59 pm ET on Dec. 16, 2022. Late submissions may not be considered.

ADDRESSES: Please submit comments and information by either of the following two methods:

1. Federal eRulemaking Portal: <http://www.regulations.gov>. In the search box at the top of the webpage, enter BOEM-2022-0072 and then click “search.” Follow the instructions to submit public comments and to view supporting and related materials.
2. U.S. Postal Service or other mail delivery service. Send your comments and other information to the following address: Bridgette Duplantis, Bureau of Ocean Energy Management, Office of Leasing and Plans, 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123.

FOR FURTHER INFORMATION CONTACT: Bridgette Duplantis, Project Coordinator, Office of Leasing and Plans, Leasing and Financial Responsibility Section, 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123, Bridgette.Duplantis@boem.gov.

SUPPLEMENTARY INFORMATION:

1. Authority

This notice of Draft WEAs is published under subsection 8(p)(3) of the Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. 1337(p)(3), and its implementing regulations at 30 CFR 585.211.

2. Purpose

The work presented here is the result of a spatial suitability model developed by the National Oceanic and Atmospheric Administration (NOAA), National Centers for Coastal Ocean Science (NCCOS) and informed by the Bureau of Ocean Energy Management (BOEM), collectively referred to as the Central Atlantic WEA Siting Team (Team). The purpose of this report is to summarize the methods and analysis described in detail in the draft BOEM/NCCOS joint report entitled, “Development of the Central Atlantic Wind Energy Areas” and to solicit public comment.

3. Background

BOEM’s competitive lease issuance process requires a Call for Information and Nominations (Call), which requests comments from the public about areas of the outer continental shelf (OCS) that should receive consideration and analysis for the potential development of renewable energy (30 C.F.R. § 585.211(a)). At BOEM’s discretion, the Call may follow a Request for Interest (RFI) to inform the Call. For the Central Atlantic, BOEM decided it was not necessary to issue an RFI and moved directly to the Call. Comments received on the Call are then used to inform the Area ID process.

The Area ID process is a required step under the renewable energy competitive leasing process used to identify areas for environmental analysis and consideration for leasing (30 C.F.R. § 585.211(b)). The Area ID process takes into consideration multiple competing uses and environmental concerns that may be associated with a proposed area’s potential for commercial wind energy development. The development of Draft WEAs and seeking public comment on these areas are not required under BOEM’s regulations. However, in this instance BOEM believes that such processes will result in a more transparent and inclusive Area ID process.

BOEM prepares an Environmental Assessment (EA), pursuant to the National Environmental Policy Act (NEPA) before any lease sale. The objective of the environmental analysis is to estimate the nature, severity, and duration of impacts that might occur from site assessment and site characterization activities and to compare the impacts of the various alternatives for a proposed OCS wind energy lease sale. Potential impacts of a specific proposed renewable energy facility in the identified areas would be addressed during the review of a Construction and Operations Plan (COP) when post-lease sale information is available.

a. Development of the Draft Call for Information and Nominations

In December 2021 and January 2022, BOEM hosted a series of eight public meetings geared toward specific stakeholders, such as the commercial and recreational fishing industries, environmental non-governmental organizations, the maritime industry, and the wind energy industry. During these meetings, a Central Atlantic Planning Area was discussed (Figure 1), and feedback was collected. Incorporating feedback from these meetings as well as discussions with affected States, Federal partners, and tribal governments, BOEM delineated draft Call for Information and Nomination areas (Figure 2).

