



BOEM Bureau of
Ocean Energy Management

Central Atlantic Intergovernmental Renewable Energy

Task Force Meeting

October 10, 2023

Agenda

- Lease Sale Process and Background
- Auction Format
- Lease-specific Terms, Conditions and Stipulations
- NEPA, Consultations and CZMA
- Next Steps



Leasing and Development Process

[Planning & Analysis]

[Leasing]

[Site Assessment]

[Construction & Operations]

Initiate Leasing Process (RFI/Call)

Lease Granted

Submit SAP

BOEM Deems COP Complete & Sufficient

BOEM Approves COP



Area Identification
Wind Energy Areas

Publish Leasing Notices

Pre-survey Meetings/Plan

Site Assessment & Surveys
(maximum timeframe)

BOEM Environmental & Technical Reviews

Installation

0 — ~1/2

0 — <1 1/2

0

1

0 — <5

0 — 2

NEPA/Environmental Reviews

We are here

Auction

BOEM Reviews & Approves SAP

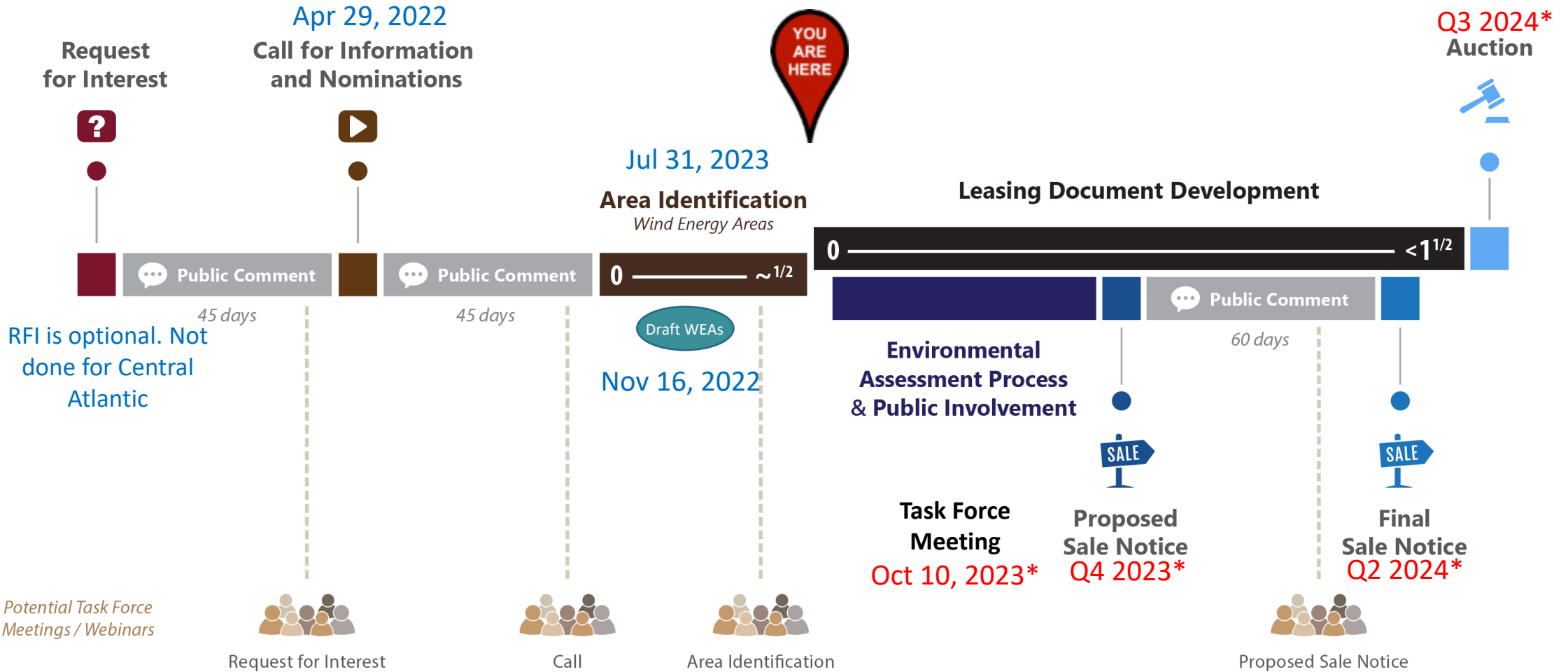
Submit COP
(with Project Design Envelope – optional)

Submit Design & Installation Plans



Central Atlantic Renewable Energy Leasing Process

PRE-DECISIONAL

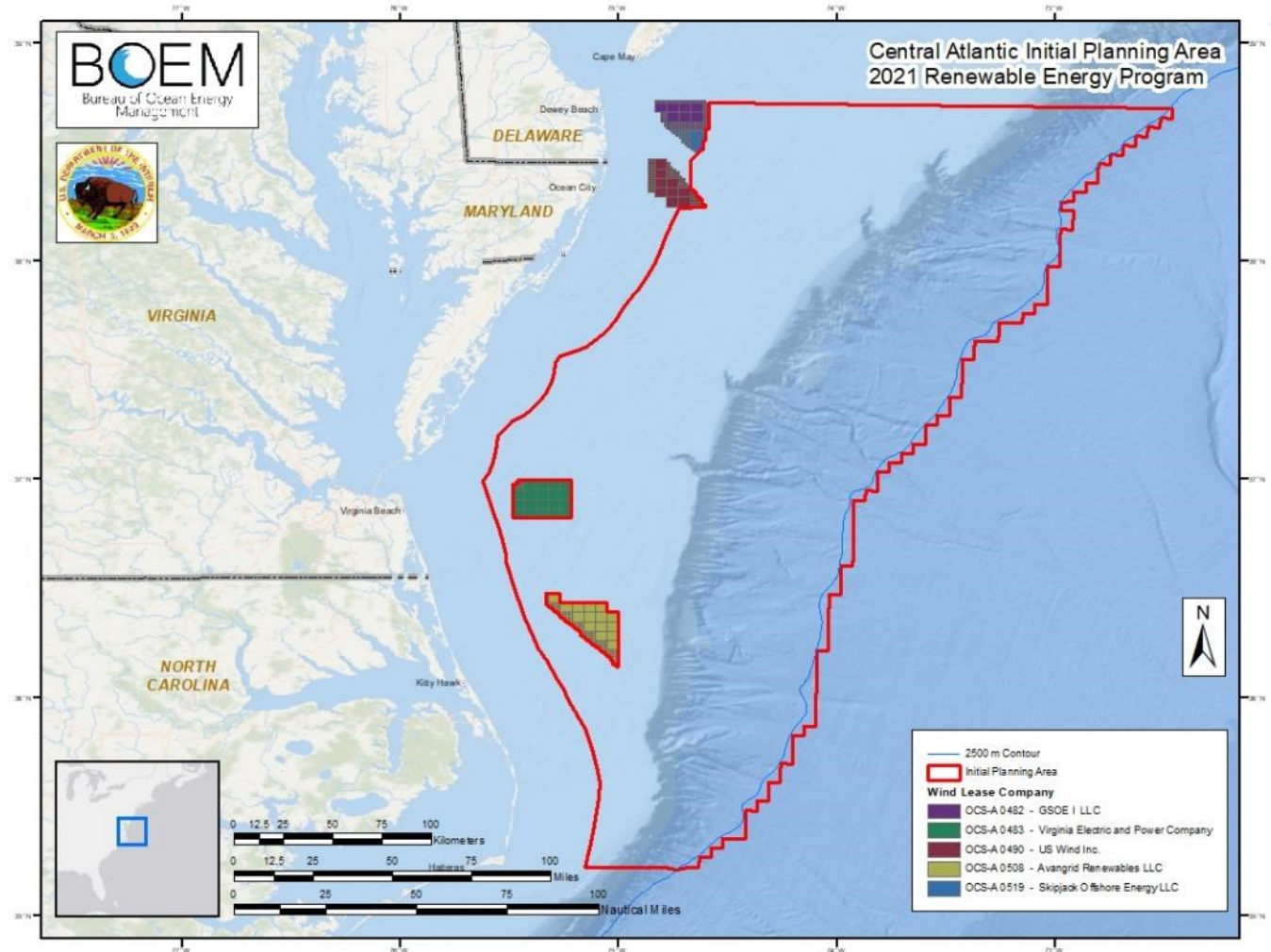


* Planned Dates



Central Atlantic Region

- West: ~21 NM coastal buffer
 - Viewshed, maritime traffic, nearshore fisheries, NASA WFF
- East: ~2,500 m depth
 - Exploring deepwater interest and user conflicts
- North: Boundary w/ New York Bight region
- South: Boundary w/ Carolina Long Bay region



