



BOEM BUREAU OF OCEAN
ENERGY MANAGEMENT

BOEM Virtual Meeting

Gulf of Maine Proposed Sale Notice &
Maine Research Lease Update

Zach Jylkka and Luke Feinberg, Renewable Energy Program Specialists

June 11, 2024

Today's Meeting

Objectives

- Exchange information and provide opportunities for feedback regarding the Proposed Sale Notice
- Provide an update on the Maine Research Lease

Public Feedback

- This meeting will help participants make more informed comments in regulations.gov
- Feedback today won't be treated as official public comment, but a high-level meeting summary will be included in regulations.gov

Our Focus Today

- General Public
 - Date: Thursday, May 23, 2024
 - Time: 6-8pm
- Commercial Fishing (Mobile & Fixed Gear)
 - Date: Thursday, June 6, 2024
 - Time: 5-7pm
- Recreational Fishing and Highly Migratory Species
 - Date: Tuesday, June 11, 2024
 - Time: 5-7pm
- Environmental Non-Governmental Organizations (eNGOs)
 - Date: Monday, June 10, 2024
 - Time: 1:30-3:30pm
- Commercial Maritime (Shipping)
 - Date: Monday, June 10, 2024
 - Time: 4-6pm

Today's Agenda

- I. Proposed Sale Notice – Process to identify proposed lease areas
 - Presentation
 - Discussion
- II. Lease stipulations and bidding credits
 - Presentation
 - Discussion
- III. Maine Research Lease update
 - Presentation
- IV. Next Steps



Gulf of Maine Engagement Meetings – Spring 2024

Meeting Guidelines

- Share the floor
 - Please be brief
- Respect different views
 - It's OK to bring different perspectives. Show others the respect you'd want people to show you
- Focus on specific comments & questions related to tonight's topic



Also, we're all together in a public meeting. Let's keep basic decorum, just like in a Fisheries Council meeting. No profanity, no threats, etc.



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Gulf of Maine Proposed Sale Notice

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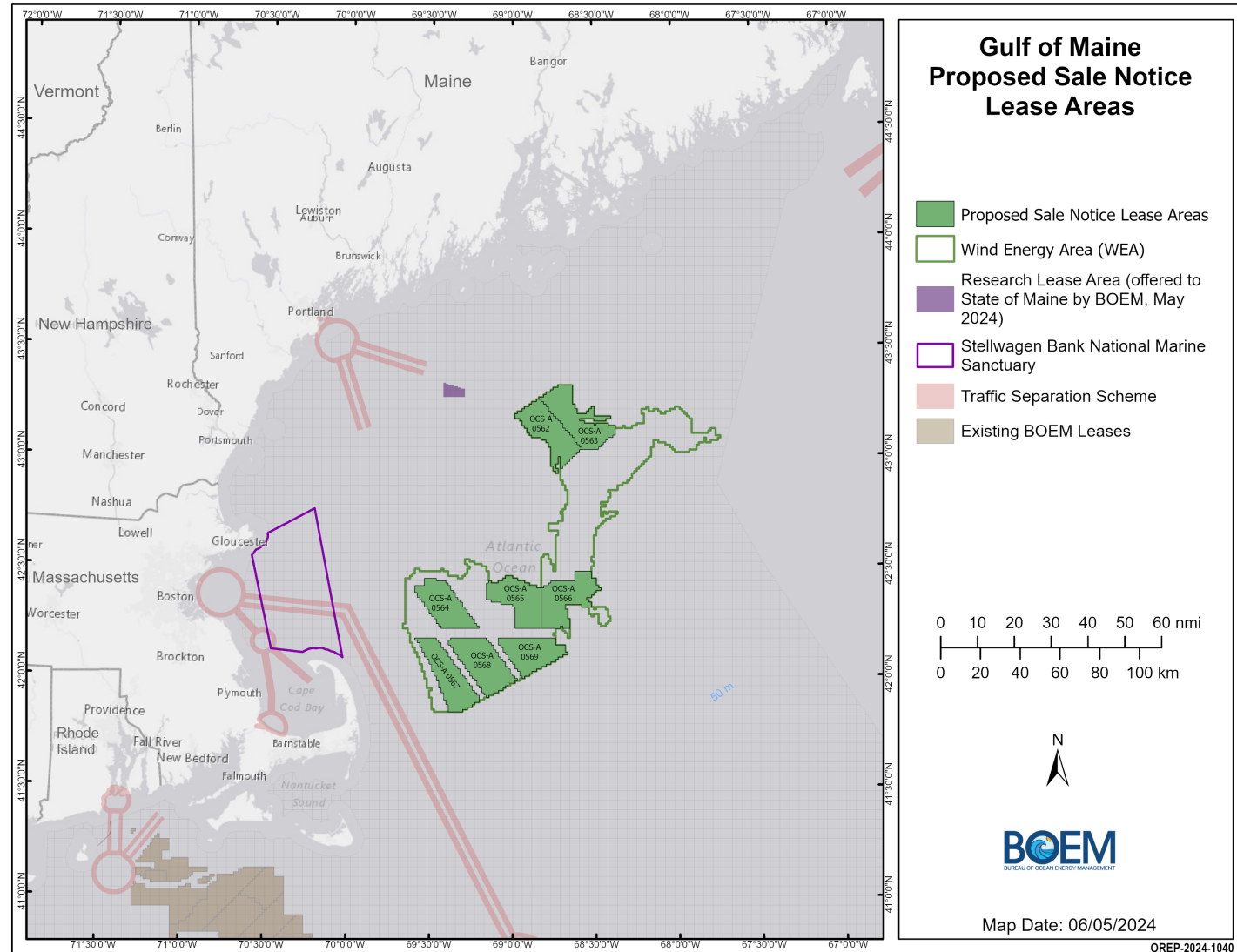
BOEM's Office of Renewable Energy Programs

Agency Mission: facilitate the responsible development of renewable energy resources on the OCS through conscientious planning, stakeholder engagement, comprehensive environmental analysis, and sound technical review.

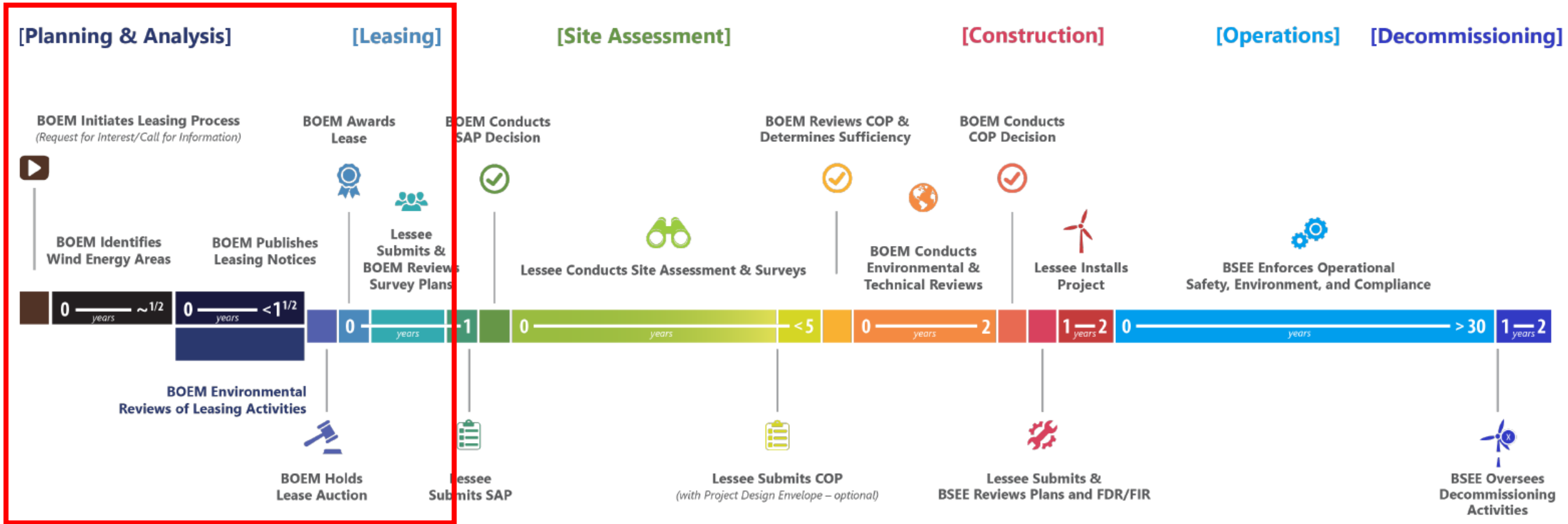


Proposed Sale Notice (PSN)