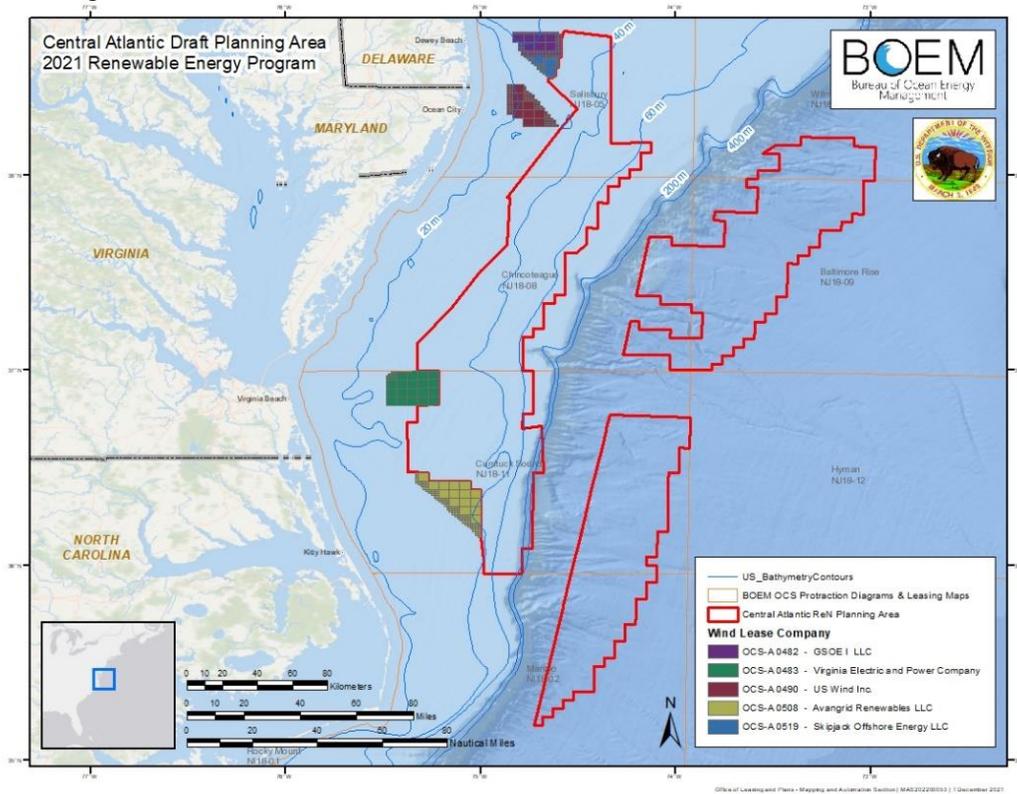


Figure 1: Central Atlantic Planning Areas

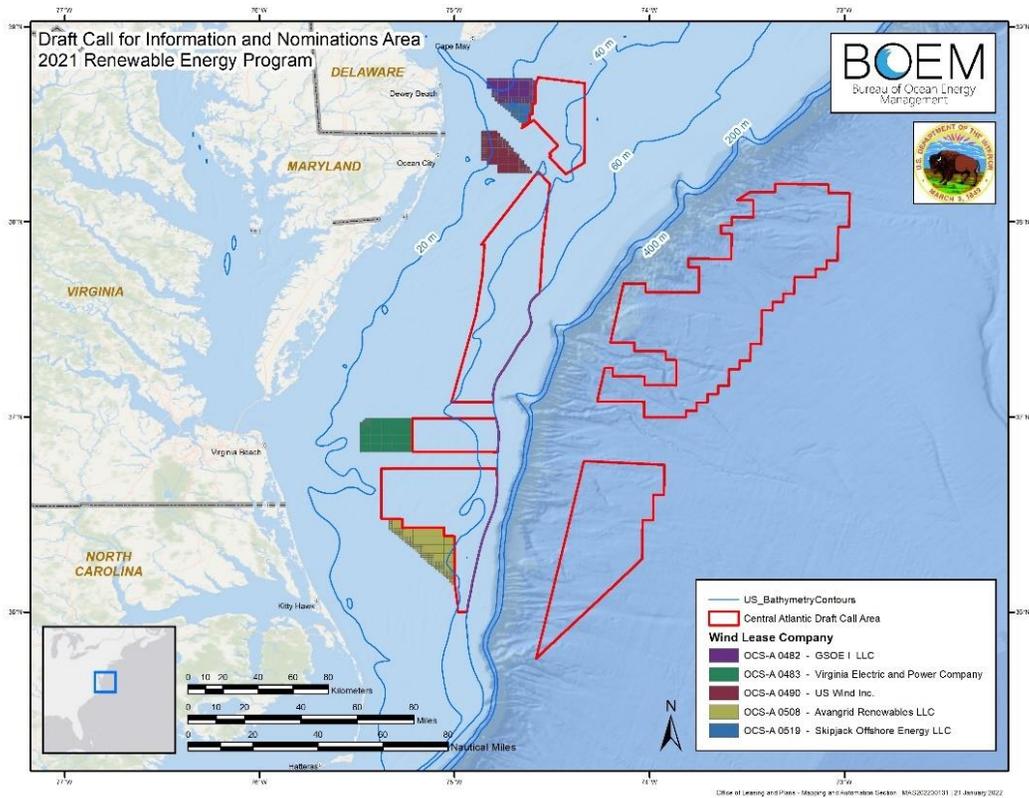


Figure 2: Central Atlantic draft Call for Information and Nominations Areas

b. Development of the Call for Information and Nominations

On February 16, 2022, BOEM convened the Central Atlantic Intergovernmental Renewable Energy Task Force and requested feedback on the draft Call areas from members. Public comment was also collected during the final hour of the virtual meeting. Considering all comments received, BOEM winnowed down the draft Call areas and published the Call for Information and Nominations on April 29, 2022 (Figure 3). The Call consisted of 6 areas labelled A-F. The comment period for the Call ended on June 28, 2022. BOEM received 66 comments, which are available at <https://www.regulations.gov/document/BOEM-2022-0023-0001>. BOEM received nominations from three wind energy companies, all of which have been legally, technically, and financially qualified. Nominations are available at <https://www.boem.gov/renewable-energy/state-activities/central-atlantic-activities>.

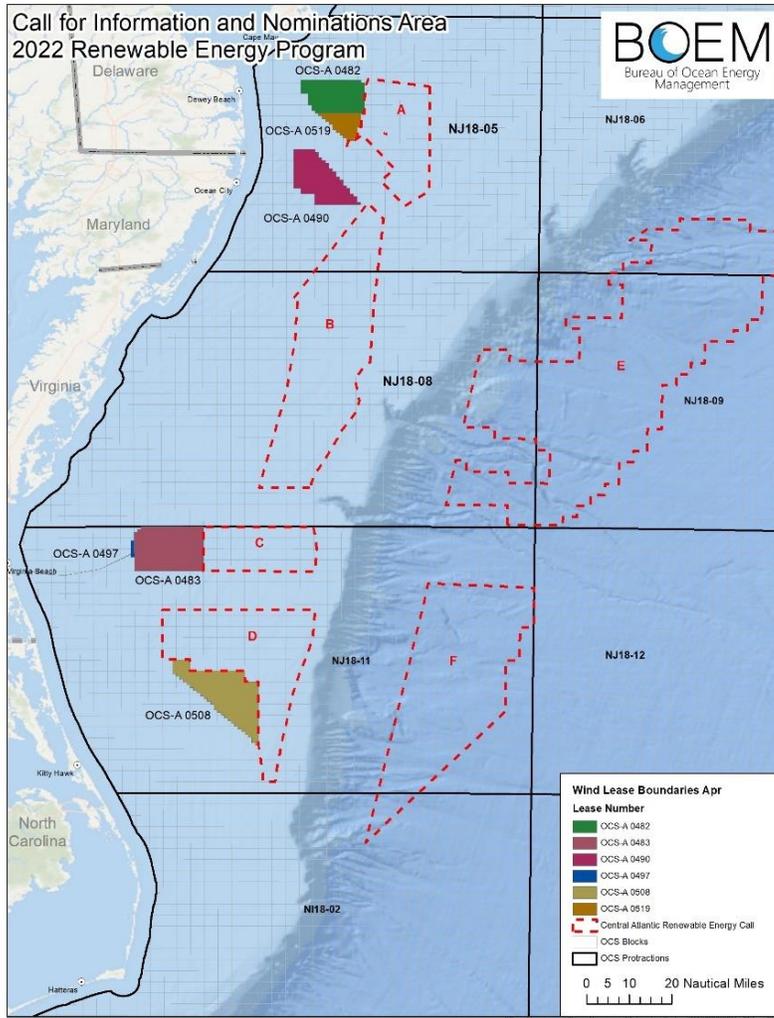


Figure 3: Central Atlantic Call for Information and Nominations Areas

4. Development of the Central Atlantic Draft WEAs

For purposes of identifying the Draft WEAs, BOEM considered the following non-exclusive information sources: comments and nominations received on the Call; information from the Central Atlantic Intergovernmental Renewable Energy Task Force; input from Delaware, Maryland, Virginia and North Carolina State agencies; input from Federal agencies; comments from stakeholders and ocean users, including the maritime community, offshore wind developers, and the commercial and recreational fishing industry; state and local renewable energy goals; and information on domestic and global offshore wind market and technological trends.

BOEM’s recommendations do not reflect a final assessment of the Department of Defense (DOD) regarding compatibility of the proposed WEAs with DOD needs. BOEM is coordinating with DOD’s Office of the Assistant Secretary of Defense (Energy, Installations

and Environment), Military Aviation and Installation Assurance Siting Clearinghouse, to incorporate a compatibility assessment into the spatial modeling described below.

BOEM has received ocean users’ requests to increase the transparency in the Area ID process and to consider leveraging an existing ocean planning model previously used in the Gulf of Mexico for NOAA’s Aquaculture Opportunity Area Atlases and the BOEM Gulf of Mexico Renewable Energy Area ID process. In response, BOEM has modified the Area ID process in a Notice to Stakeholders, which is available at <https://www.boem.gov/newsroom/notes-stakeholders/boem-enhances-its-processes-identify-future-offshore-wind-energy-areas>. This modified process is being used to support identification of Draft WEAs in the Central Atlantic (Figure 4).