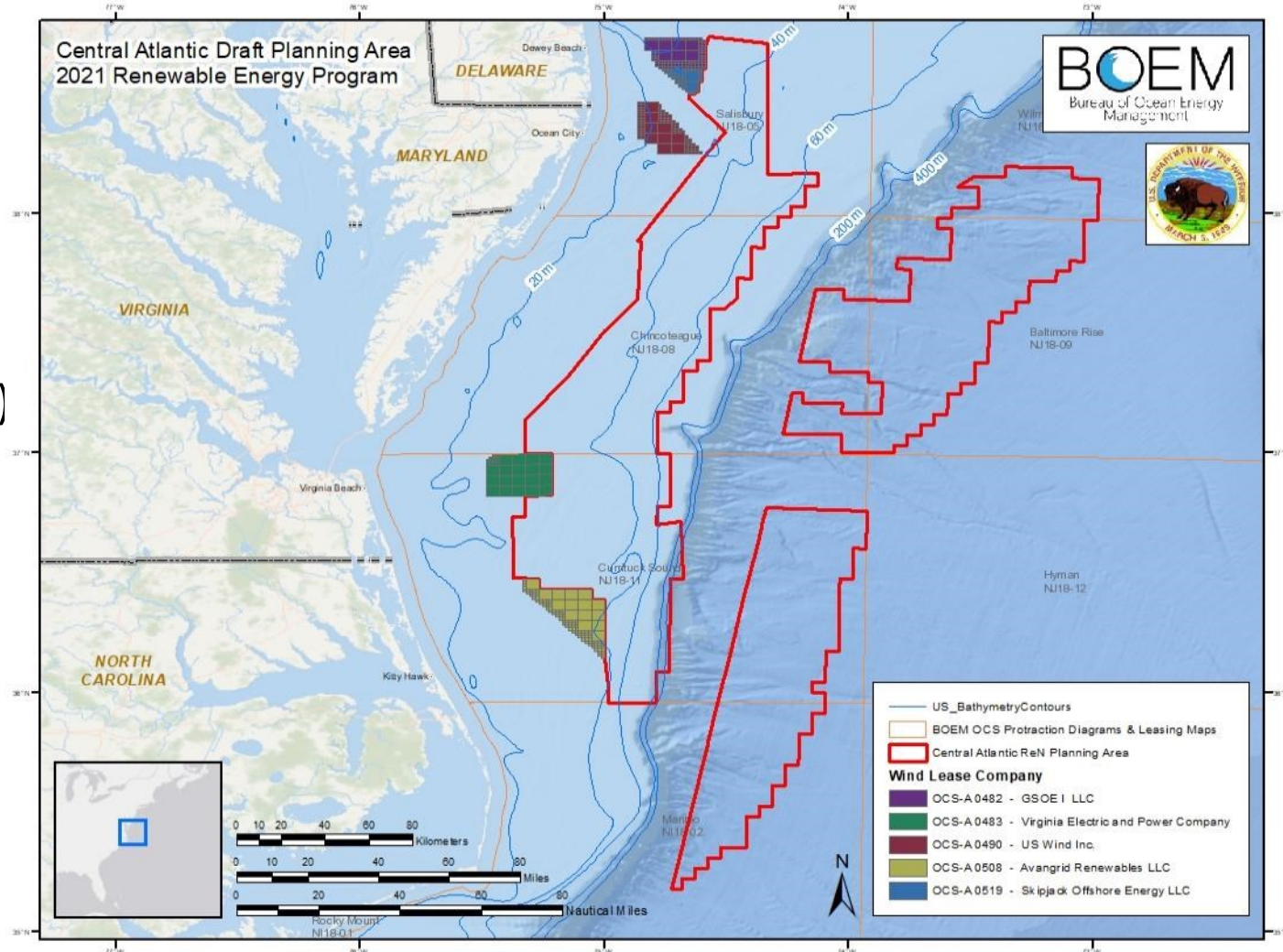
Central Atlantic Planning Area

- Initial Areas Eliminated:

- Sea Scallop Management Area
- Existing lease coastal buffer
- NASA WFF Danger Zone
- USCG Proposed Fairways (partial)
- Submarine Transit Lanes
- Shelf break
- Canyons Heads (deepwater)

- 5.8 million acres

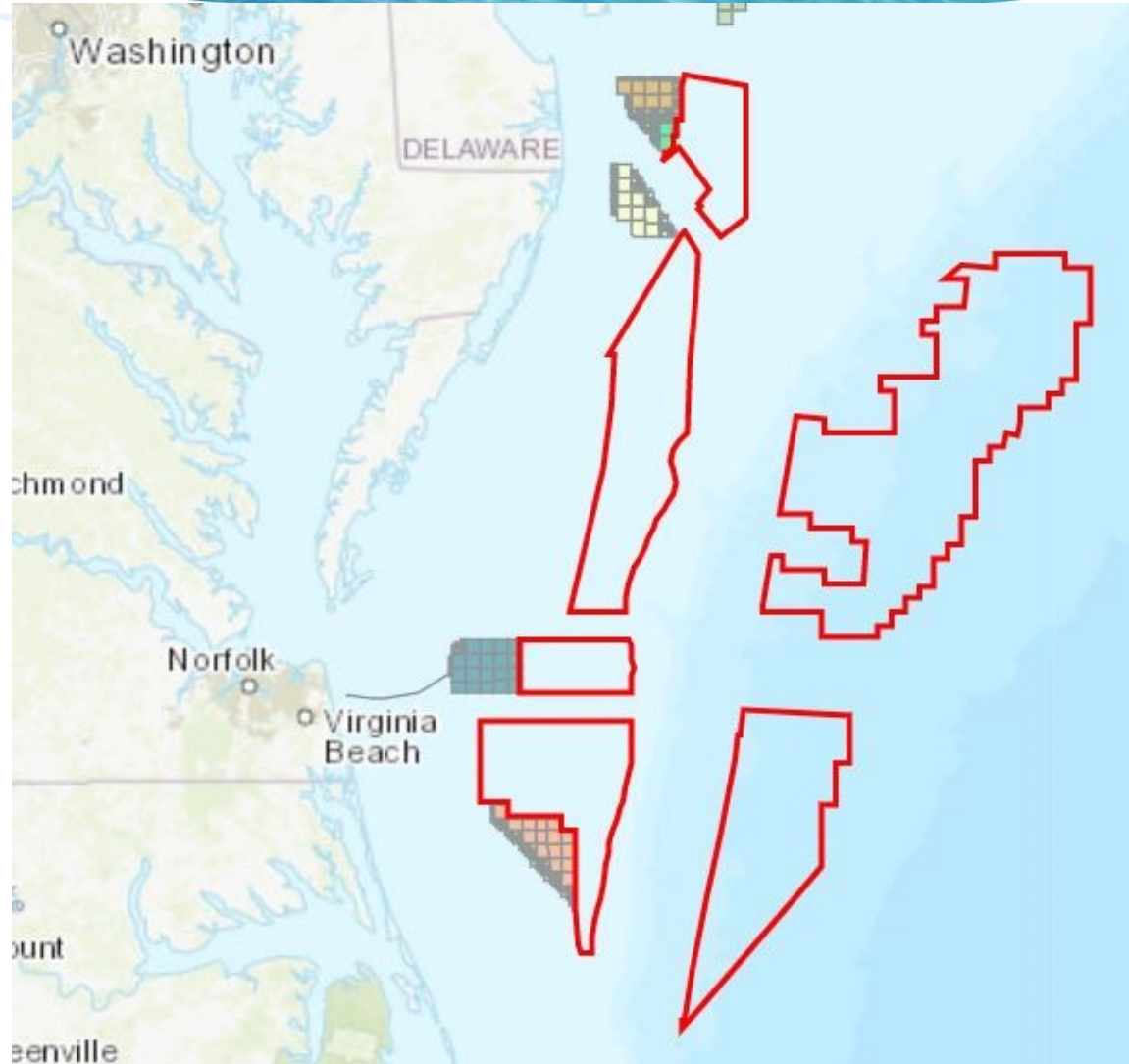
- 54.3% reduction from Region



Draft Call for Information and Nominations Area

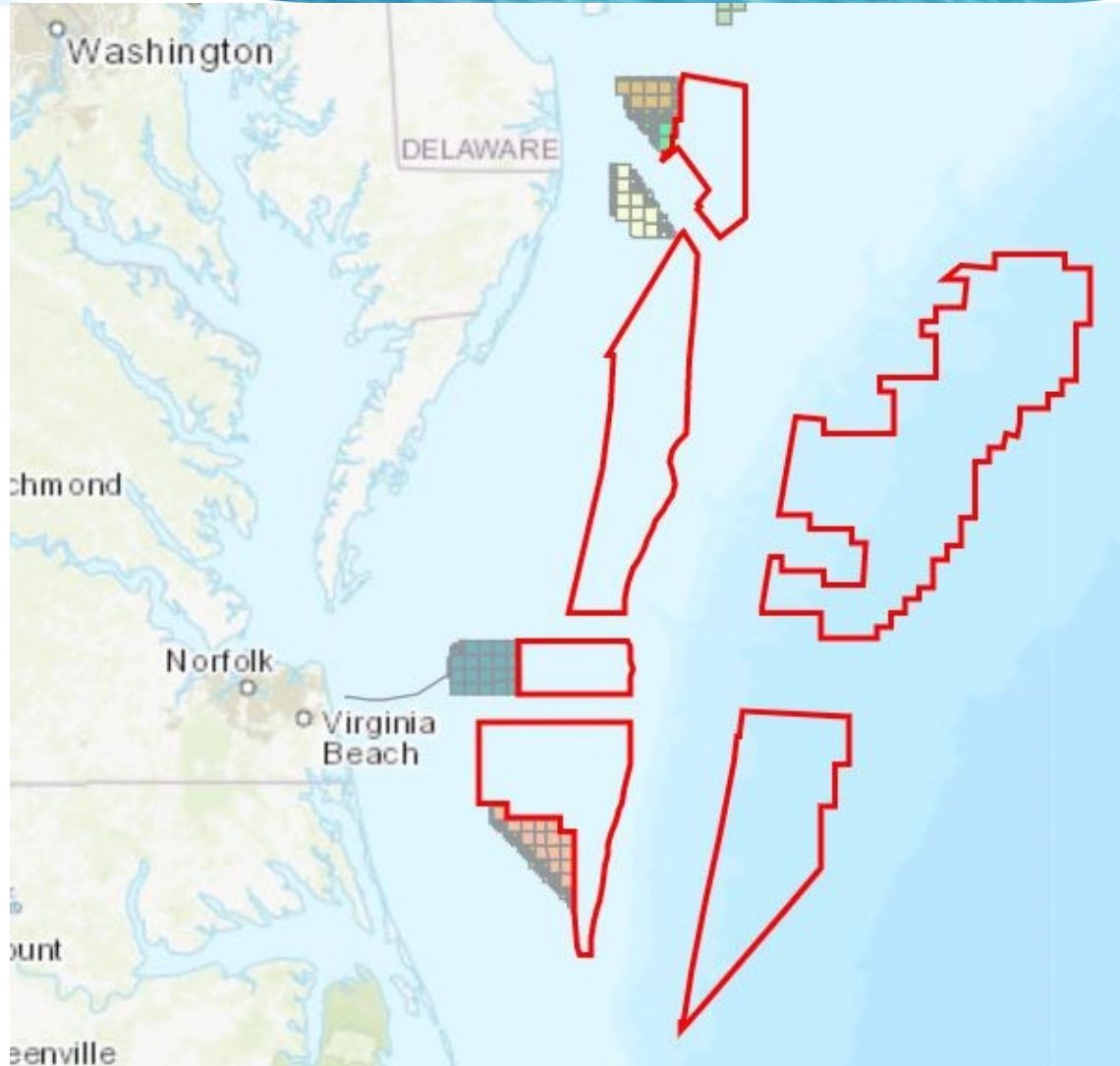
In summary, removed these areas for the following reasons:

1. Navigation lanes
2. Multiple fisheries and navigation
3. NASA Exclusion Zone, navigation
4. Multiple fisheries and loggerhead sea turtle
5. Gulf Stream, Black capped petrel, loggerhead turtle, *Sargassum*