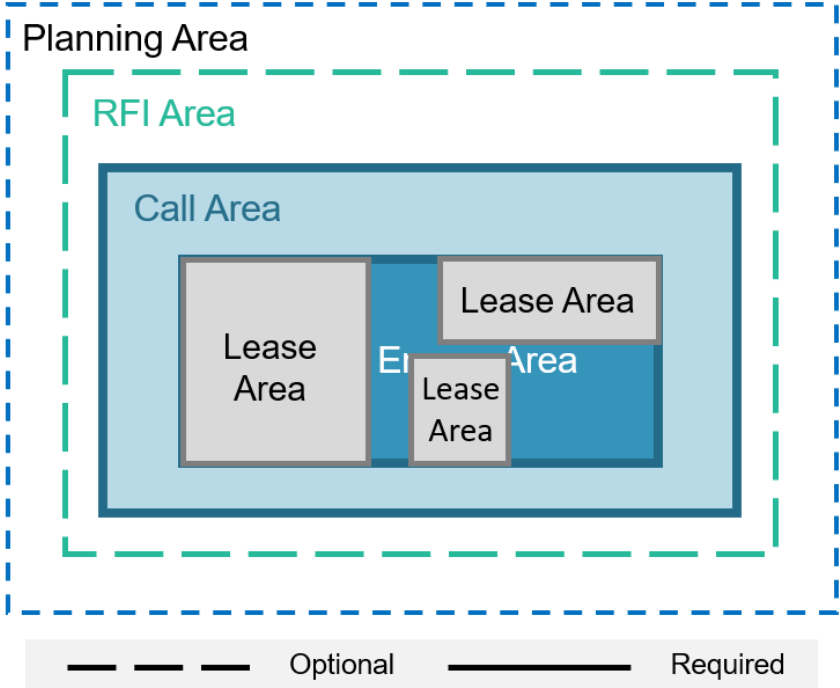
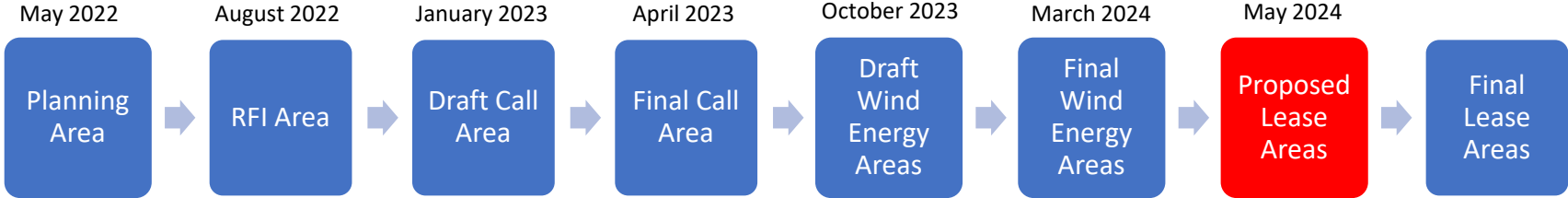
- On April 30, 2024, the Interior Department [announced](#) its proposal for a first offshore wind energy auction in the Gulf of Maine.
- The PSN published in the [Federal Register](#) on May 1, 2024, initiating a 60-day public comment, which closes on July 1, 2024.
- Individuals may comment by navigating to [Regulations.gov](#) and searching for **BOEM-2024-0026**.



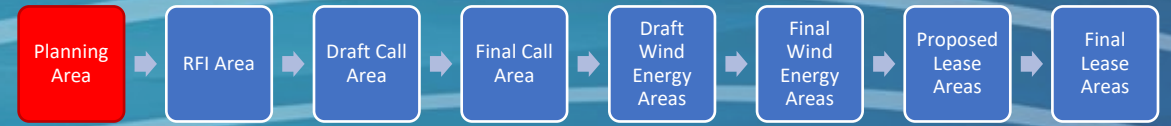
Renewable Energy Authorization Process



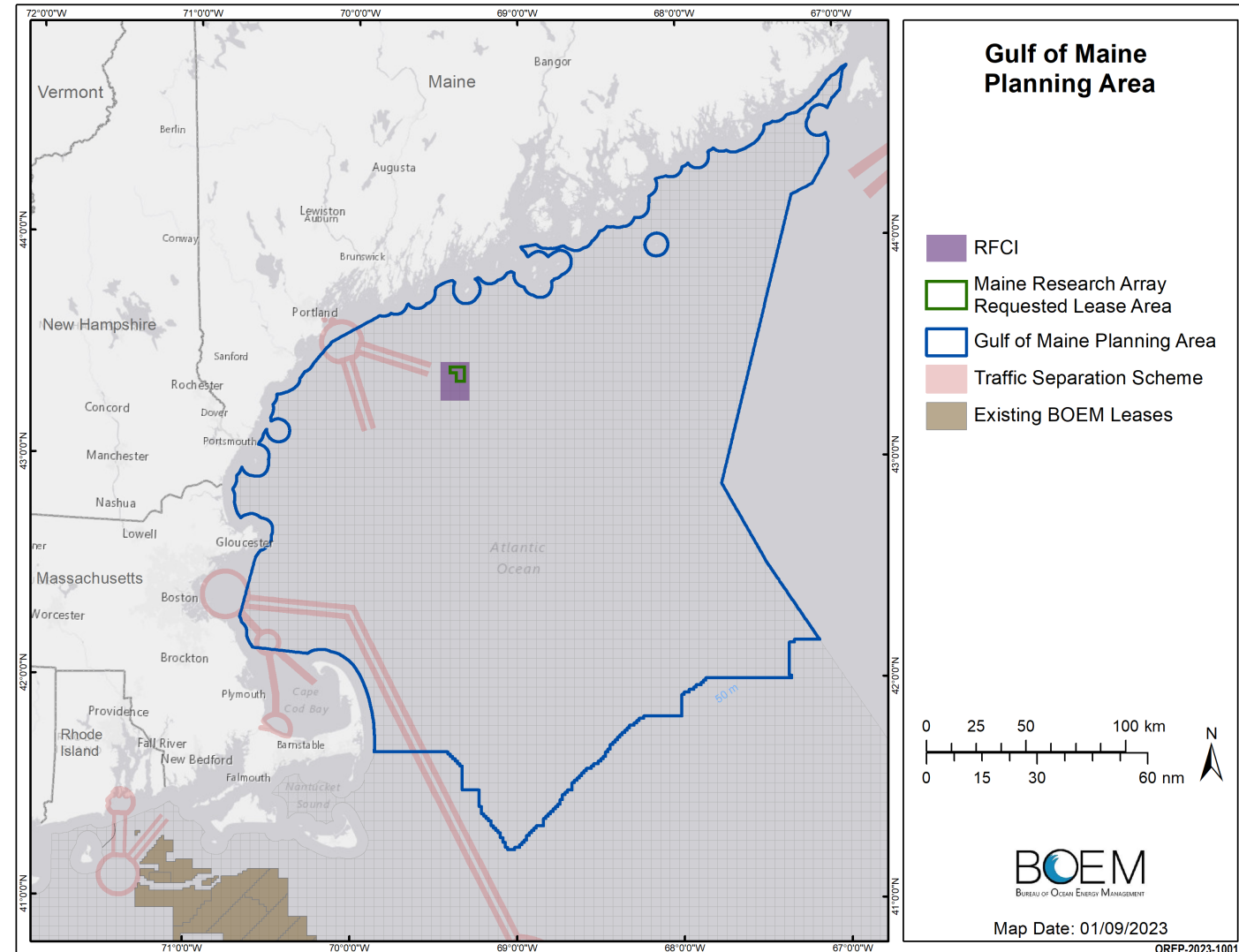
Gulf of Maine Planning & Leasing Process