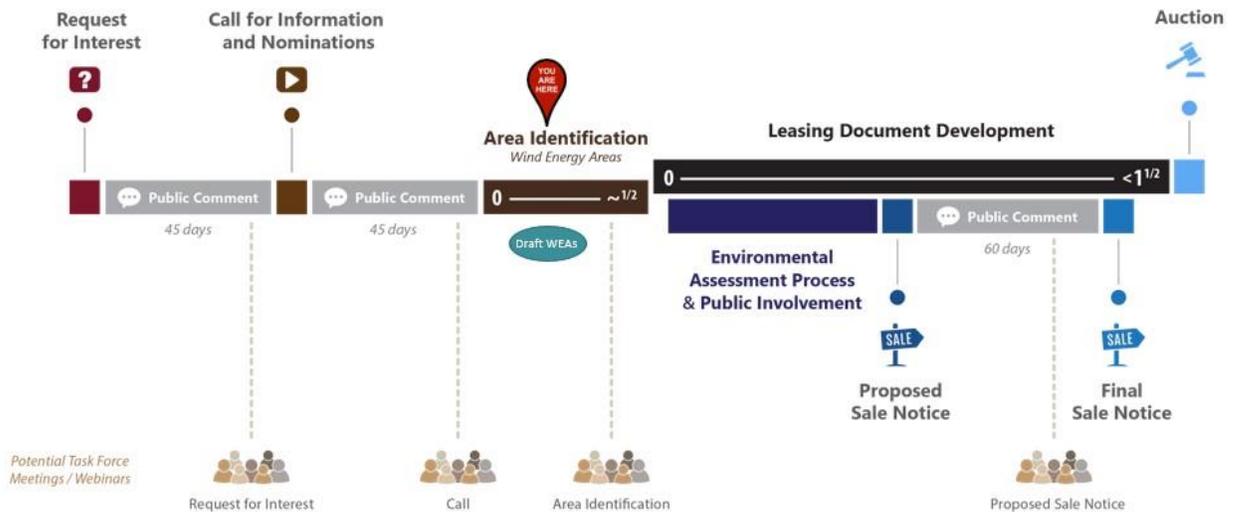


Figure 4: BOEM’s leasing process

a. Ocean Planning

BOEM’s process to identify Draft WEAs in the Central Atlantic was based on rigorous science with the goal of encouraging an informed, forward-looking, and sustainable wind energy industry that maximizes its operational efficiency and limits potential adverse interactions with other industries or natural resources. Additionally, the BOEM and NOAA NCCOS Team used an ocean planning tool to identify Draft WEAs in the Federal waters of the Central Atlantic. Due to the vast richness of data and decades of active management in the Central Atlantic, BOEM was able to apply this tool in this region. BOEM identifies Draft WEAs based on the best available science and through public engagement to facilitate wind energy development; support environmental, economic, and social sustainability; and minimize resource use conflicts. BOEM’s Area ID process seeks to identify and minimize potential conflicts in ocean space, as well as to mitigate interactions with other users and adverse interactions with the environment; the NCCOS model is a tool to help support this process.

b. Study Area

The Call Area, consisting of 3.9 million acres and shown in Figure 3, was used to define the study area boundaries.

c. WEA Planning

Historically, BOEM has engaged in similar ocean planning efforts in other OCS Regions. BOEM's ocean planning processes often follow a standard workflow: 1) identification of the planning objective; 2) inventory of data; 3) geospatial analysis of data; 4) interpretation of results; and 5) delivery of map products and reports to decision makers and ocean users. BOEM uses spatial data to represent known or potential environmental and ocean space use conflicts that could constrain, or conditionally constrain, the siting of offshore wind facilities in Federal waters. Using a multi-criteria decision analysis approach allows for evaluating numerous spatial data layers across diverse ocean uses. BOEM incorporates these data into a spatially explicit model to identify areas that are suitable for offshore wind development. Additionally, BOEM describes and identifies natural and cultural resources, industry and operations, various fishing activities, wind logistics, economics, and national security are described and identified in the WEA model suitability analysis, which is discussed in detail in the draft BOEM/NCCOS Joint Report, "Development of the Central Atlantic Wind Energy Areas," which can be found at <https://www.boem.gov/renewable-energy/state-activities/central-atlantic>.

Additionally, WEA siting informed by ocean planning is helpful in avoiding and minimizing adverse environmental, social, and existing user interactions. Throughout the Area ID process, BOEM used existing datasets to have focused discussions with specific ocean users to receive early feedback. BOEM incorporated the feedback from ocean users in the spatial and temporal planning strategies to allow initial compatibility to be assessed, while also increasing efficiency of meaningful communications within and among stakeholders, and potentially with industry. The decision maker then considers the Draft WEAs resulting from this analysis in making offshore wind leasing decisions in the Central Atlantic.

d. Ocean Planning Model

In BOEM's Area ID process, the identification of WEAs requires an understanding of the relationship between different elements of the environment and ocean use, as well as the practical requirements for offshore wind development. Developing a model for an expansive region like the Central Atlantic requires compilation and analysis of best-available data. BOEM developed a step-by-step approach for ocean planning using a logical workflow that began with framing the research questions (i.e., number of acres needed for a wind facility), data collection and inventory, then continued with spatial suitability modeling, identifying Draft WEA options using a unique precision siting modeling strategy, further characterization of options, and finally, interpretation of results (Figure 5). Each step of the workflow diagram corresponds to an essential step of the

study, with corresponding methods detailed in the “Development of the Central Atlantic Wind Energy Areas” draft report.

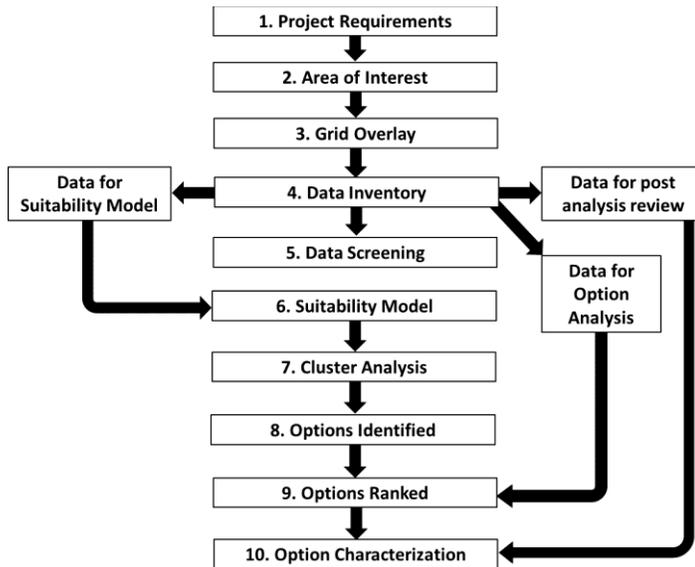


Figure 5: Workflow for Draft Wind Energy Area options spatial analysis

BOEM based its geospatial analysis for identification of Draft WEA options on a categorical framework to ensure relevant, comprehensive data acquisition and characterization for spatial suitability modeling. We developed an authoritative spatial data inventory that included data layers relevant to administrative boundaries, national security (i.e., military), navigation and transportation, energy and industry infrastructure, commercial and recreational fishing, natural and cultural resources, and oceanography. With over 200 data layers included in this analysis, the maps, models, and descriptions provide the most comprehensive marine spatial modeling in the Central Atlantic to date. Refer to the draft report, “[Development of the Central Atlantic Wind Energy Areas.](#)” for a complete description of the suitability modelling methods and results.