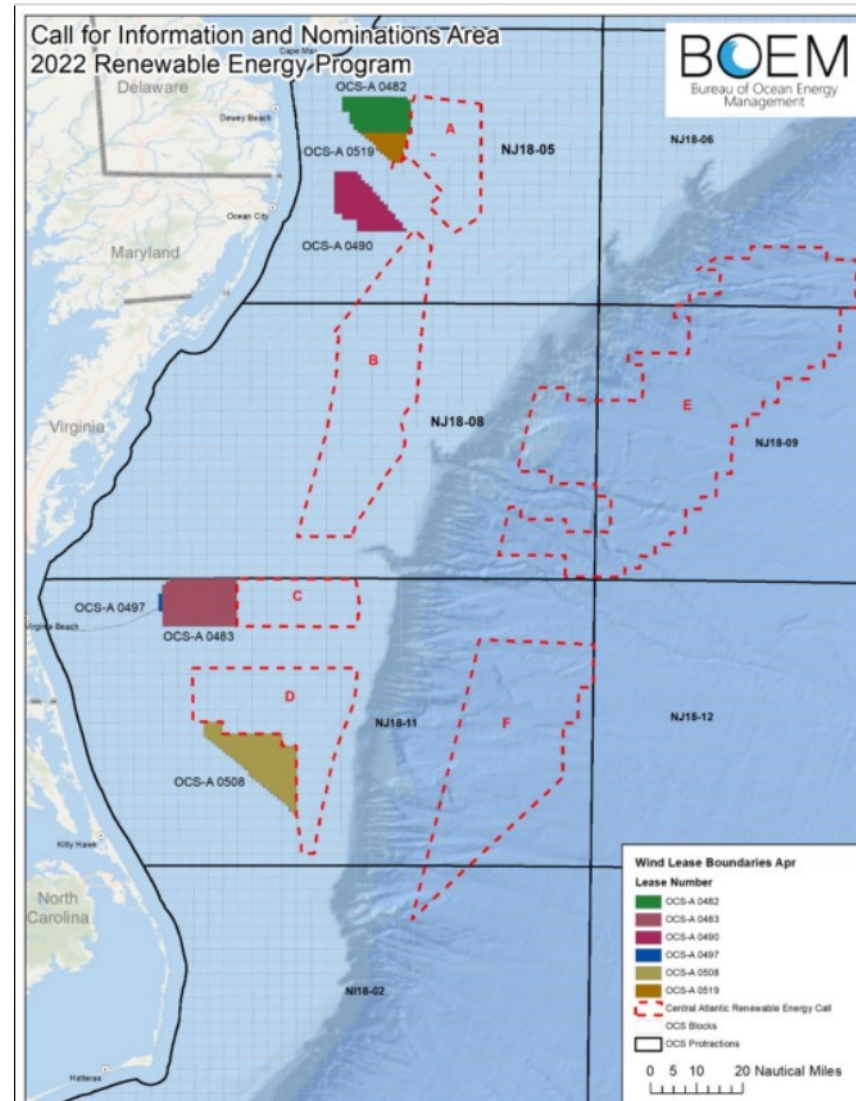
Draft Call for Information and Nominations Area

- 4.0 million acres
 - 68.5% reduction from Region
 - 31.0% reduction from Planning Area



Central Atlantic Call for Information and Nominations Area

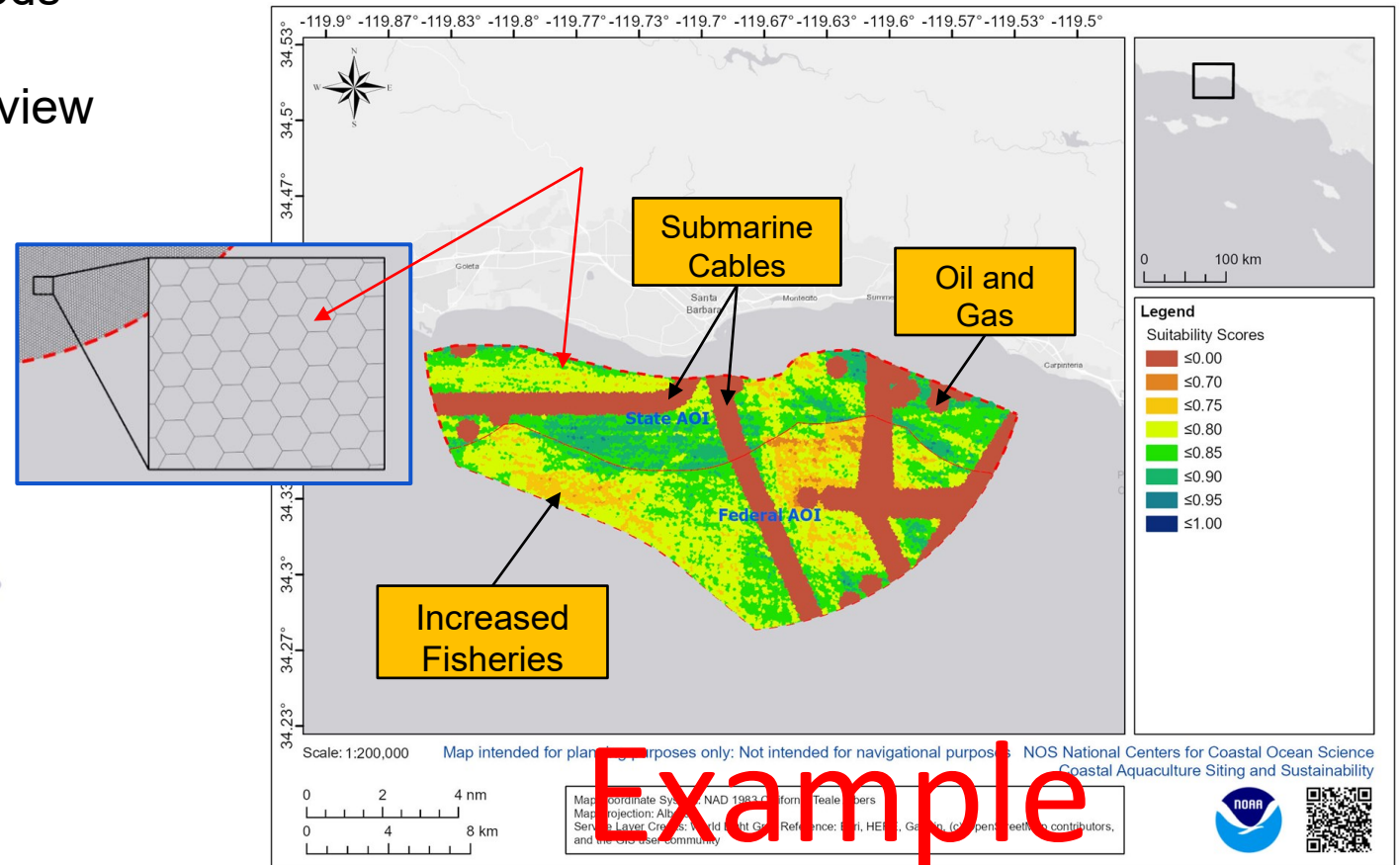
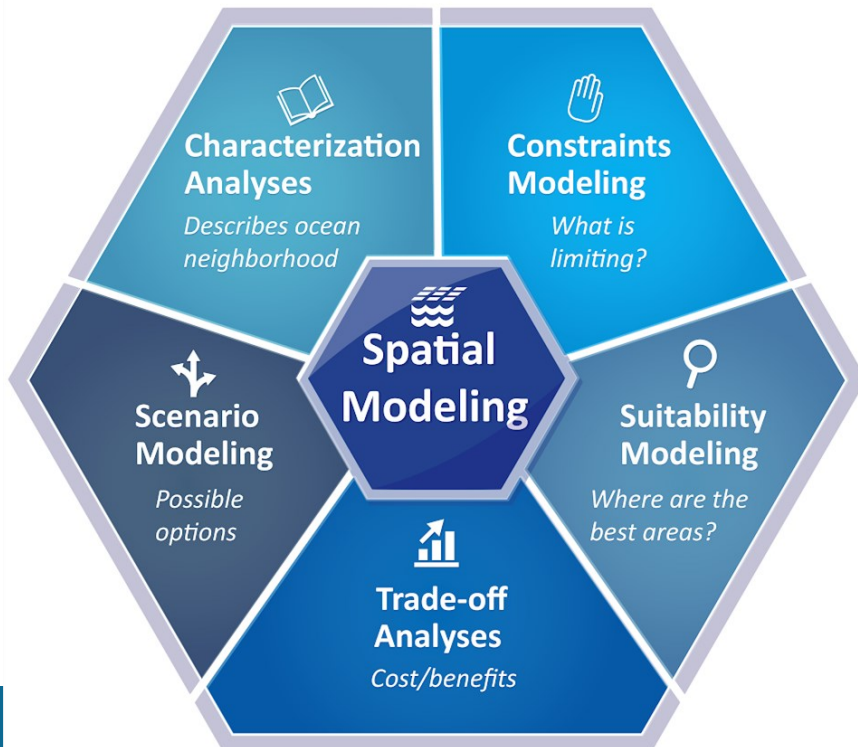
- Widened the east-west navigational lanes per USCG recommendation
- Removed artificial reef in Area A per State of Delaware's request
- Call Area is approximately 3.9M acres and was published on April 29, 2022 with a 60-day public comment period.
- Comments on the Call included requests for increased transparency in BOEM's Area Identification process
- Collaborated with NOAA's National Centers for Coastal Ocean Science (NCCOS) to utilize an ocean planning model previously used to identify GOM Wind Energy Areas (WEAs)



Why Spatial Suitability Modeling?

- Analyzes the “whole ecosystem”
- Identifies hotspots of conflict and opportunity
- Requires set rules (weights) and methods
- Provides defensible and transparent methods
- Allows for scenario planning
- Supports comprehensive environmental review

A **spatial suitability model** weights locations relative to each other based on a given criteria.