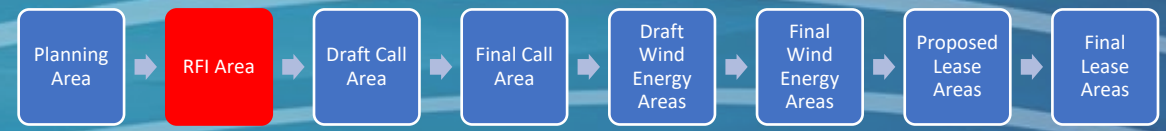
Planning Area



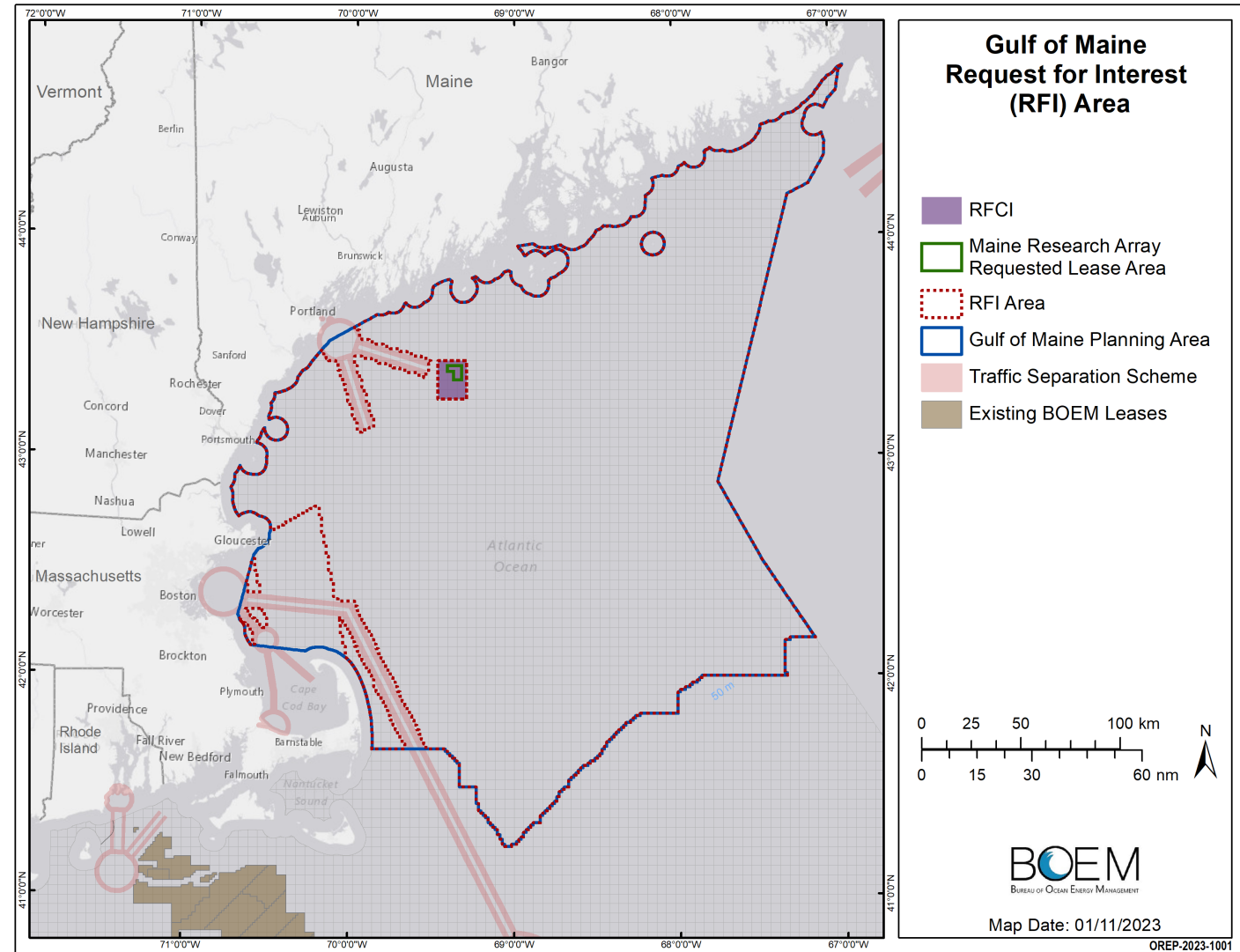
- Preliminary and optional step in the BOEM Planning Process
- Shared Planning Area and Draft RFI Area at the [May 2022 Task Force meeting](#)



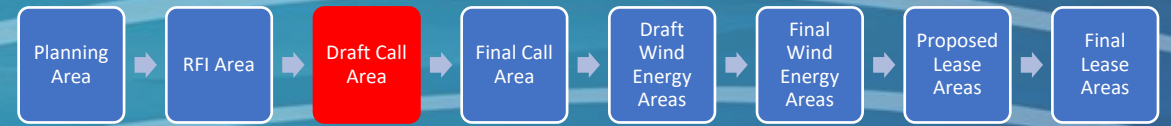
Request for Interest (RFI) Area



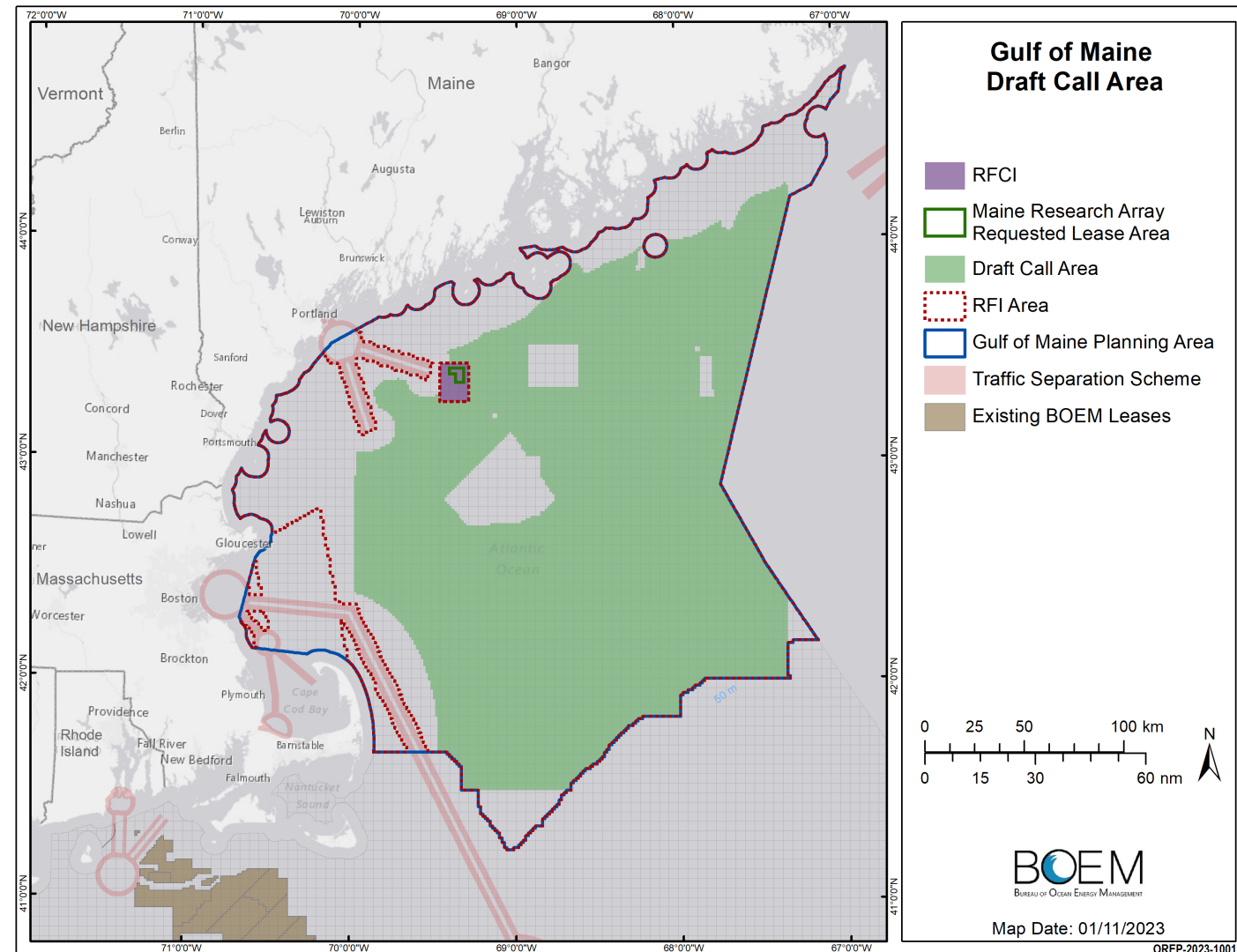
- Published RFI on August 19, 2022
 - 45-day comment period closed October 3, 2022
- RFI Area excluded “incompatible areas”
 - National Park System, National Wildlife Refuge System, National Marine Sanctuary System, or any National Monument (§585.204)
 - Existing Traffic Separation Schemes (TSS), fairways, or other internationally recognized navigation measures
 - Unsolicited lease request areas that are the subject of a separate request for competitive interest