i. Geospatial Data

Acquisition of spatial data is a key factor in model success because it is the base for further calculations and analysis.¹ BOEM completed an initial review to determine the broad suite of data and categories needed to properly support this ocean planning process. BOEM then developed a comprehensive, authoritative spatial data inventory including data layers relevant to national security, natural and cultural resources, industry and operations, fisheries, logistics, and economics. BOEM developed the data holdings through engagement with non-

¹ Molina JL, Rodríguez-González P, Molina M-C, González-Aguilera D, Balairon L., Espejo Almodóvar F, Montejo J. 2013. River morphodynamics modelling through suitability analysis of geomatic methods. In: Wang Z, Lee JHW, Gao J, Cao S, editors. Proceedings of the 35th IAHR World Congress, Chengdu, China. Beijing: Tsinghua.

governmental organizations and U.S. Federal and State agencies representing a diverse array of stakeholders. The Marine Cadastre, the Mid-Atlantic Ocean Data Portal, and many studies conducted throughout the years by BOEM's environmental studies program were used to supply data for the study.

BOEM evaluated data for completeness and best quality, and used the most authoritative, up-to-date sources available. Refer to the "Development of the Central Atlantic Wind Energy Areas" draft report for a list of data used for this ocean planning analysis and which can be found at <https://www.boem.gov/renewable-energy/state-activities/central-atlantic>.

ii. Data Processing and Setbacks

While BOEM provided some datasets in a ready-to-use format, many datasets required processing prior to use in the suitability model, subsequent cluster analysis, or for the option ranking model and characterization. The methods that BOEM used to process that data is described for all data that required processing in "Development of the Central Atlantic Wind Energy Areas" draft report. BOEM received much of the data in a ready-to-use format and reviewed the processing metadata provided by the data originator. BOEM applied setbacks (i.e., buffers) when they were established by agency recommendation, policy, or regulations. In cases where an established setback requirement was not available from an authoritative source, BOEM used conservative professional judgment when assigning setback distances.

iii. Suitability Analysis

The Team performed a gridded relative suitability analysis, which is commonly used in a multi-criteria decision analysis, to identify the grid cells with the highest suitability for Draft WEA development in the Call Area. Spatial data layers included in the suitability analysis identify space-use conflicts and environmental constraints, such as active national security areas, maritime navigation, and natural resource management. A submodel structure to capture ocean use and conservation concerns including national security, natural and cultural resources, industry and operations, fisheries, wind energy logistics (distance to shore, distance to ports, depth, and average wind speeds), and constraints or "no-go areas" was used (Figure 6). This submodel structure ensures that each submodel is given equal weight in the final suitability model regardless of how many data layers are present in each submodel.

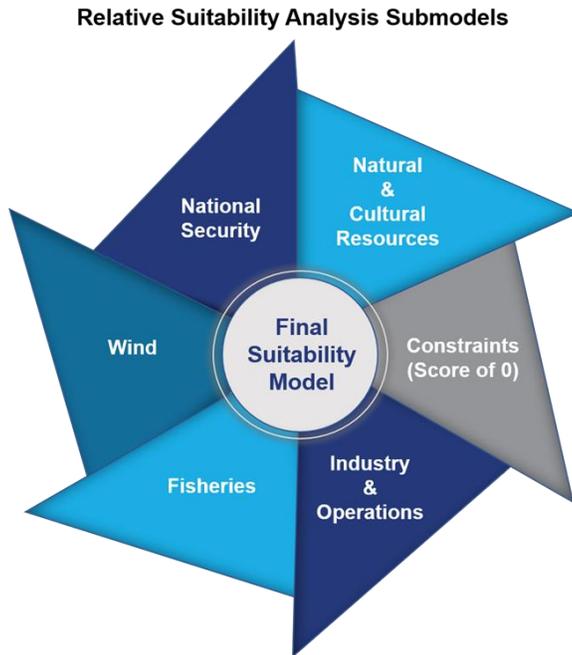


Figure 6: Overview of relative suitability model design and the submodel components. The constraints submodel includes all data layers with a score of 0; these data layers were removed before the remaining submodel scores were calculated.

iv. BOEM Data Scoring

The Team analyzed categorical datasets (i.e., in which data are distinct and separate groups) to determine if a constraining feature was present or absent in each grid cell. If a feature was absent, a score of 1 was given indicating suitability with offshore wind energy development, otherwise a score ranging from 0 to 1 was assigned (0 = unsuitable with offshore wind energy development; 1= most suitable with offshore wind energy development).

BOEM used the most conservative setback distances to avoid interactions with other ocean activities (Table 1). Constraints are reflected in data layers identifying areas of reduced compatibility (e.g., shipping fairways and deep-sea coral and sponge observations) and those areas are removed from further analysis. Table 1 and Figure 7 present a summary of the constraints that are likely to limit offshore wind energy development either because of environmental sensitivities or high level of conflict with other ocean industries. The constraints submodel in total overlapped with 24.91% of the Call Area, which at this time was removed from further consideration.

Data Layer	Setback Distances	Score	Cells Impacted	Percent Area Constrained
Deep Sea Coral and Sponge Observations	1000 m	0	2536	0.64%
Danger Zones and Restricted Areas	-	0	263	0.07%
NASA Wallops Flight Facility Exclusion Area	-	0	3,730	0.94%
Shipping Safety Fairways	-	0	93,161	23.59%
All Constraints			98,375	24.91%

Table 1: Constraints submodel data layers included in the relative suitability analysis. Each dataset in the constraints submodel was scored 0 for complete avoidance. A dash denotes when a dataset did not have a setback applied.