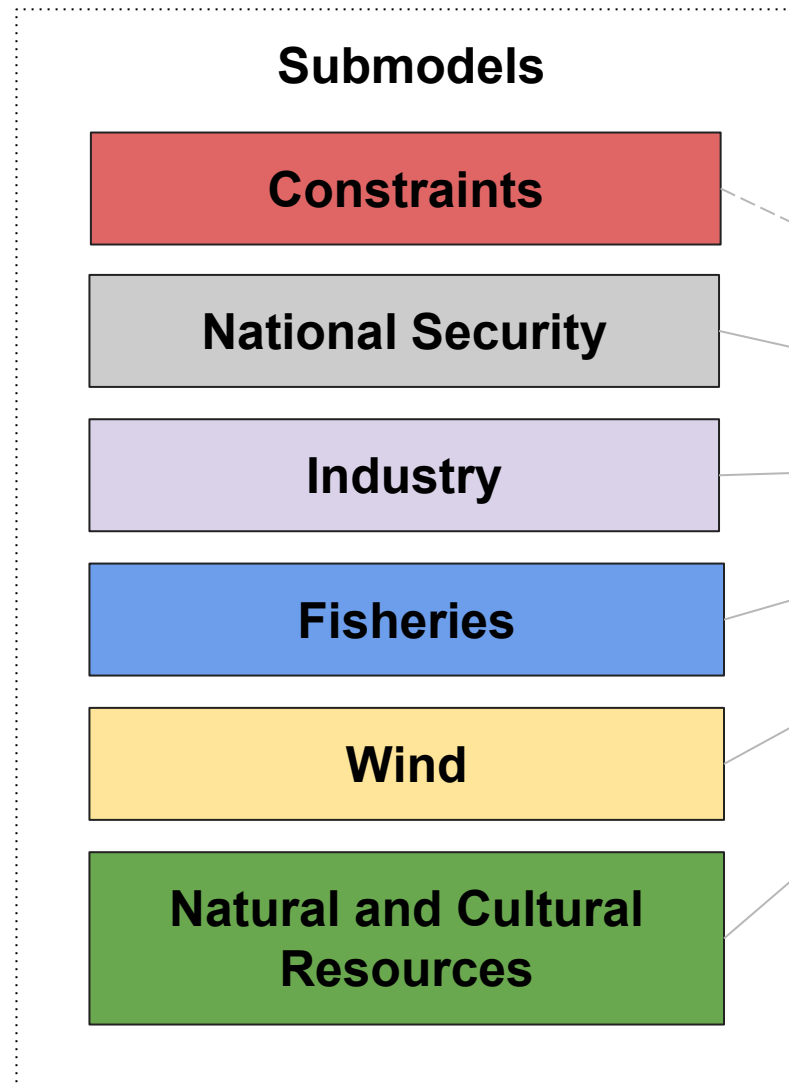
Example



Spatial Suitability Model

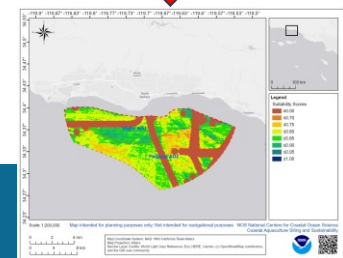
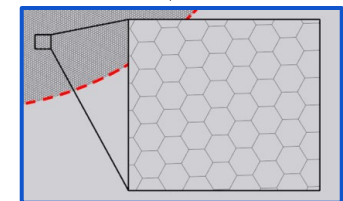
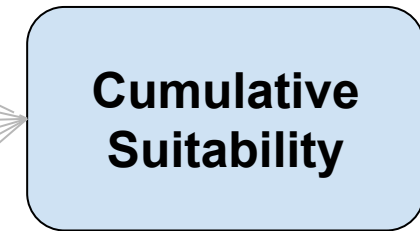


MarineCadastre.gov
An Ocean of Information
A joint BOEM and NOAA initiative providing authoritative data to meet the needs of the offshore energy and marine planning communities.



Areas Eliminated

Geometric Mean Calculated



Ocean Planning collaboration with NCCOS

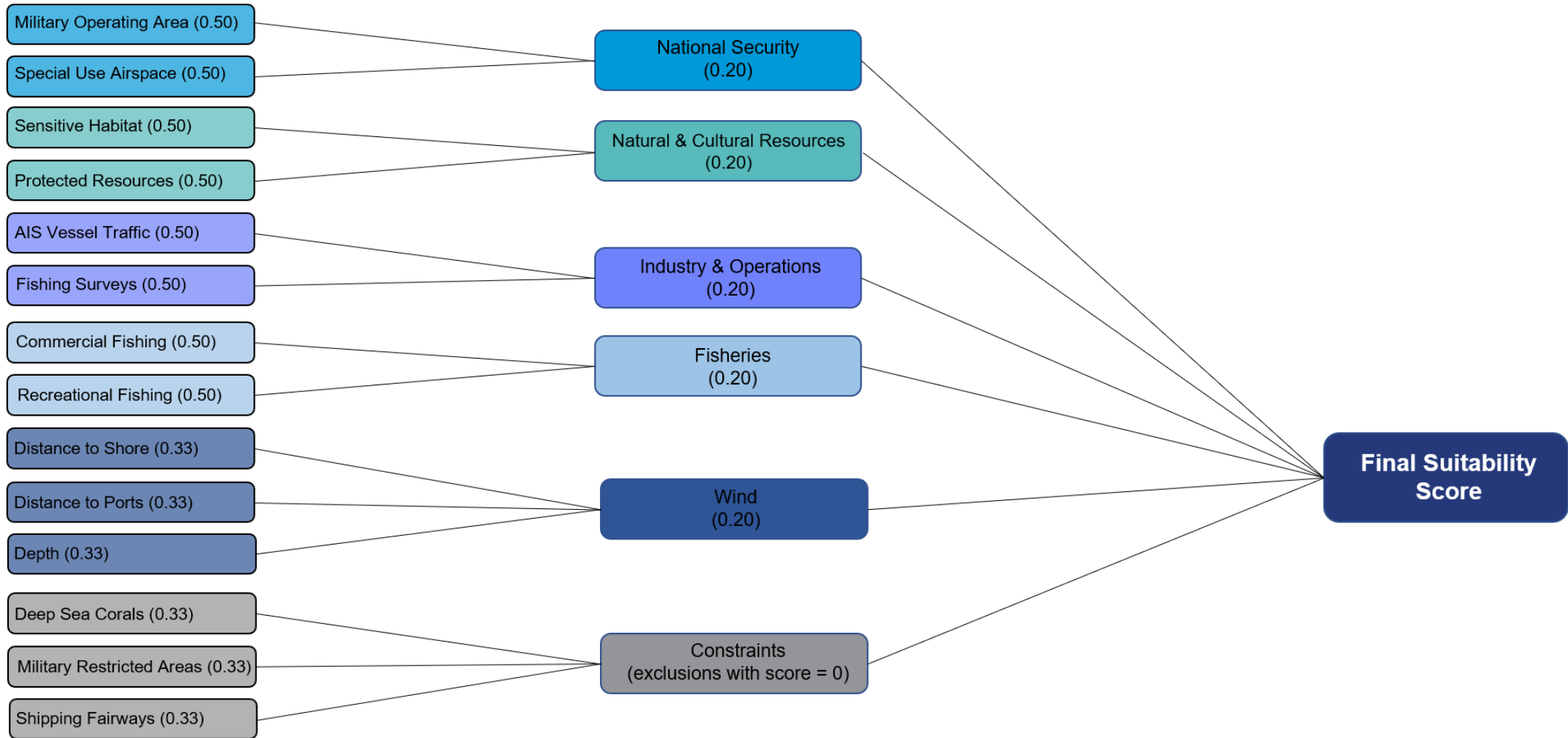
Modeling Methods:

- A 10-acre grid was fit over the Call Area
- Data layers chosen based on best available data
- All data layers were assigned a compatibility score
 - 0 = low compatibility and 1 = highly compatible
- Data were organized into 6 submodels
- Suitability score was calculated for each grid cell
- Cluster analysis identified highest scoring clusters (85% CI; $p = 0.15$)
- WEA options were identified, labeled, and ranked by suitability score

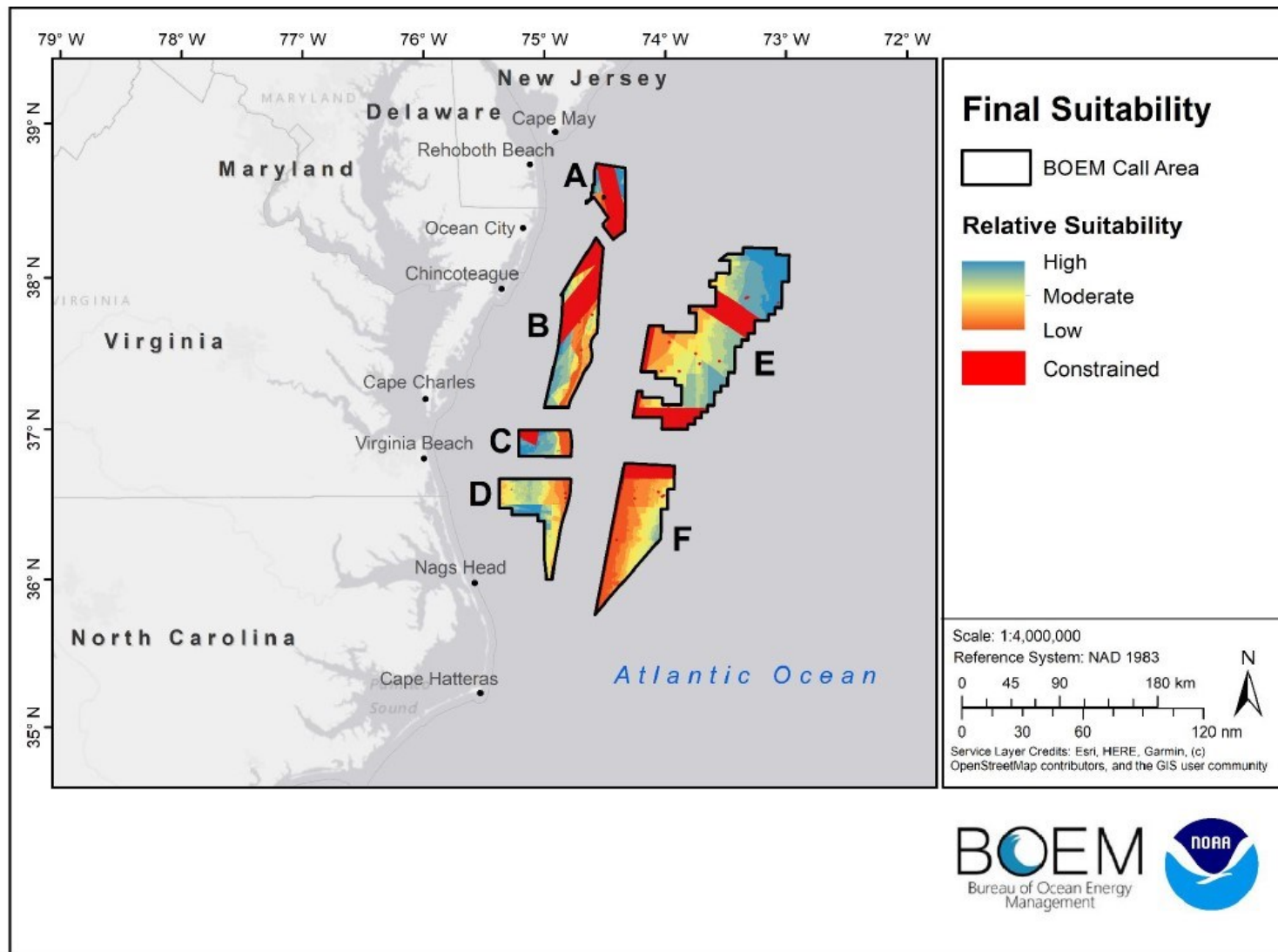
Relative Suitability Analysis Submodels



Ocean Planning collaboration with NCCOS



Final Suitability: Draft WEAs



Draft WEAs Overview

BOEM recommends 8 draft WEAs:

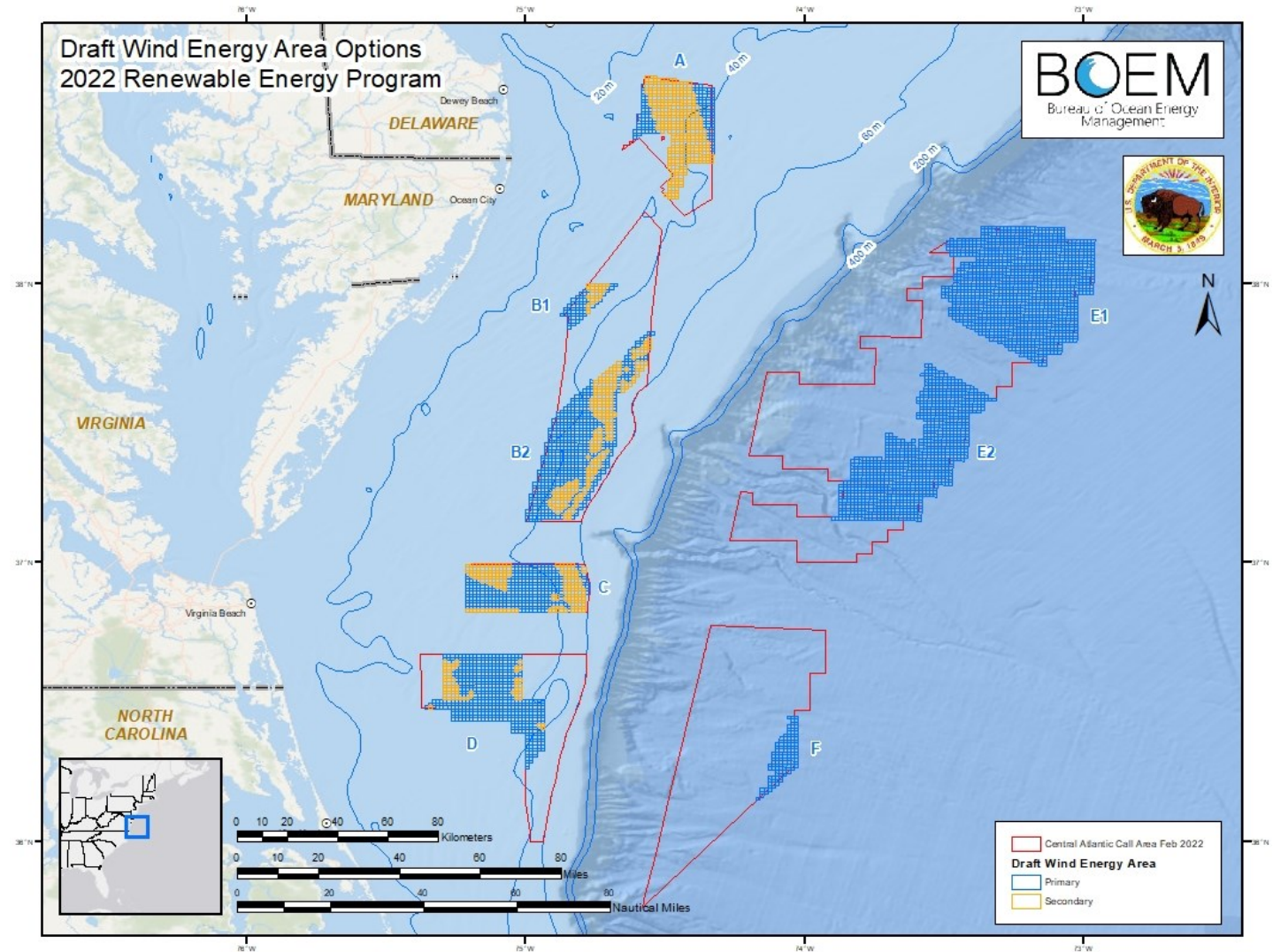
- A
- B-1, B-2
- C
- D
- E-1, E-2
- F

Total Acres: **1,747,026 acres**

- Nearshore area (A-D): 890,631 acres
- Deepwater area (E – F): 856,395 acres
- Published on website November 16, 2022 with a 30-day public comment period.

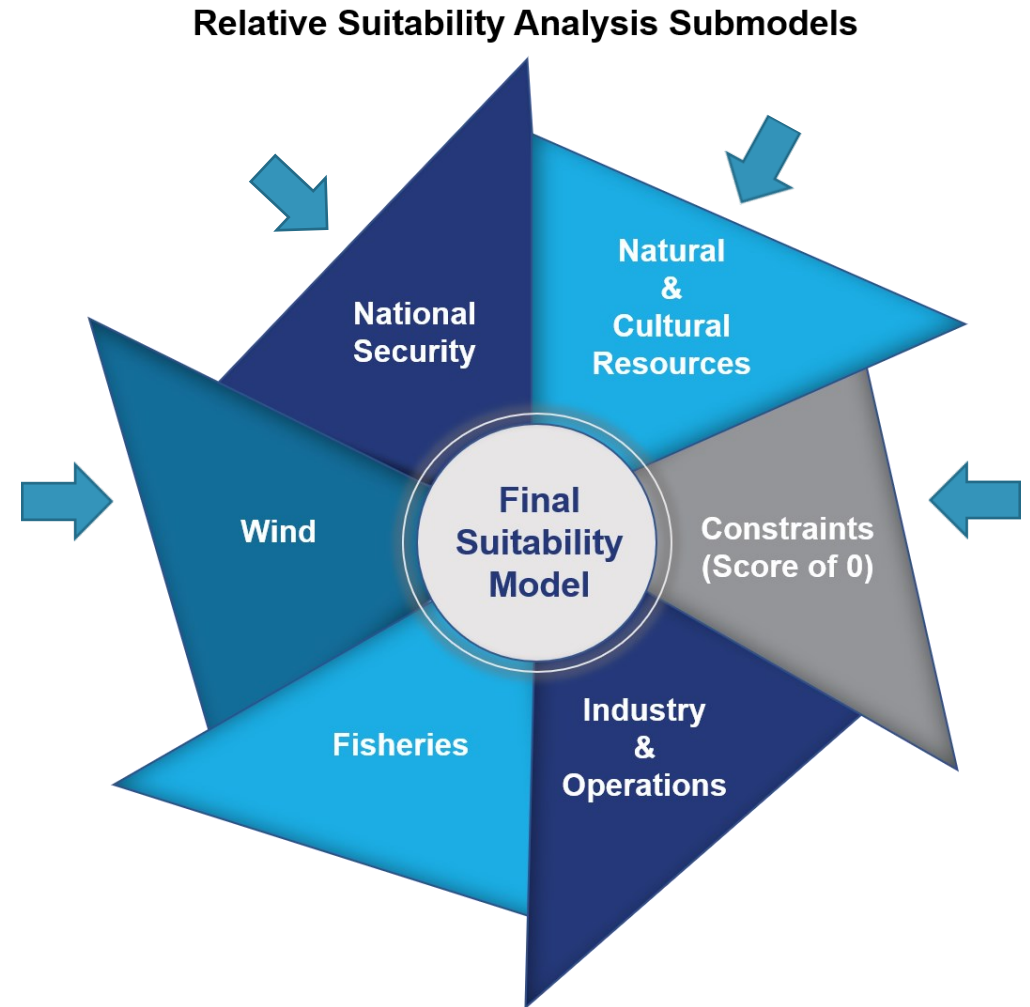
 = Primary NCCOS recommended area

 = Secondary BOEM added area

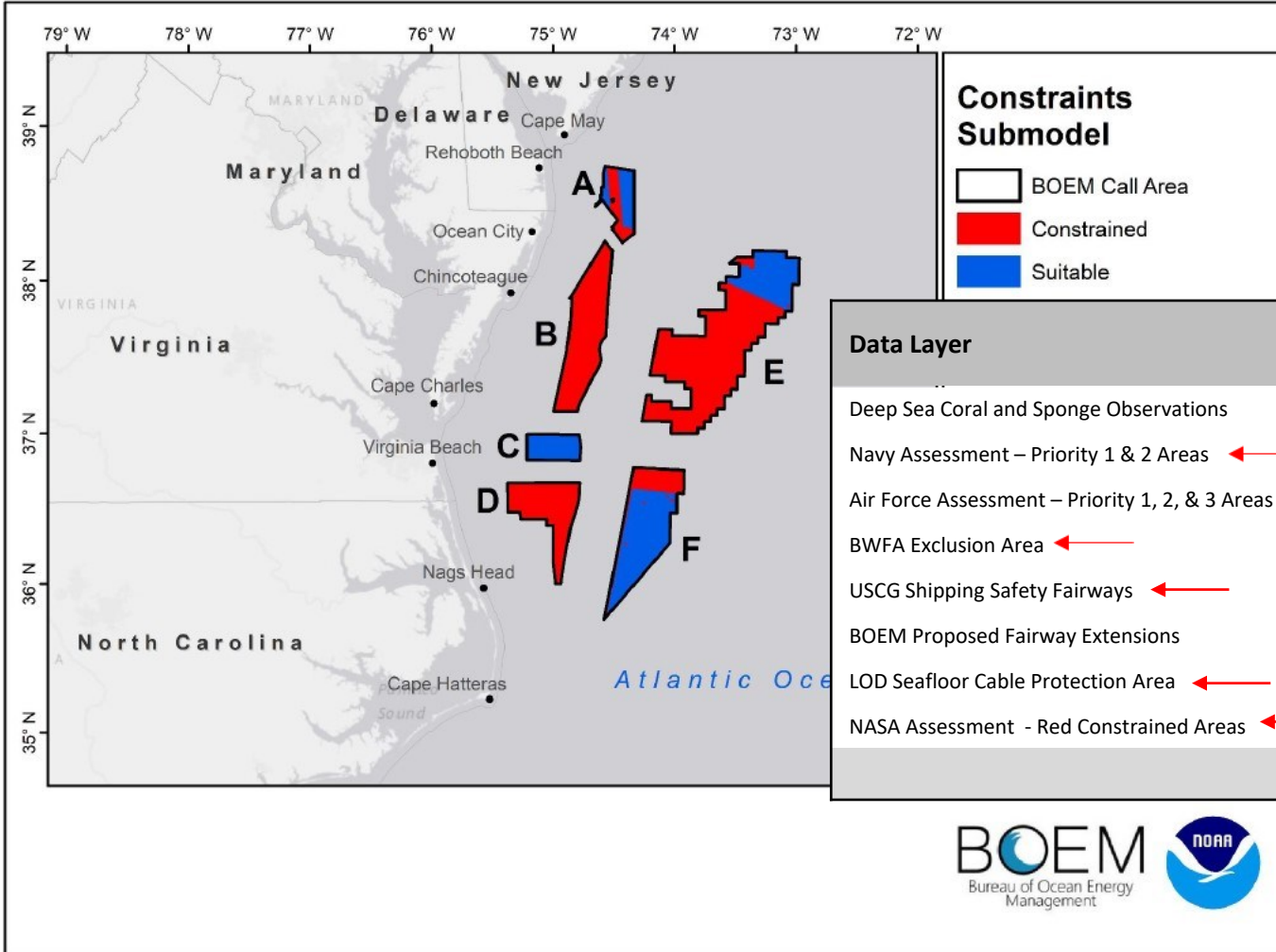


From Draft to Final WEAs

- Received 67 comments on the draft WEAs many of which support of the BOEM/NCCOS partnership
- Continued partnership with NOAA's National Centers for Coastal Ocean Science (NCCOS) to incorporate new information received in response to the Draft WEAs
- Changes were made to the **Constraints, National Security, Natural and Cultural Resources and Wind submodels**
- Clusters of high scoring (most suitable) areas were identified (95% CI; $p = 0.05$)