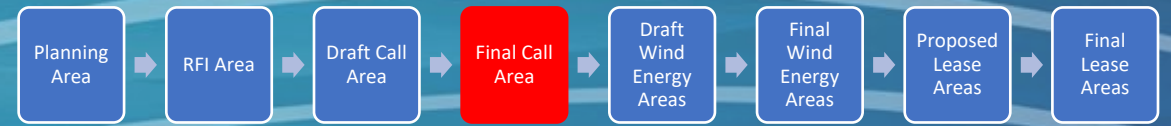
Draft Call Area



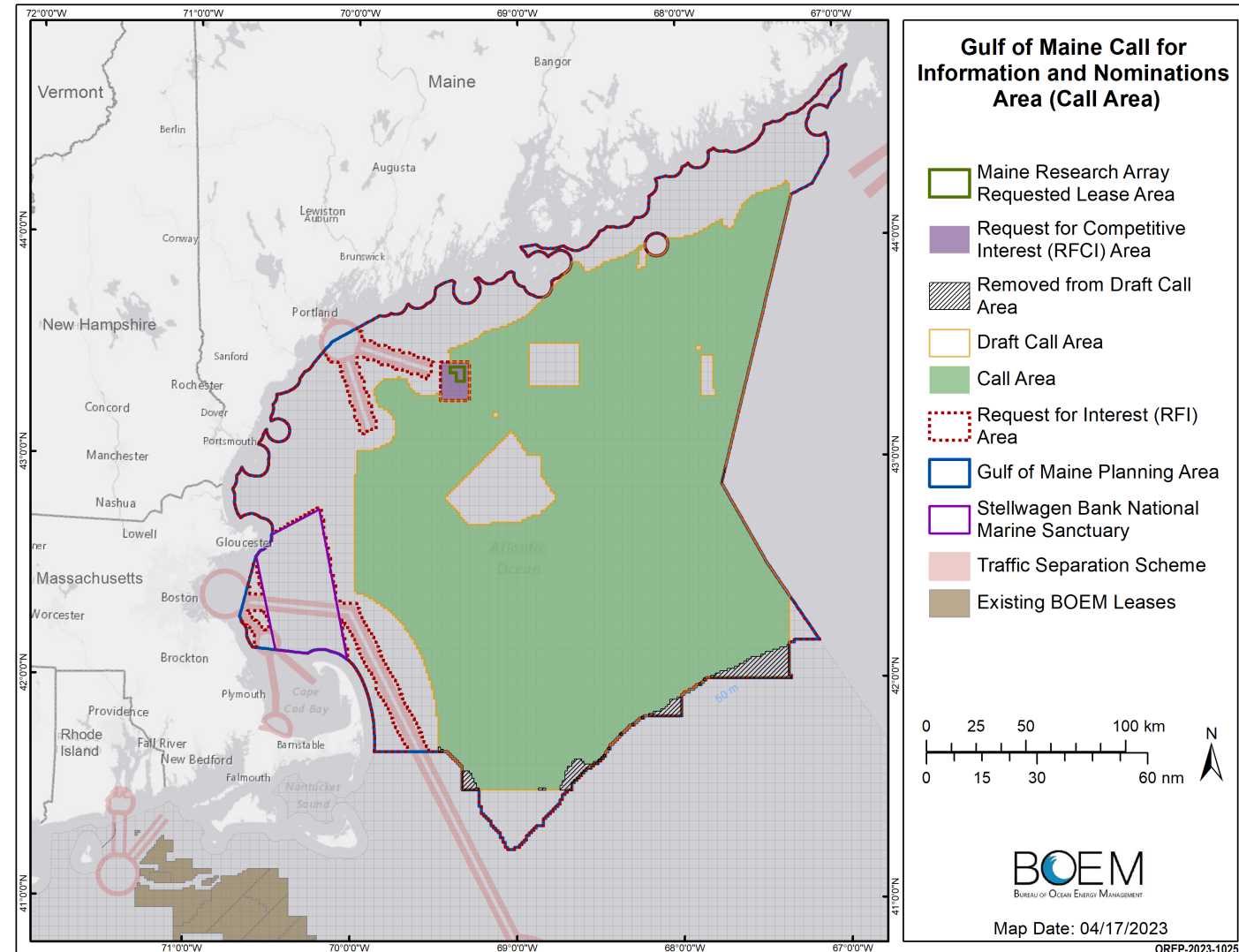
- BOEM reviewed responses to RFI and worked with NOAA NCCOS to conduct spatial analysis to inform Draft Call Area
 - 27% reduction from RFI Area
- BOEM held a series of in-person and virtual meetings.



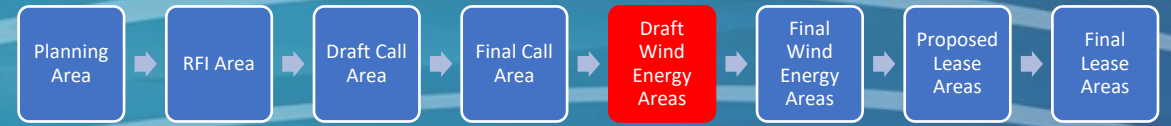
Final Call Area



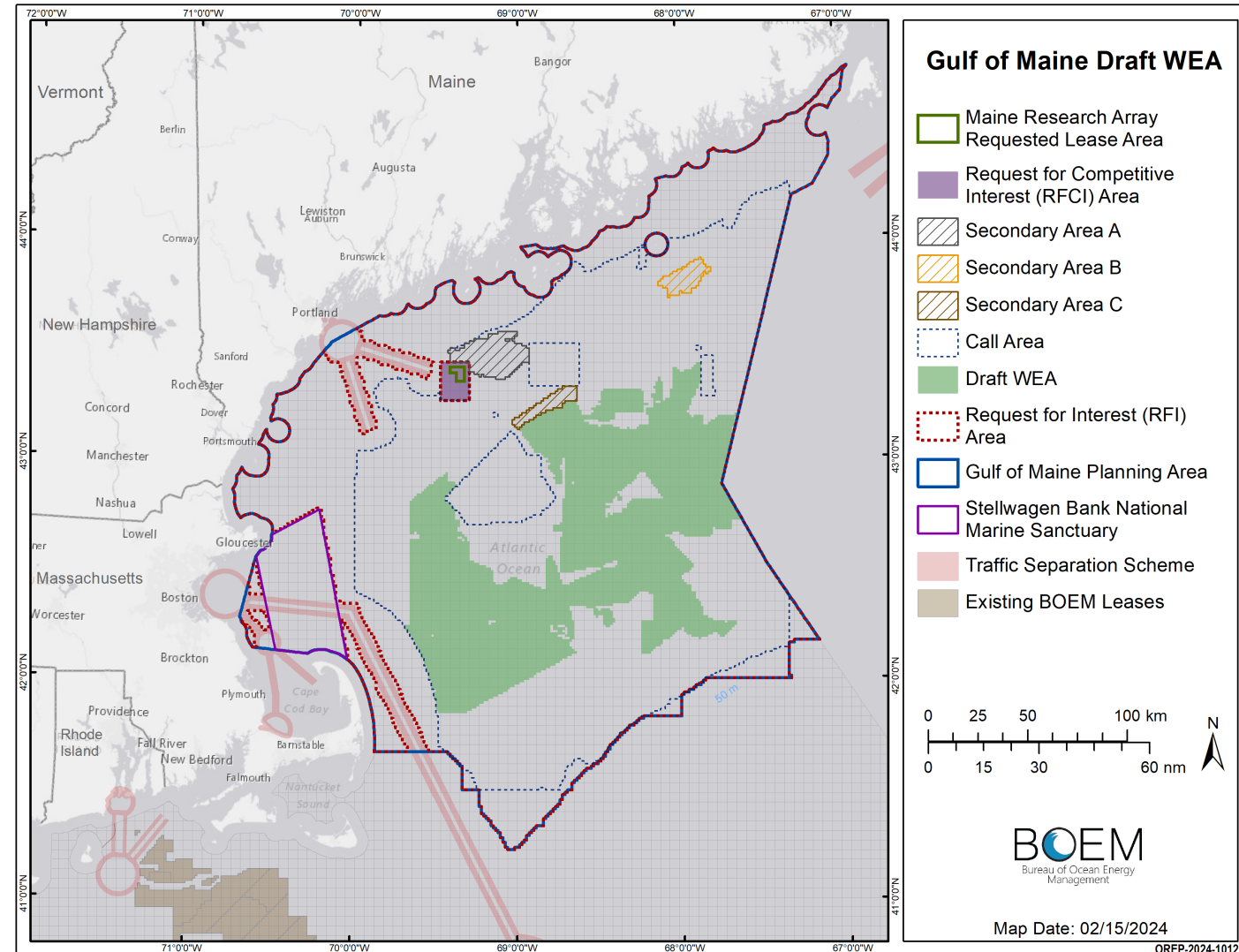
- The Final Call Area was published on April 26, 2023
 - 45-day public comment period (closed June 12, 2023)
- BOEM removed areas from the southern edge of the Call Area to better avoid Georges Bank
- BOEM held a [Task Force meeting \(May 2023\)](#) and invited public comment on, and assessed interest in, possible commercial wind energy development in areas within the Call Area.