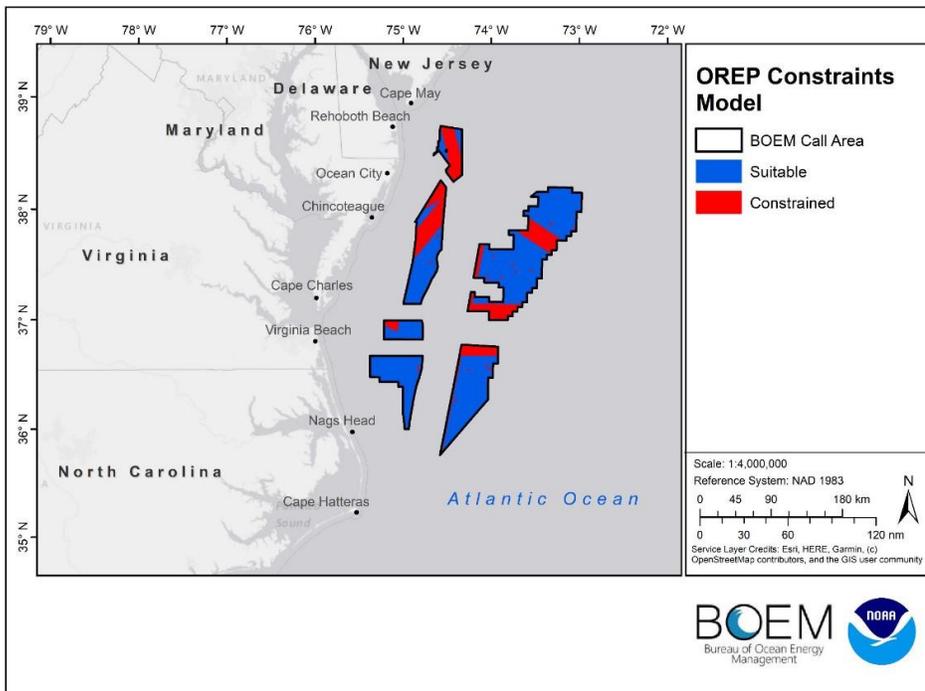


Figure 7: Constraints submodel relative suitability for the Call Area. Red color indicates those areas constrained by ocean activity, while blue areas are considered potentially suitable for offshore wind development.

v. Final Suitability

The Team calculated a final suitability score for each submodel by taking the geometric mean of all scores within each grid cell. We used the geometric mean of all submodels to calculate a final overall suitability score. We chose the geometric mean because it grants equal importance to each variable.² All data layers and submodels had equal weight within the suitability model. The final suitability results for all submodels are presented in Figure 8. The Team identified several potentially suitable areas off the Central Atlantic Coast.

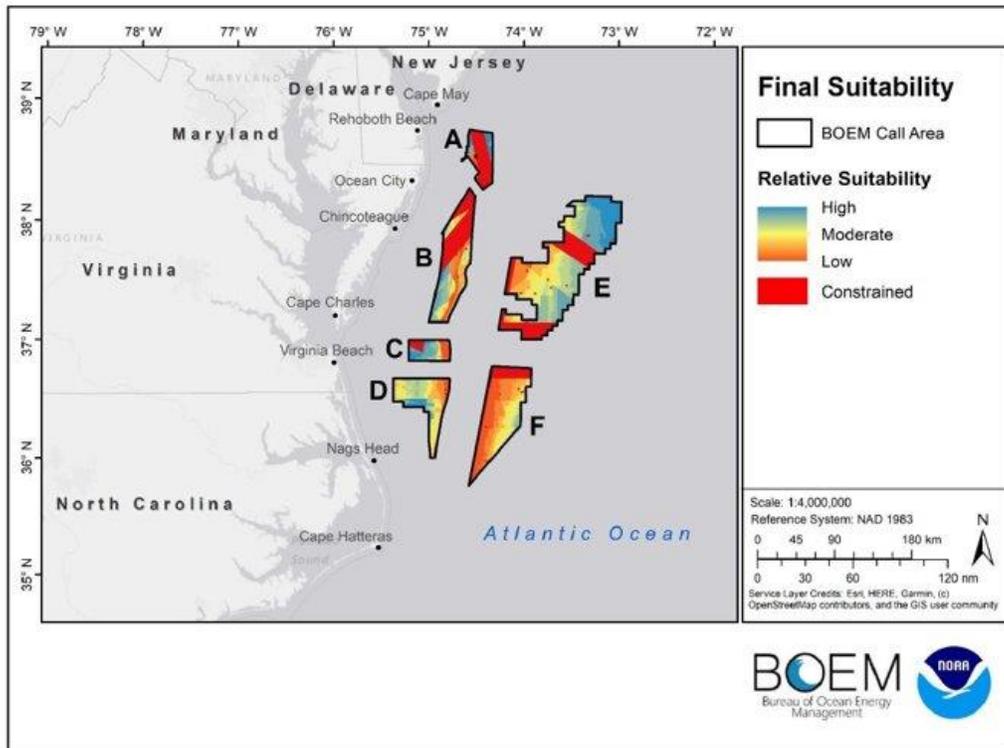


Figure 8: Final suitability modeling results for the Call Area. Red color indicates those areas where layers with a score of 0 occurred due to conflict with ocean activity. Green/blue color indicates areas of highest suitability for offshore wind development.

² Bovee KD. 1986. Development and evaluation of habitat suitability criteria for use in the instream flow incremental methodology. Instream Flow Information Paper 21, Report 86(7), U.S. Fish and Wildlife Service.

Longdill PC, Healy TR, Black KP. 2008. An integrated GIS approach for sustainable aquaculture management area site selection. *Ocean Coastal Manage.* 51(8–9): 612–624.

Silva C, Ferreira JG, Bricker SB, DelValls TA, Martín-Díaz ML, Yáñez E. 2011. Site selection for shellfish aquaculture by means of GIS and farm-scale models, with an emphasis on data poor environments. *Aquaculture.* 318(3-4):444–457.

Muñoz-Mas R, Martínez-Capel F, Schneider M, Mouton AM. 2012. Assessment of brown trout habitat suitability in the Jucar River Basin (Spain): Comparison of data-driven approaches with fuzzy-logic models and univariate suitability curves. *Sci Total Environ.* 440:123–131.

The Team performed a Local Index of Spatial Association (LISA) analysis, which identifies statistically significant clusters and outliers of the final relative suitability modeling results. The LISA analysis identified 1,203,160 acres of clusters that are statistically significant from other cells at an 85% confidence interval ($p < 0.15$). Based on the cluster analysis, BOEM identified 15 potential WEA options that ranked in the top fifteen percent, ranging from 1,068 to 470,501 acres (Figure 9).