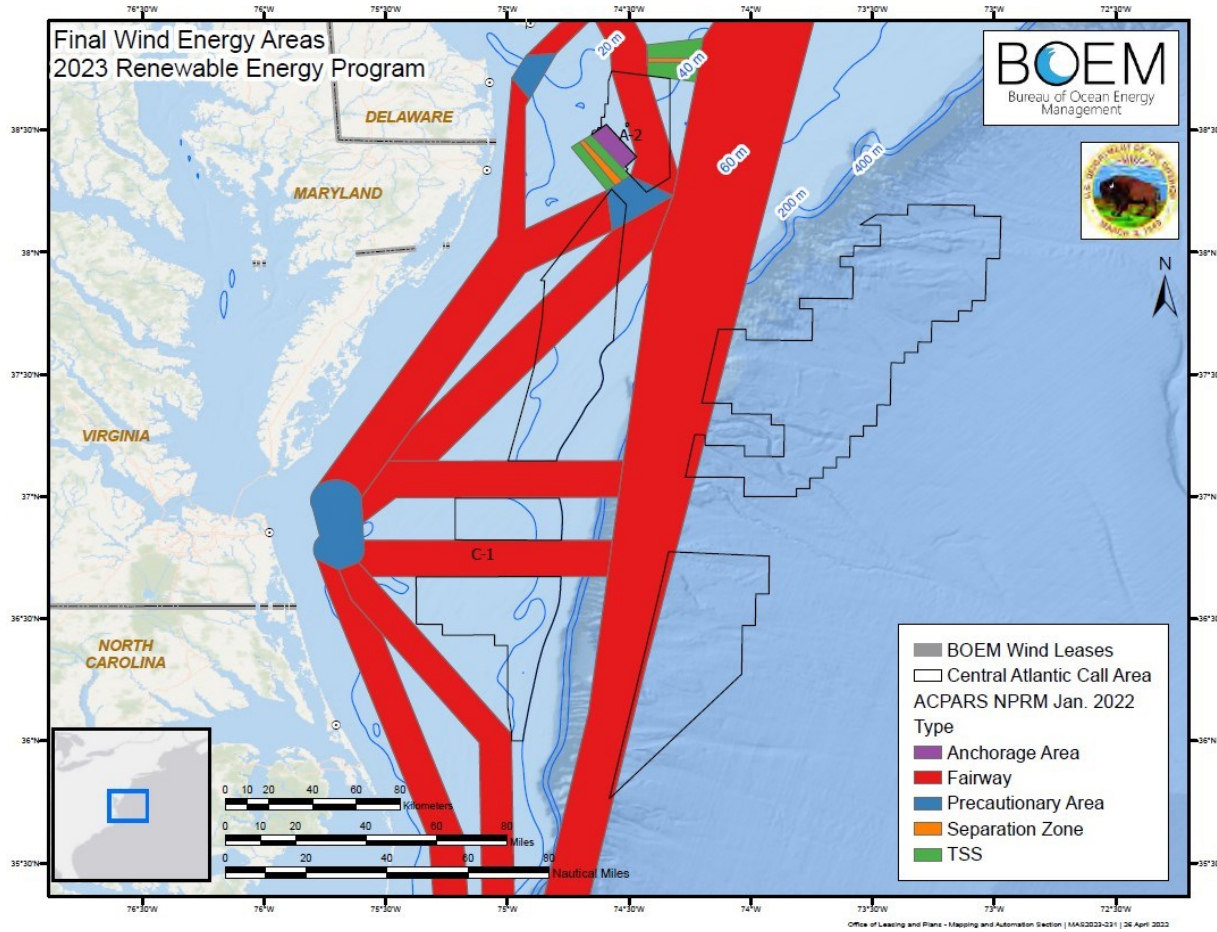
Changes to the NCCOS Model: Constraints Submodel



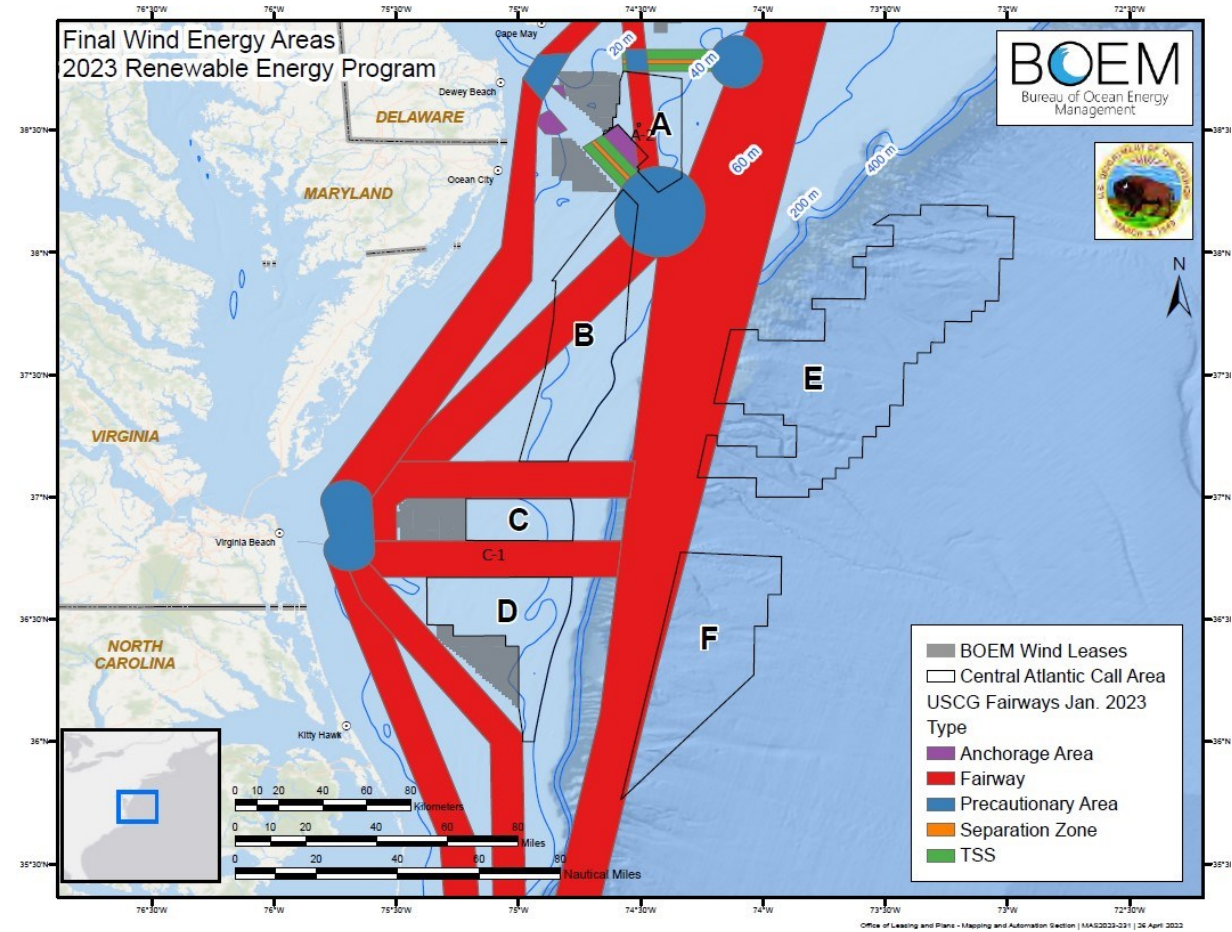
Data Layer	Setback Distances	Score	Cells impacted	Percent Area Constrained
Deep Sea Coral and Sponge Observations	1000 m	0	2536	0.64%
Navy Assessment – Priority 1 & 2 Areas	-	0	172783	43.775%
Air Force Assessment – Priority 1, 2, & 3 Areas	-	0	141249	35.77%
BWFA Exclusion Area	-	0	2354	0.6%
USCG Shipping Safety Fairways	-	0	45320	11.48%
BOEM Proposed Fairway Extensions	-	0	40090	10.15%
LOD Seafloor Cable Protection Area	-	0		
NASA Assessment - Red Constrained Areas	-	0	193326	48.95%
All Constraints			272,749	69.10%