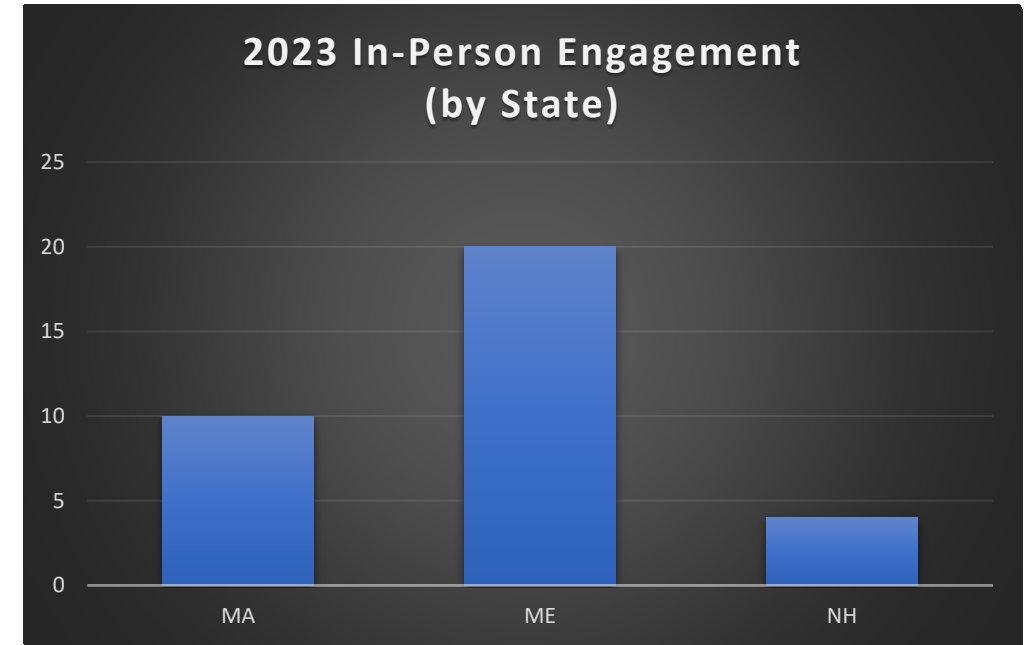
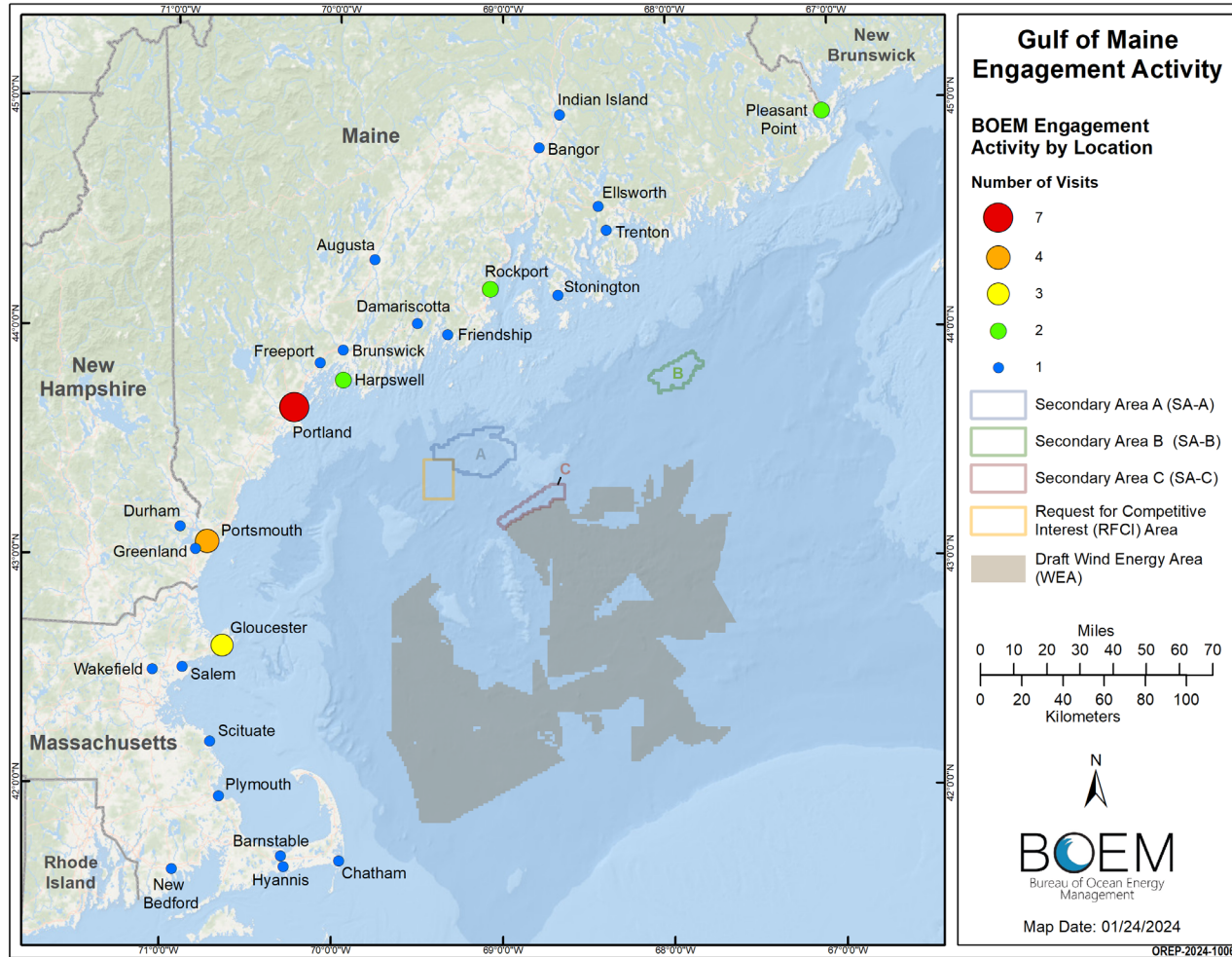
Area ID: Step 1 (Draft WEA)



- Draft WEA was published on October 19, 2023—opening a 30-day public comment period (closed November 20, 2023)
- ~3.5 million acres, representing a 64% reduction from the Call.
- Request for Comment
 - Explained the Draft WEA and Secondary Areas
 - Asked questions about:
 - Relative developability of different areas
 - Phased leasing
 - Fishing gear used, migration patterns of fish, protected species
- Draft NCCOS Report: Wind Energy Siting Analysis
 - Modeling methodology
 - Model performance across different resource groups/stakeholder interests
- Public Meetings
 - BOEM held public meetings in [July 2023](#) on the NCCOS model and underlying data, before holding additional meetings in [October 2023](#) on the Draft WEA