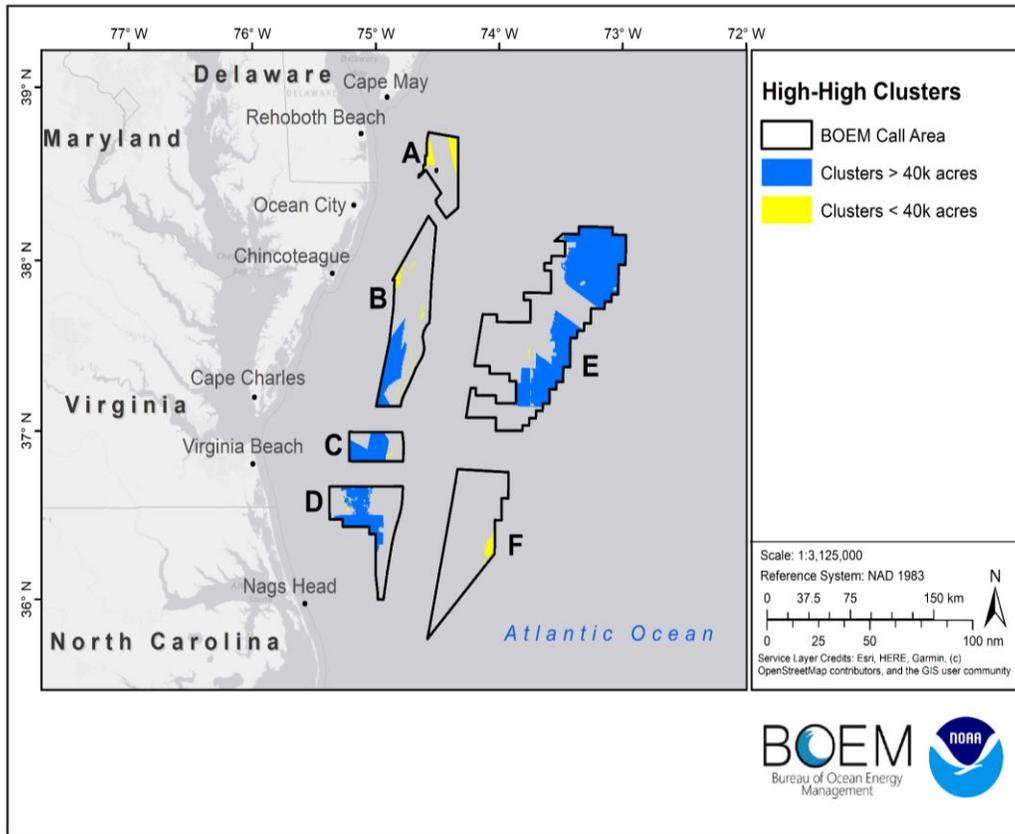


Figure 9. Cluster analysis of the Call Area at the 85% Confidence Interval ($p = 0.15$). Blue areas indicate areas determined to have the highest suitability (i.e., high-high clusters) greater than 40,000 acres and the yellow areas are less than 40,000 acres.

vi. Draft WEA Options Recommended by Spatial Modeling

The Team overlaid the High-High clusters with the lease block aliquots. An aliquot is 1/16th the size of a lease block (1 lease block = 16 aliquots) and is the smallest area that BOEM leases. The Team selected and extracted aliquots that overlapped the high-high clusters, for a total of 4,402 aliquots. Next, the Team removed aliquots that overlapped with shipping safety fairways and extensions (234 aliquots) from the selection. Additionally, the Team removed any aliquots that overlapped existing BOEM wind leases (72 aliquots). Then, the Team

grouped together the remaining aliquots based on location to make up fifteen Draft WEA options (Figure 10).

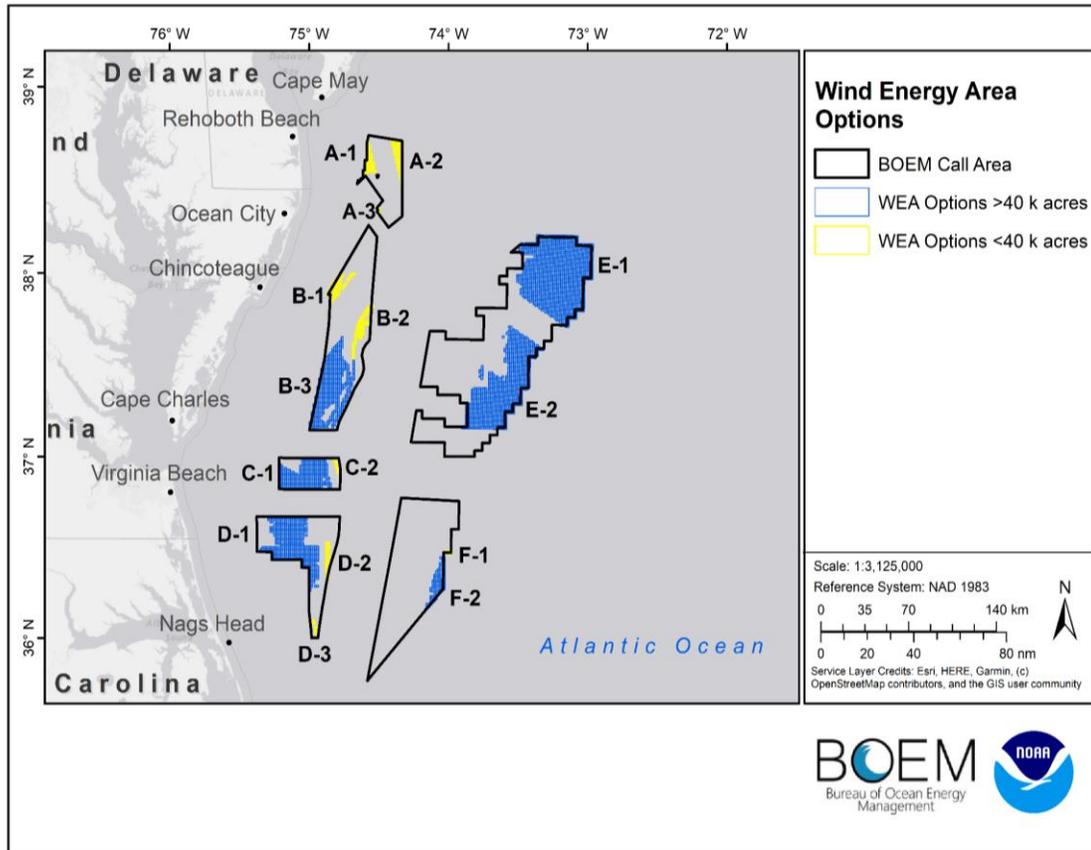


Figure 10. Draft WEA options determined by selecting aliquots that overlapped high-high cluster areas. A total of 4,096 aliquots were selected totaling 1,435,077 acres. Blue areas represent WEA options greater than 40,000 acres and yellow represents areas less than 40,000 acres.

4. BOEM Identification of Draft WEAs

BOEM identified eight Draft WEAs (Figure 10) for a total of 1,747,026 acres using the results provided by the Team’s siting model. The total area of the Draft WEAs represents a 55% reduction of the Call Area. Primary WEAs consist of the aliquots that overlapped with the spatial model’s high-high clusters that were the most suitable areas for wind development and total 1,435,077 acres. BOEM added aliquots adjacent to and within discrete Primary Draft WEAs as Secondary Areas for the purpose of creating a geographic area more conducive to potential offshore wind development (e.g., filling pockets within Primary Draft WEAs, creating straight line boundaries, and connecting adjacent but separate Primary Draft WEAs to produce a continuous Draft WEA. Secondary Areas represent aliquots with suitability scores less than the 85% confidence interval ($P < 0.15$) indicating potential spatial incompatibility issues with wind development that may require mitigation or measures to minimize impacts.