Collaboration with US Coast Guard



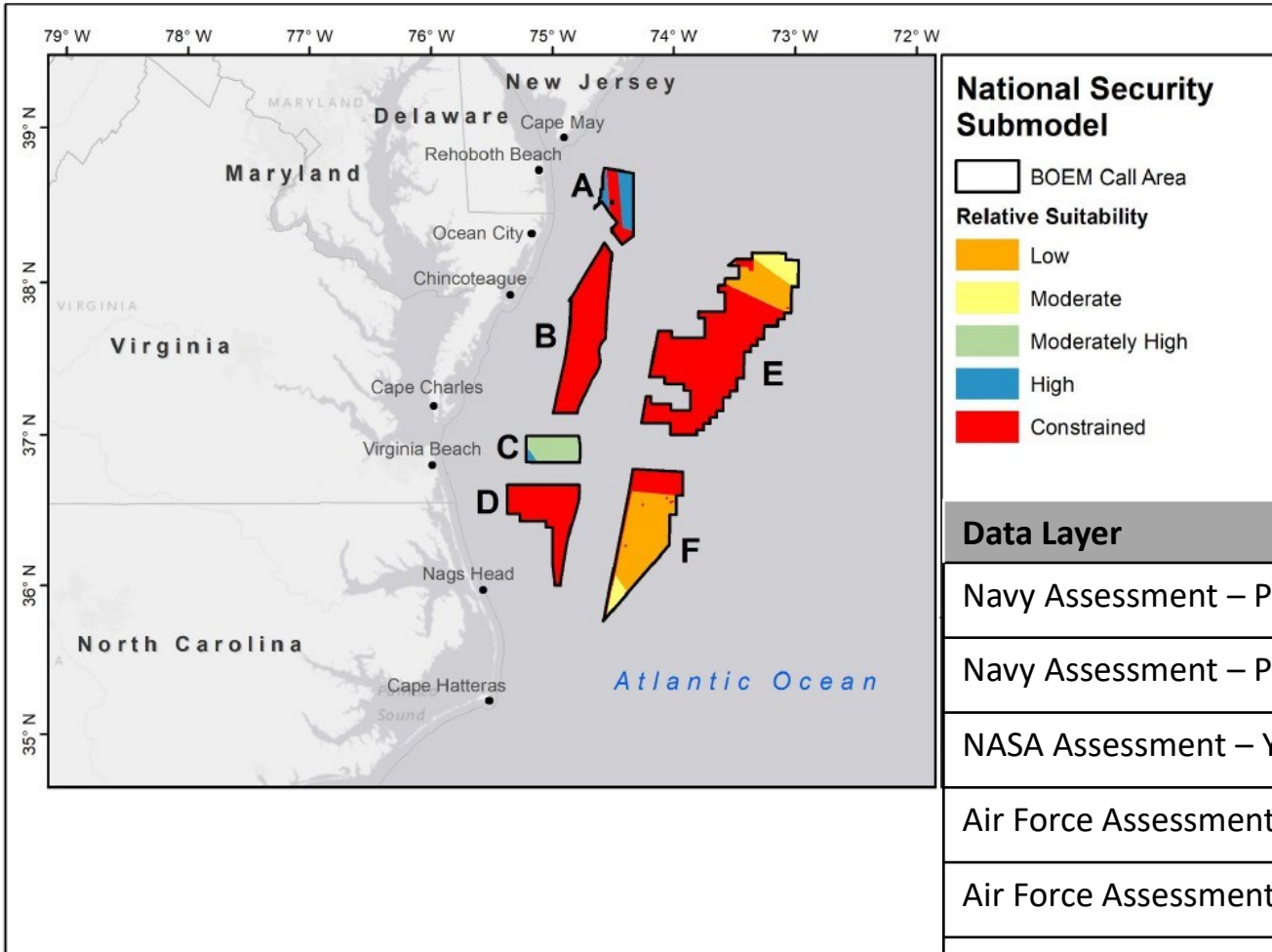
January 2022



January 2023



Changes to the NCCOS Model: National Security Submodel

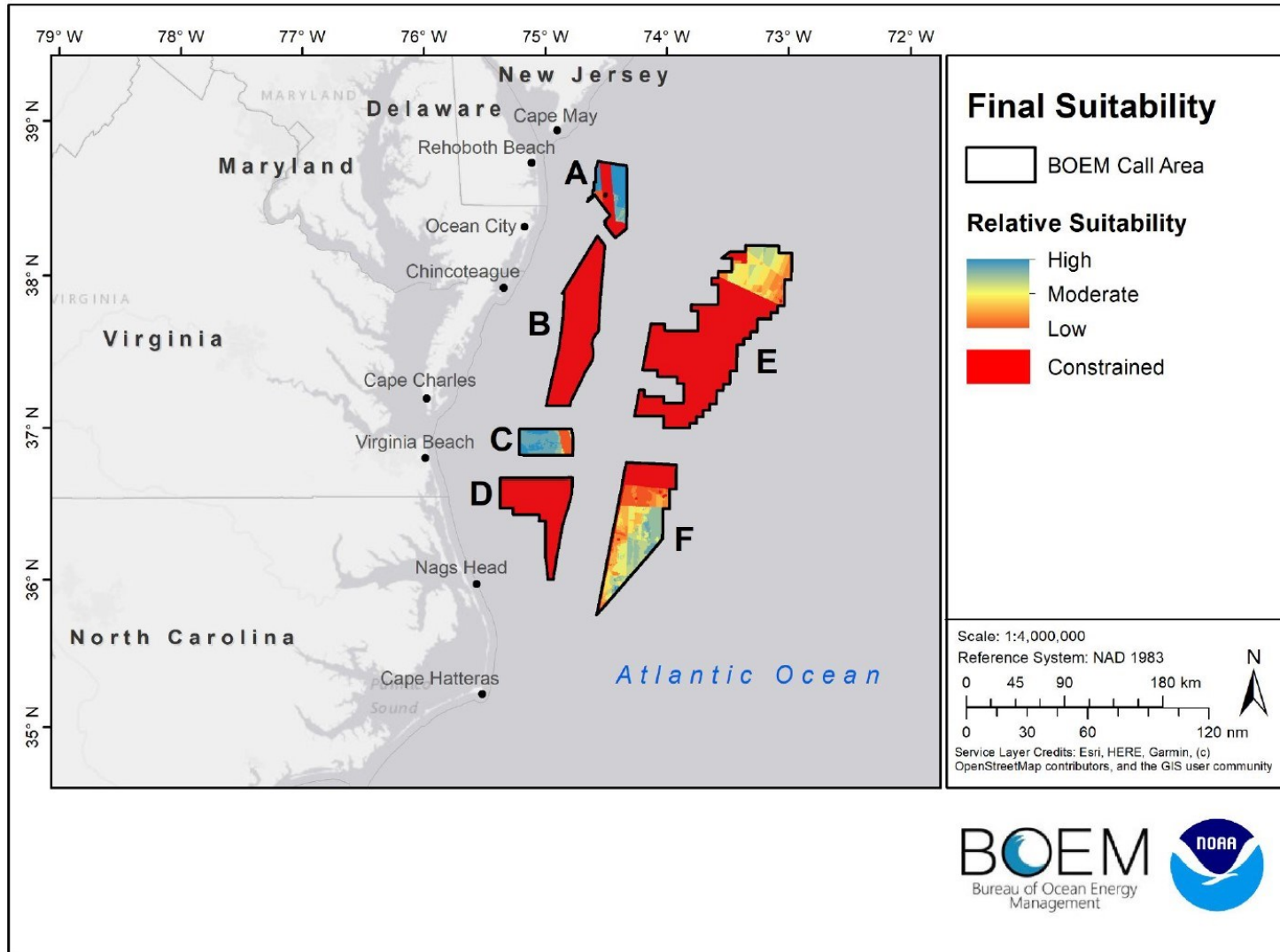


To determine the draft WEAs, a score of 0.5 was used for the National Security Submodel in the absence of a DoD Assessment indicating “uncertainty” in the area.

Data Layer	Score
Navy Assessment – Priority Area 3	0.1
Navy Assessment – Priority Area 4 (call Area A&C)	0.5
NASA Assessment – Yellow Areas	0.5
Air Force Assessment – Priority 4	0.5
Air Force Assessment – Priority 5	0.8
Air Force Assessment – Priority 6	1.0