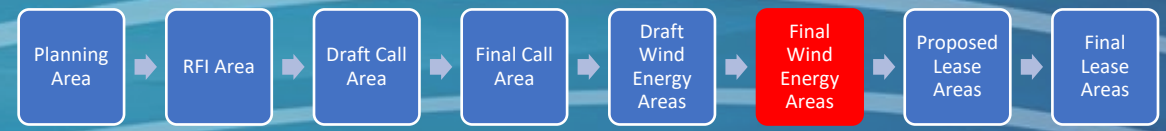
2023 Gulf of Maine Engagement



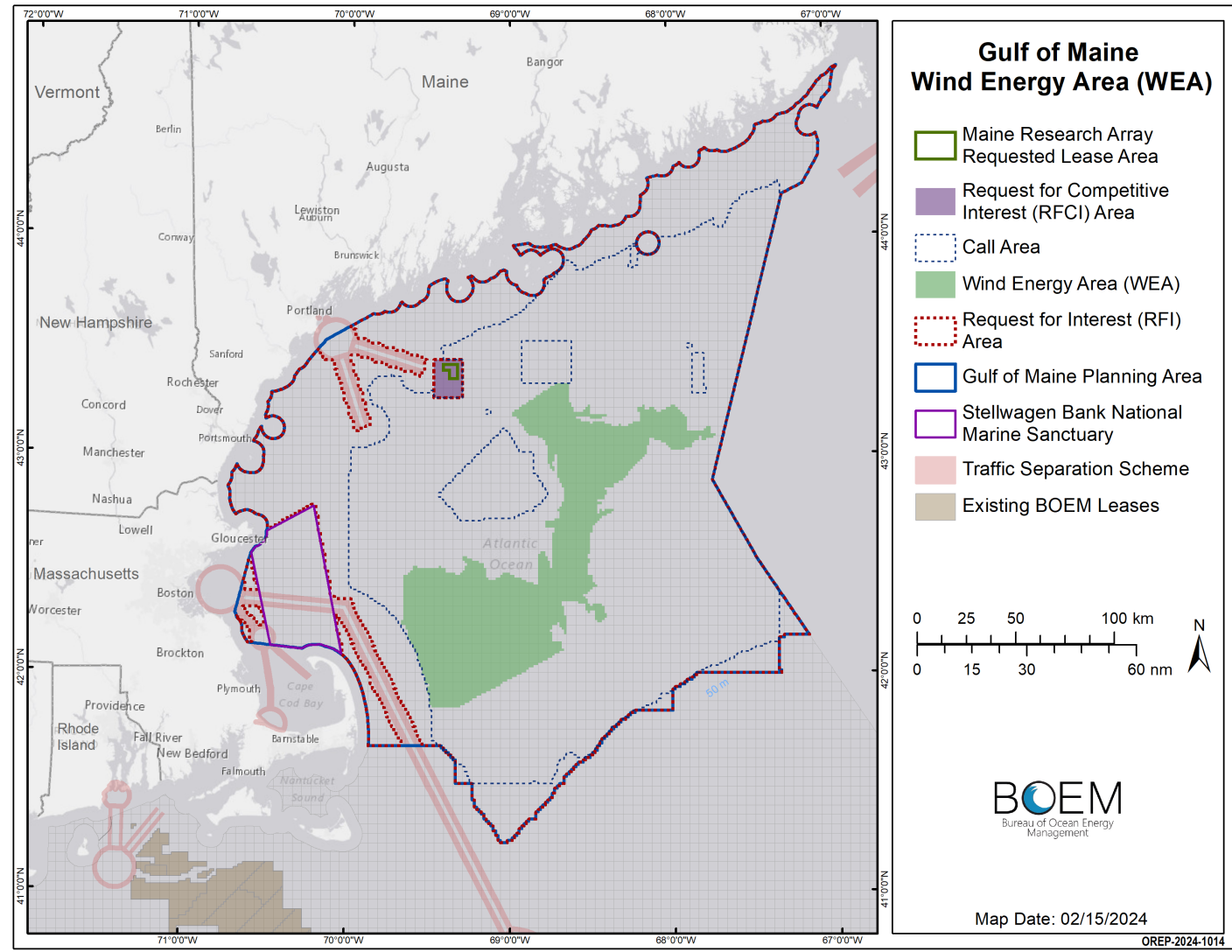
Specific to the Draft WEA, we held 7 meetings in ME, 6 in MA, 2 in NH

Engagement in the map spans 2019-2023; however, all but 5 meetings took place in 2023

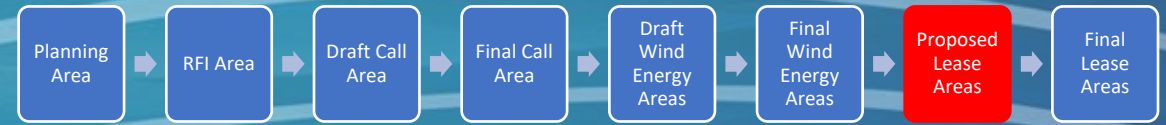
Area ID: Step 2 (Final WEA)



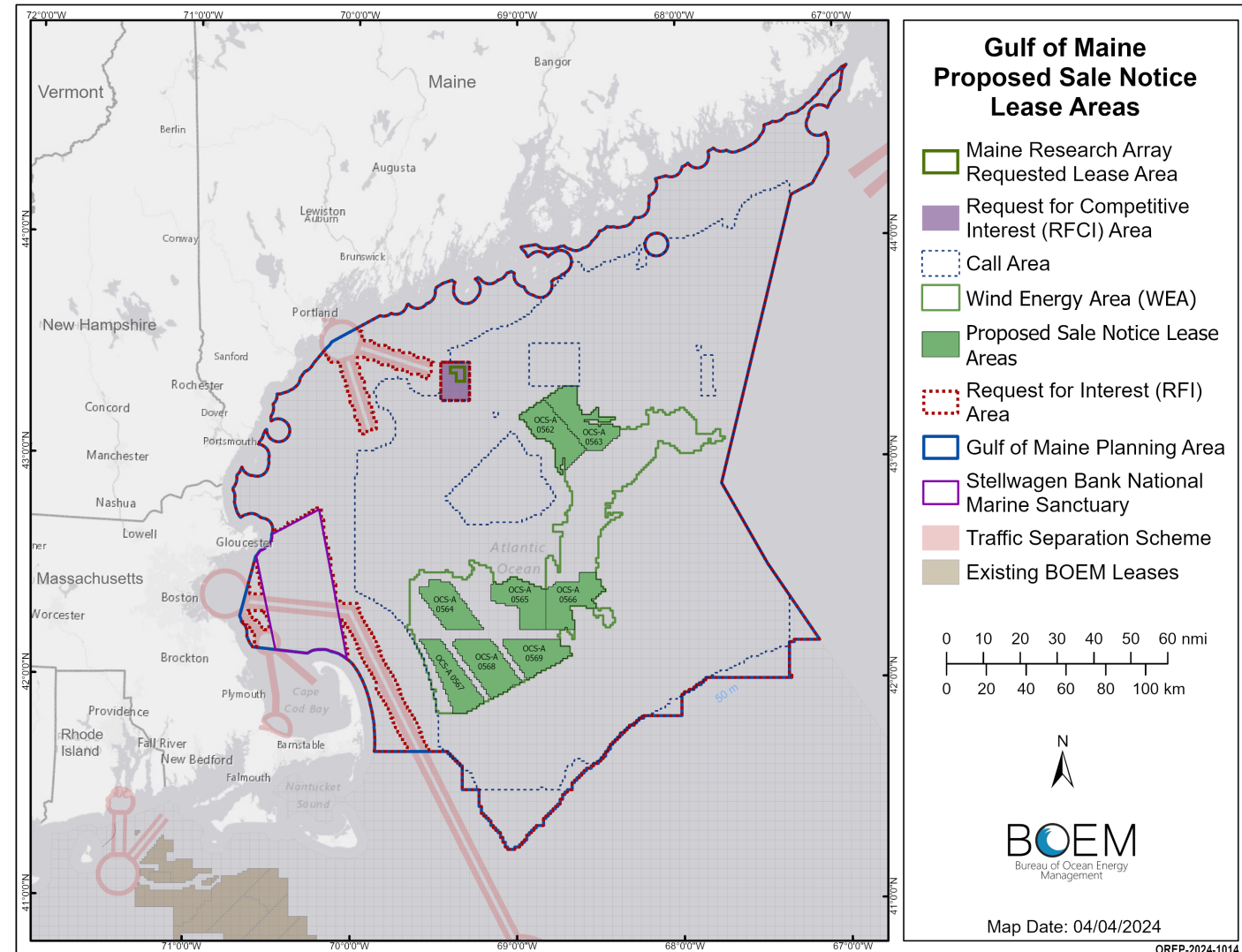
- [Area ID Memo](#): published March 15, 2024
- ~2 million acres (~80% reduction from Call Area; 43% reduction from Draft WEA)
 - Combined capacity of 32 gigawatts (4 MW/km²)
 - Exceeds area/capacity needed for regional offshore wind goals (13-18 gigawatts)
 - Area allows for additional deconfliction
 - Could support multiple GoME Lease Sales
- [BOEM worked with NCCOS](#) to run a revised suitability model on the Draft WEA
 - Removed Secondary Areas A & B, included most of C
 - Constrained
 - Area representing top 10% of revenue for the multispecies groundfish (VTR)
 - 5-mile buffer around Cashes Ledge Groundfish Closure/HMA
- **Geographic diversity**
 - Includes areas that are potentially HVAC compatible (within ~75 mi of a POI) for both MA and ME
 - Avoids several key fishing grounds and important areas of North Atlantic Right Whale Critical Habitat, Tribal fishing grounds