BOEM also added secondary area aliquots where it believes additional input and discussion with specific stakeholders is needed before it completes final modeling and renders a Final WEA decision. These areas include a portion of Draft WEA A within a potential U.S. Coast Guard (USCG) safety fairway and Draft WEA C within a NASA danger zone. BOEM intends to further explore these areas with the USCG, NASA, and other ocean users, such as the fishing industry, to collect additional information that would be added to the model before finalizing the WEAs.

As previously noted, the Draft WEAs do not include data from DOD on compatibility with military training, testing, and operations. BOEM will work with DOD's Office of the Assistant Secretary of Defense (Energy, Installations and Environment), Military Aviation and Installation Assurance Siting Clearinghouse, to incorporate a compatibility assessment into the final spatial modeling.

WEA – A

BOEM identified one Draft WEA (Figure 11) in Call Area A totaling 175,554 acres. Draft WEA Area A is 18.9 nm from shore and consists of 45,935 acres of Primary Area and 129,619 acres of Secondary Area. BOEM received overlapping wind energy industry nominations throughout all of Area A (Figure 12). Preliminary USCG navigational safety fairways and commercial fishing activities are the potential WEA compatibility issues within this area.

WEA – B

BOEM identified two Draft WEAs in Call Area B (Figure 11). Area B-1 is 31,694 acres and 18.3 nm from shore and includes 9,615 acres of Secondary area. Area B-2 combines the remaining Primary Areas with 85,467 acres of Secondary Area for a total of 290,588 acres and 29.3 nm from shore. The wind energy industry expressed interest in several areas throughout Area B particularly within the central region (Figure 12). Spatial conflicts identified in Area B include National Marine Fisheries Service (NMFS) Fisheries Surveys and deep-sea coral observations.

WEA – C

BOEM identified all of Call Area C as a Draft WEA (Figure 11). Area C combines Primary areas and 63,032 acres of Secondary Area for a total of 183,043 acres 30.9 nm from shore. Similar to Call Area B, the wind energy industry expressed interest in all of Area C (Figure 12). Several spatial conflicts were identified in Area C, including the NASA Danger Zone, protected resources, and sensitive habitat on the shelf break.

WEA – D

BOEM identified one Draft WEA in Call Area D (Figure 11). Area D consists of the Primary area with 24,216 acres of Secondary Area for a total of 209,752 acres, 21.9 nm from shore. BOEM removed the remaining Primary areas (D-2 and D-3) because of their small size. Much of Area D received industry interest (Figure 12). The NMFS Southeast Region Headboat Surveys presents the main suitability concern in Area D.

WEA – E

BOEM identified two Draft WEAs in Call Area E (Figure 11) ranging from 1,550 m to 2,640 m in depth. Draft Area E-1 is 470,501 acres and is 71.4 nm from shore. Draft Area E-2 is 343,879 acres and is 74.4 nm from shore. A navigational constraint separated draft Areas E-1 and E-2. Industry nominations in this region were mainly along the most western aspect of Area E nearest to shore and in the shallower depths (Figure 12).

WEA – F

Similar to Call Area E, Call Area F is a deep water site. In Call Area F, BOEM identified one Draft WEA (42,015 acres) that is 66.5 nm from shore (Figure 11) and ranges in depth from 2,375 m to 2,390 m. Call Area F received some industry interest along the western side (Figure 12). A small area north of Area F was removed from Draft WEA consideration as a result of its small size.

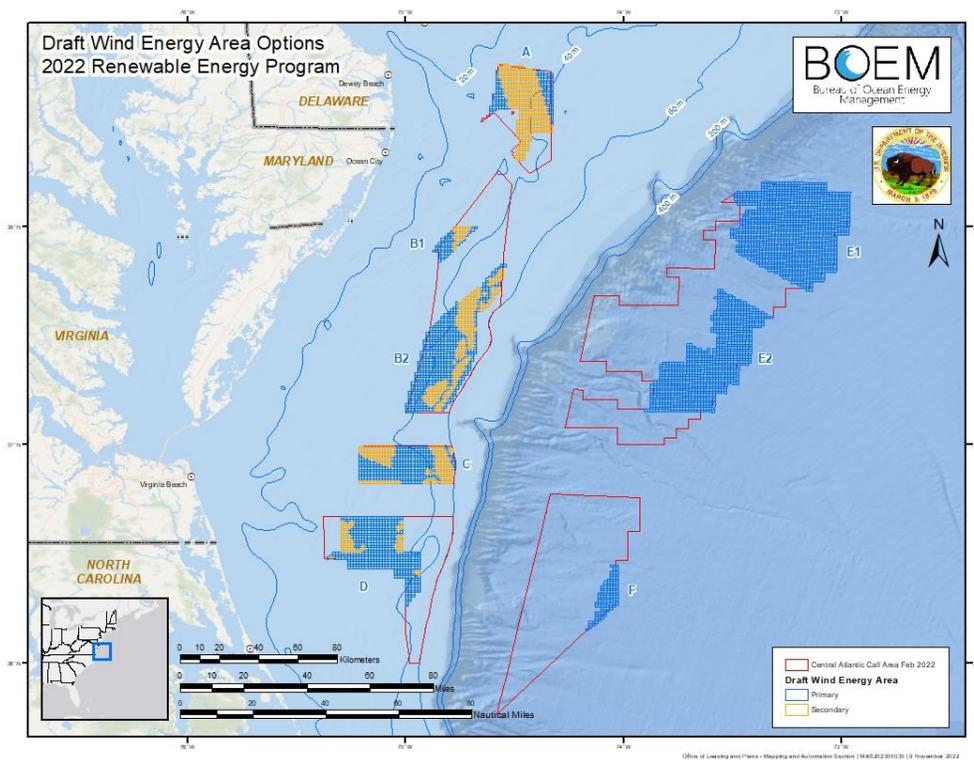


Figure 11. Draft WEA options with Primary WEAs (blue) and Secondary Areas (yellow) aliquots identified.