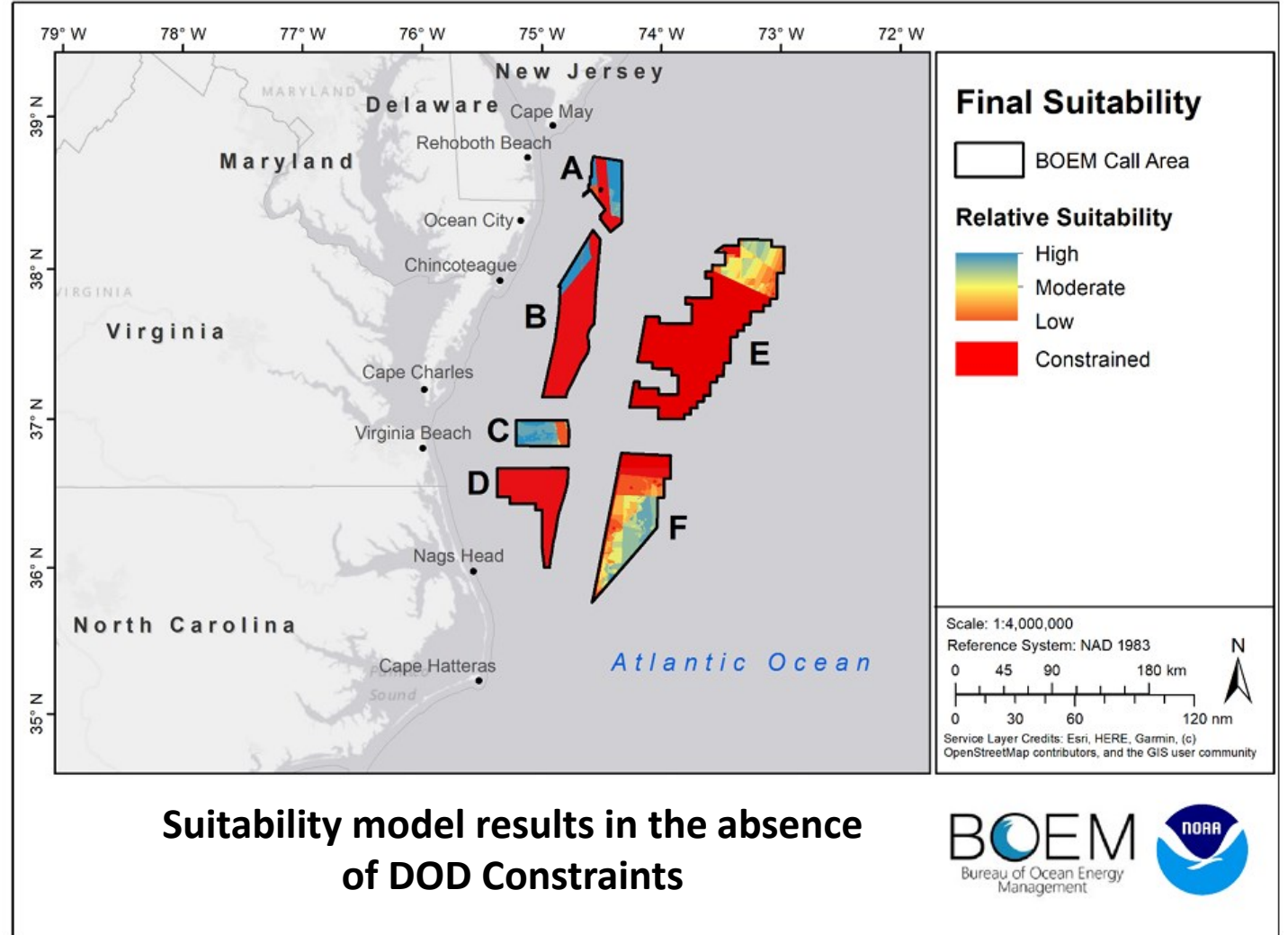


Final Suitability for Final WEAs



Final Suitability for Final WEAs

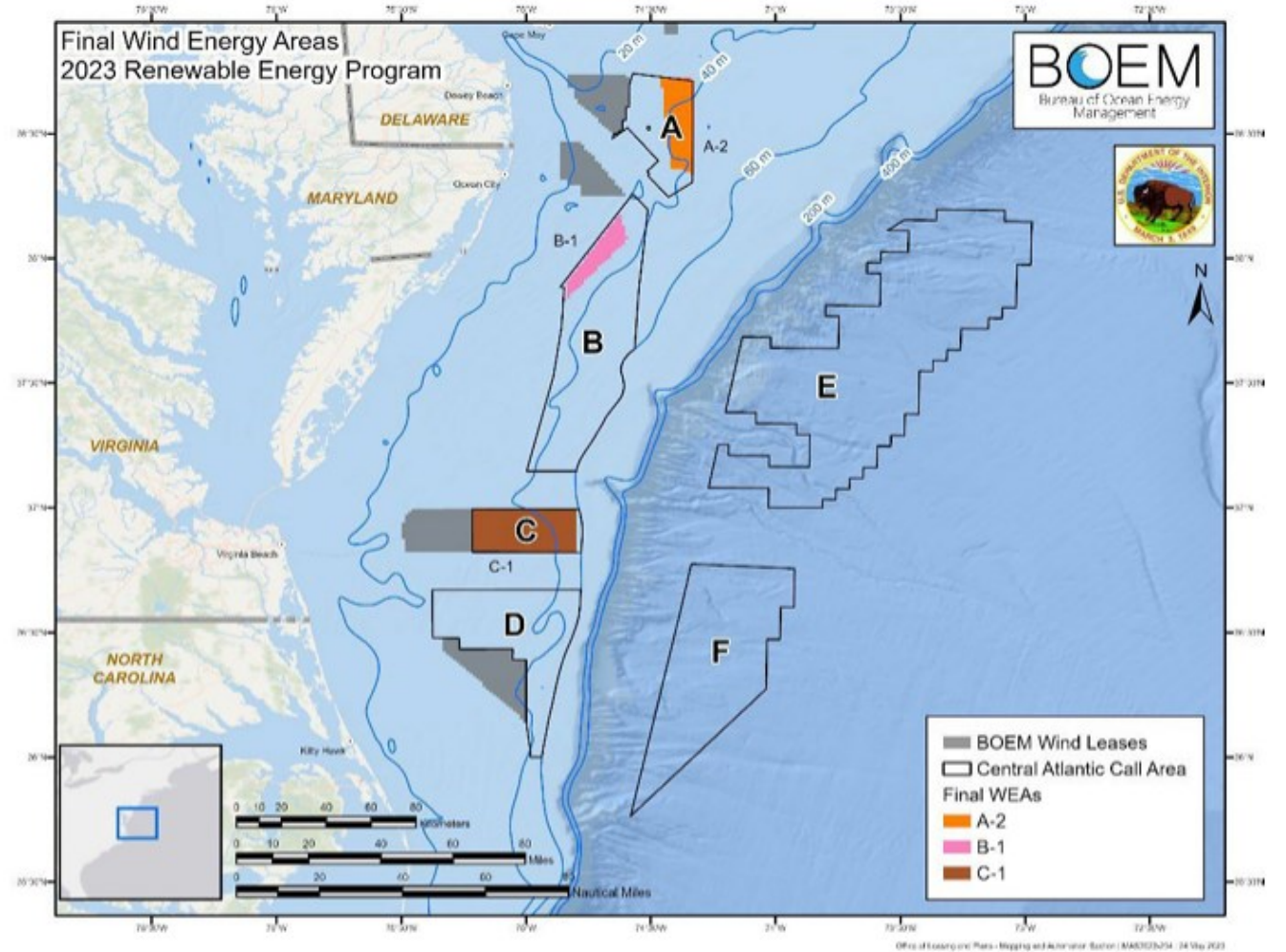
- BOEM, DOD and NASA agreed to take a deeper dive into the northern portion of Call Area B.
- NCCOS re-ran the model to determine if any suitable area could exist if, for modeling purposes only, the DOD/NASA constraint was removed.
- The model indicated that B-1 would be a suitable area **in the absence of DOD constraints**, and the federal team agreed to take a closer look.



Central Atlantic Final Wind Energy Areas (July 31, 2023)

WEA Option	Acres	Capacity
A-2	101,767	1.2-2.3 GW
B-1	78,285	0.9-1.8 GW
C-1	176,506	2.1-4.0 GW

Total = 356,550 acres and between 4.3—8.1 GW if fully developed



Potential Auction Format

- The Central Atlantic auction is proposed to include the following.
 - Multiple-factor auction format
 - Bidding system would be a combination of monetary and non-monetary factors.
 - The non-monetary factors would be bidding credits for commitments to financial investments in specific initiatives that further OCSLA's objectives.
 - The bid in each round would represent the sum of the cash bid and the value of any non-monetary factors in the form of bidding credits.
 - BOEM would start the auction at the minimum bid price for the Lease Area and increase prices incrementally until no more than one active bidder per Lease Area remains in the auction.
- There are currently three companies qualified to bid in Central Atlantic:
 - Avangrid Renewables, LLC
 - US Mainstream Offshore, Inc.
 - OW North America Ventures LLC



Potential Stipulations

- **Reporting and Enhanced Engagement**

- Progress Report submitted by Lessee every 6 months
 - Must include Communication Plans for fisheries, Tribes, and agencies
 - Must include coordinated engagement between Regional Lessees

- **Project Labor Agreements (PLAs)**

- The Lessee must make every reasonable effort to enter into a PLA that covers the construction stage of any project proposed for the Lease Area.

- **Supply Chain Statement of Goals**

- The Lessee must submit a statement describing plans, including engagement with domestic suppliers, for contributing to the creation of a robust and resilient US-based offshore wind supply chain.



Potential Bidding Credits

- **Workforce Training and Supply Chain Development**
 - 17% bidding credit with the Contribution due by the lease's first FDR
 - Lessee retains flexibility consistent with its Conceptual Strategy to direct funds to most worthwhile training and supply chain efforts
 - Credit is intended to incentive investments that would not otherwise happen
 - Enhance, through training, the offshore wind workforce or to stand-up the domestic supply chain for offshore wind technology, manufacturing, assembly, or services
 - OCSLA nexus: operations must be conducted in a safe manner by well-trained personnel
 - OCSLA nexus: expeditious and orderly development, and protection of national security interests



Potential Bidding Credits

○ Fisheries Compensatory Mitigation Fund

- 8% bidding credit in exchange for an equivalent cash commitment to an Atlantic Fisheries Compensatory Mitigation Fund
 - OCSLA Nexus: 8(p) requires BOEM to consider other uses of the sea including fisheries
- Credit Design Features
 - Fund's first priority is for gear loss or damage or income loss, but if excess funds are actuarially determined, funds can be used for engagement and select gear upgrades
 - Central Atlantic lease areas are expected to have minimal fishery impacts
 - The fund provides certainty to fisheries stakeholders and is available as a perpetual fund to mitigate impacts from future Atlantic leases
 - Fund must include fiduciary governance, strong internal controls, and annual reporting



Potential Lease-Specific Terms, Conditions and Stipulations

The following Lease-Specific Terms, Conditions and Stipulations are proposed to be included in Addendum C of the Lease Instrument:

- Site Characterization
- Reporting
- National Security and Military Operations
 - New: Foreign Interest
 - New: Notice of Assignment to the Committee on Foreign Investment in the United States (CFIUS)
- Standard Operating Conditions
- Project Labor Agreements
- Workforce Training and/or Domestic Supply Chain Development Bidding Credit (17%)
- Fisheries Compensatory Mitigation Fund Bidding Credit (8%)
- Siting Conditions



Potential Information to Lessees

- **Potential Future Restrictions to Ensure Navigational Safety**
 - Lightering Zones, Vessel Traffic Corridors
- **Potential Future Restrictions to Mitigate Potential Conflicts with Department of Defense Activities**
- **Proposed Restrictions Related to National Aeronautics and Space Administration (NASA) Wallops Island Flight Facility Operations:**
- **Potential Future Restrictions within Significant Sediment Resource Areas (SSRAs)**
 - Bidders are advised that SSRAs exist in one or more of the lease areas. Where feasible, project design and construction should consider on-lease access to sediment resources.



- **NEPA**

- Notice of Intent to prepare an Environmental Assessment (EA) published in Federal Register on August 1, 2023.
- EA will consider the potential environmental impacts associated with site assessment and site characterization activities.
- Environmental impacts of any proposed wind energy projects will be assessed after a lease is issued and before BOEM decides whether or not to approve any lessee's construction and operations plan.



Consultations

- **Completed Consultations**
 - BOEM completed programmatic Endangered Species Act Section 7 consultation with the National Marine Fisheries Service in June 2021 (the Atlantic Data Collection and Site Survey Programmatic Informal Consultation).
- **BOEM will conduct other required consultations under the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, Section 106 of the National Historic Preservation Act, and the Coastal Zone Management Act.**



Central Atlantic Milestones

Milestone	Action	Target Date
<i>Draft WEA publication</i>	<i>30-day comment period on Regs.gov</i>	<i>November 15, 2022</i>
<i>Stakeholder Engagement</i>	<i>3 virtual meetings</i>	<i>November/December 2022</i>
<i>Area Identification</i>	<i>Identify Wind Energy Area(s)</i>	<i>July 31, 2023</i>
Lease Sale	Proposed Sale Notice	Q4 2023
	Final Sale Notice	Q2 2024
	Hold auction	Q3 2024



BOEM

Bureau of Ocean Energy
Management

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Central Atlantic Region: State Goals

State	Goal	Current Capacity in C. Atl. (GW)	Additional Capacity Needed to Meet 2035 Goals (GW)	State Request (GW)
North Carolina	2.8 GW OW by 2030 8.0 GW OW by 2040	2.8 (4.2 in all of NC)	0	4.0
Virginia*	5.2 GW OW by 2034	2.6	2.6	2.6
Maryland*	8.5 GW OW by 2031	2.0	6.5	10
Delaware	40% by 2035	1.1	-1.1	None
Totals	16.5 GW OW by 2035	8.5	8	16.6

*written requests were received from the State