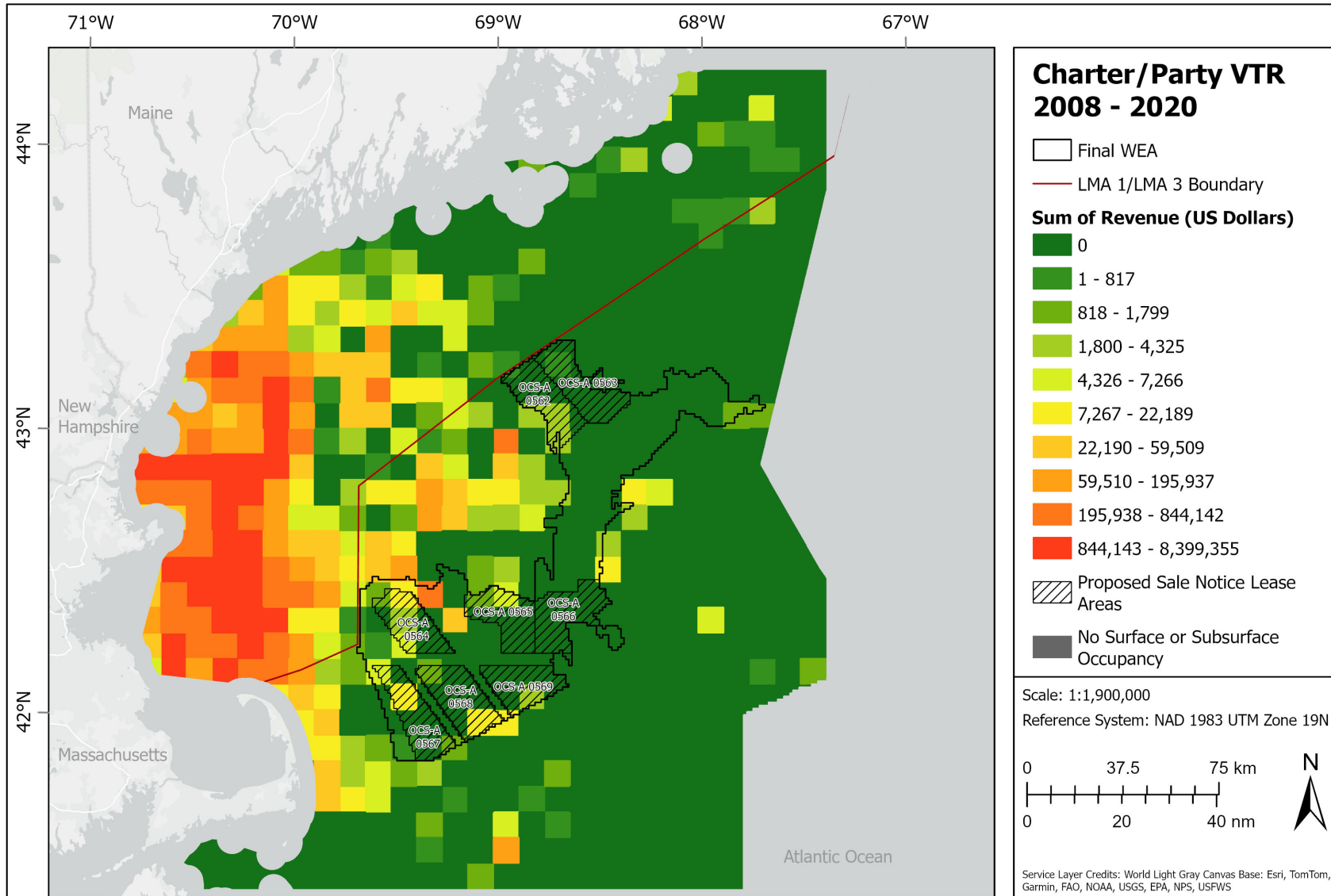


Proposed Sale Notice (PSN)



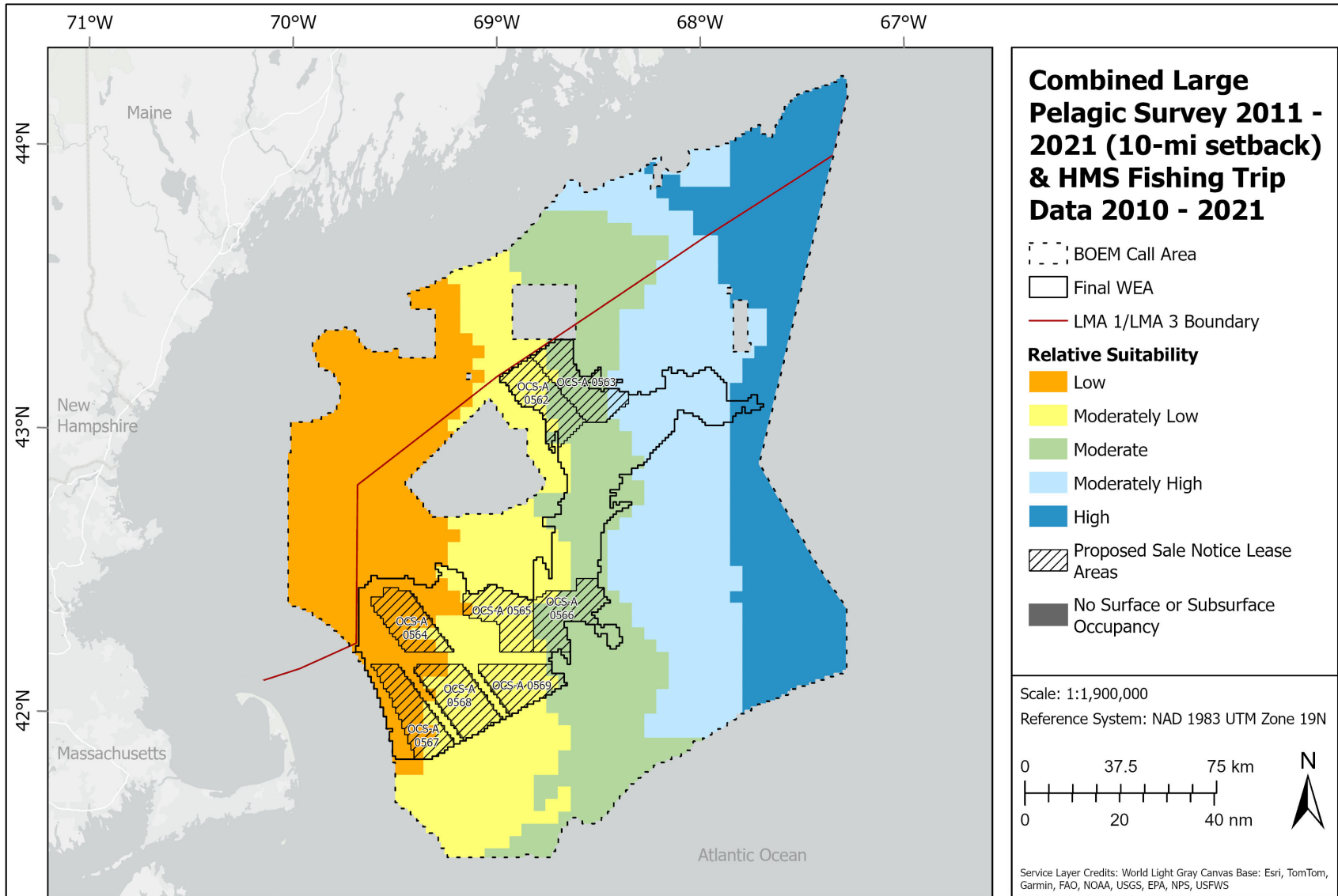
- Area summary:
 - 8 Leases
 - 969,999 acres (944,422 “developable” acres)
 - ~50% reduction from the Final WEA; ~90% reduction from the Call Area
 - Average lease size: 121,250 acres
 - Combined capacity of **15 gigawatts** (4 MW/km²)
 - Within range of the regional offshore wind goals (13-18 gigawatts)
- Geographic diversity
 - Includes areas that are potentially HVAC compatible (within ~75 mi of a POI) for both MA and ME
- Areas avoided from Final WEA:
 - Several heavily utilized areas for groundfish fishery
 - 3 transit corridors in southern region of WEA
 - Mayo Swell; Rogers Swell (important fishing/habitat areas)
 - Areas furthest offshore and likely most expensive to develop





Charter/Party VTR Data. NOAA National Marine Fisheries Service. 2008 - 2020. 193.2 km² resolution. Trip point locations are required to be submitted by any vessel issued GARFO charter party permit. Points represent best approximate position of that trip. Points are linked with survey derived angler price data to calculate revenue.