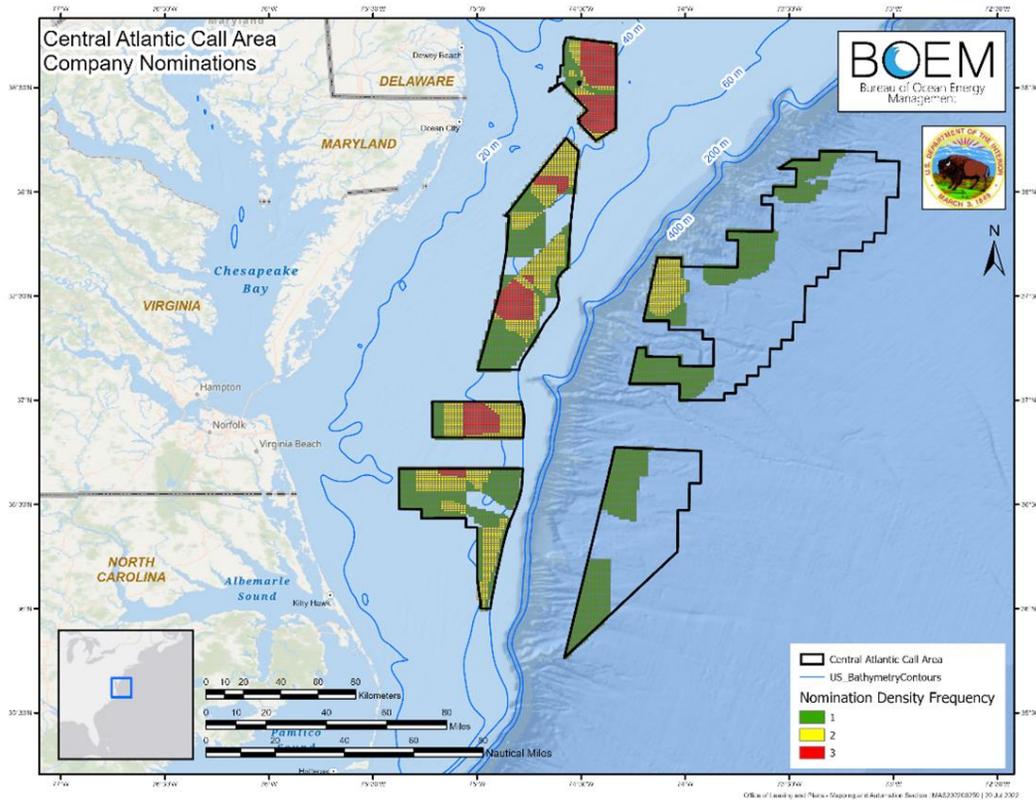


Figure 12. Areas receiving wind energy industry nominations in response to the Central Atlantic Call for Information and Nominations.

5. Next Steps

BOEM is accepting written public comments on the Draft WEAs for 30-days following the publication of this announcement. Search for docket number BOEM-2022-0072 at <https://www.regulations.gov/> to submit a comment. BOEM will also accept comments via mail as directed in the “Addresses” section of this notice. BOEM will consider public comments, along with those received at two virtual public engagement meetings during the development of the Final WEAs. For more information on the public meetings, visit <https://www.boem.gov/renewable-energy/state-activities/central-atlantic>. The identification of Draft or Final WEAs does not constitute a final leasing decision, and BOEM reserves the right under its regulations to issue leases in smaller, fewer and/or different areas—or issue no leases.

6. Environmental Review

Before deciding whether leases may be issued, BOEM will prepare an environmental assessment (EA) under NEPA (including public comment periods to determine the scope of the EA and to review and comment on the draft EA). The EA will analyze anticipated impacts from leasing within the Final WEAs identified through the Area ID process, and from site characterization and assessment activities expected to take place after leases are

issued. Site characterization activities include geophysical, geotechnical, archaeological, and biological surveys; and site assessment activities include installation and operation of meteorological buoys. BOEM also will conduct appropriate consultations with Federal agencies and Tribal, State, and local governments during the EA. These consultations include, but are not limited to, those required by the Coastal Zone Management Act, the Magnuson-Stevens Fishery Conservation and Management Act, Endangered Species Act, Section 106 of the National Historic Preservation Act (NHPA), and Executive Order 13175, which is entitled, “Consultation and Coordination with Indian Tribal Governments.”

Before BOEM allows a lessee to begin construction of a wind energy project, BOEM will consider the potential environmental effects of the construction and operation of any wind energy facility under a separate, project-specific analysis under NEPA. This analysis will include additional opportunities for public involvement.

7. Proposed and Final Sale Notices

If BOEM decides to offer an area(s) for lease, BOEM would publish a Proposed Sale Notice (PSN) describing the proposed area(s) for competitive leasing, the associated terms and conditions, and a proposed format of the competitive auction issued pursuant to 30 C.F.R. § 585.216. The PSN would be followed by a 60-day formal comment period, which helps to inform the Final Sale Notice. BOEM may use information from the NEPA analysis for any lease sale, as well as information gathered in response to the PSN, to further refine lease areas and develop lease terms and conditions.

8. Requested Information from Interested or Affected Parties

BOEM requests comments regarding the following features, activities, mitigations, or concerns within or around the Draft WEAs. Commenters should be as specific and detailed as possible to help BOEM understand and address the comments including indication if your comment pertains to a Primary or Secondary Area within a Draft WEA.

- a. Information on the technological and economic viability of Draft WEAs E1, E2, and F. Information received to date suggests these areas are likely not viable for development by 2035 due to their significant depth and distance from shore. BOEM is requesting specific information on the technological and economic viability of these areas to support continued consideration as WEAs.
- b. Geological, geophysical, and biological bathymetric conditions (including bottom and shallow hazards and whether seafloor is covered with living organisms).
- c. Known archaeological and cultural resource sites on the seabed.
- d. Information regarding the identification of historic properties or potential effects to historic properties from leasing, site assessment activities (including the construction of meteorological towers or the installation of meteorological buoys), or commercial wind energy development in the Draft WEAs. This includes potential offshore archaeological sites or other historic properties within the areas described in this notice and onshore historic properties that could potentially be affected by renewable

- energy activities within the Draft WEAs. This information will inform BOEM's review of future undertakings under section 106 of the NHPA and NEPA.
- e. Information about potentially conflicting uses of the Draft WEAs, including navigation (in particular, commercial shipping and recreational vessel use), recreation, and fisheries (commercial and recreational). Additional information regarding recreational and commercial fisheries including, but not limited to, the use of the areas, the types of fishing gear used, seasonal use, and recommendations for reducing use conflicts.
 - f. Information relating to visual resources and aesthetics, the potential impacts of wind turbines and associated infrastructure to those resources, and potential strategies to help mitigate or minimize any visual effects.
 - g. Information on the constraints and advantages of possible electrical cable transmission routes, including onshore landing and interconnection points for cables connecting offshore wind energy facilities to the onshore electrical grid and future demand for electricity in the U.S. mid-Atlantic region.
 - h. General interest by developers in constructing a backbone transmission system that would transport electricity generated by wind projects in the Draft WEAs to the onshore grid, including a general description of the transmission system's proposed path and potential interconnection points.
 - i. Habitats that may require special attention during siting and construction.
 - j. Information regarding the identification of protected species, federally designated (or proposed) critical habitat, essential fish habitat, or areas that are environmentally sensitive or crucial to marine productivity and are State or federally managed for their conservation value.
 - k. Other relevant socioeconomic, cultural, biological, and environmental data and information.