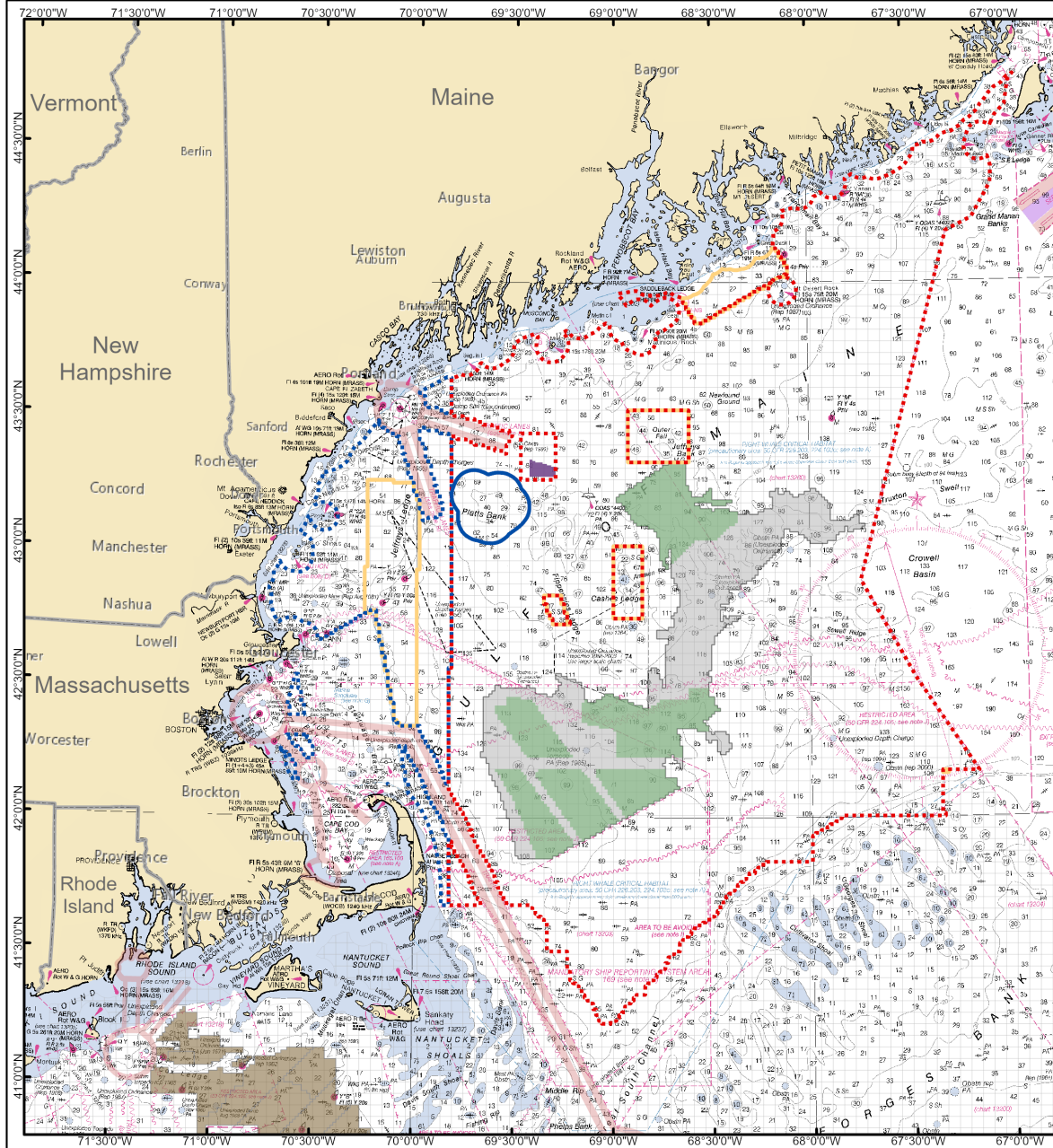




Large Pelagic Survey Data. NOAA National Marine Fisheries Service. 2011 - 2021. Trip point data was received from NOAA NMFS. A 10-mi setback was applied to each trip point to capture potential fishing extent. Trip points and corresponding setbacks were overlaid on the 10-acre grid and a total trip count per grid cell was calculated.

Highly Migratory Species Fishing Trip Data. Marine Department of Marine Resources. 2010 - 2021. A combined data layer was created using the two data layers.



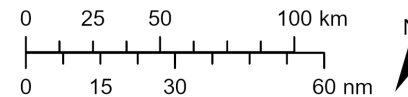


Gulf of Maine Request for Interest (RFI) Area Comments

- PSN Areas
- Final WEA
- RFI Area with Requested Areas Removed
- Research Lease Area (offered to State of Maine by BOEM, May 2024)
- Existing BOEM Leases
- Traffic Separation Scheme

New Hampshire Commercial Fishermen's Association Comments (Requested RFI Removals)

- 5 Mile Buffer of Platts Bank
- 50 Fathom Depth Contour
- RFI Area Beyond 69 Degrees, 50 Minutes West
- Habitat Management Area

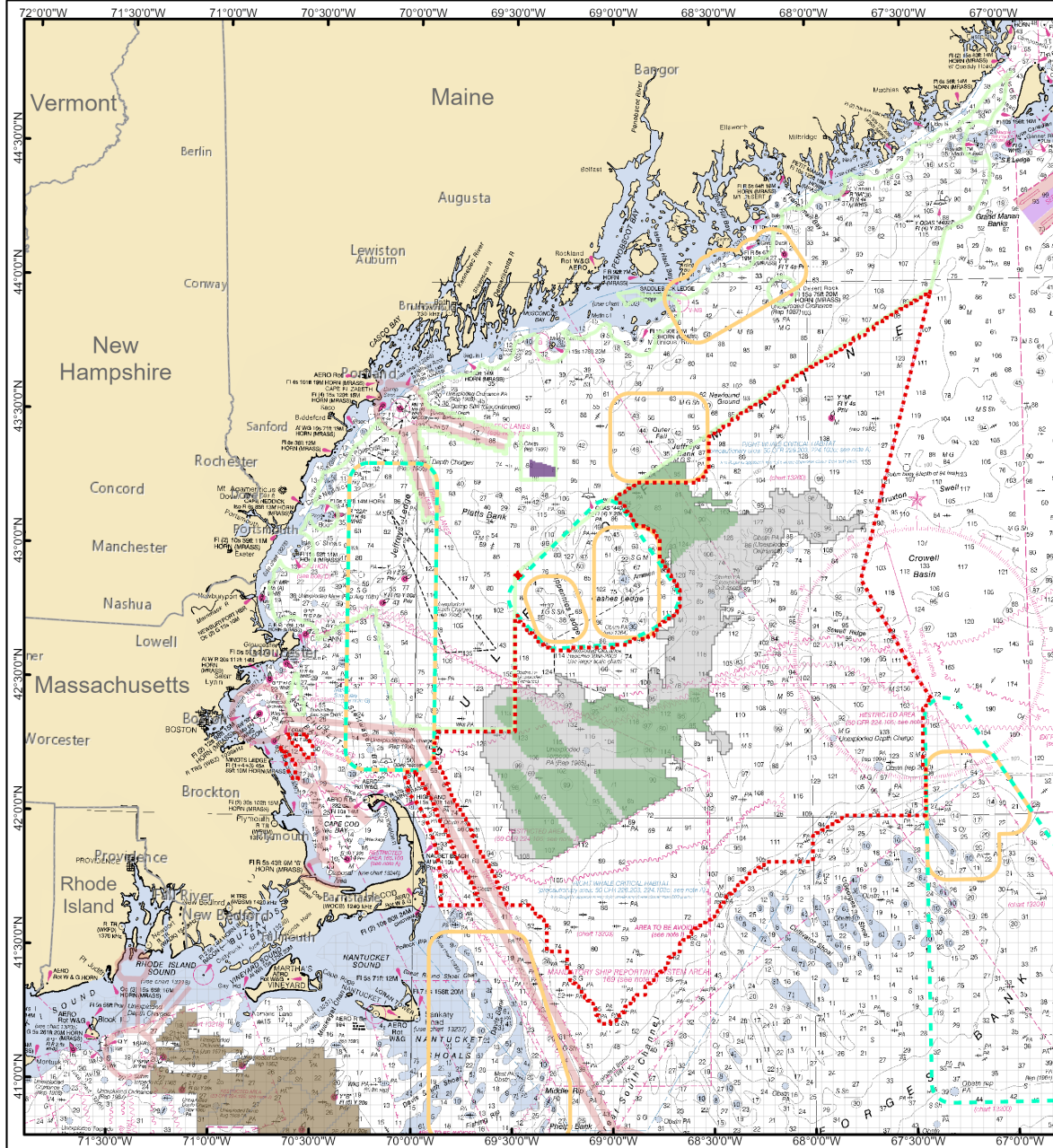


Map Date: 06/05/2024

OREP-2024-1051

NOTE: See <https://www.regulations.gov/comment/BOEM-2022-0040-0003> for original NH CFA comment letter.



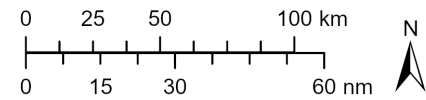


Gulf of Maine Request for Interest (RFI) Area Comments

- PSN Areas
- Final WEA
- RFI Area with Requested Areas Removed
- Research Lease Area (offered to State of Maine by BOEM, May 2024)
- Existing BOEM Leases
- Traffic Separation Scheme

Maine Fisheries Working Group Comments (Requested RFI Removal)

- Habitat Management Areas 5 Statute Mile Buffer
- Groundfish Closure Areas - 5 Statute Mile Buffer
- Lobster Management Area 1/3 line to 69 30' W and south to 42 20' W

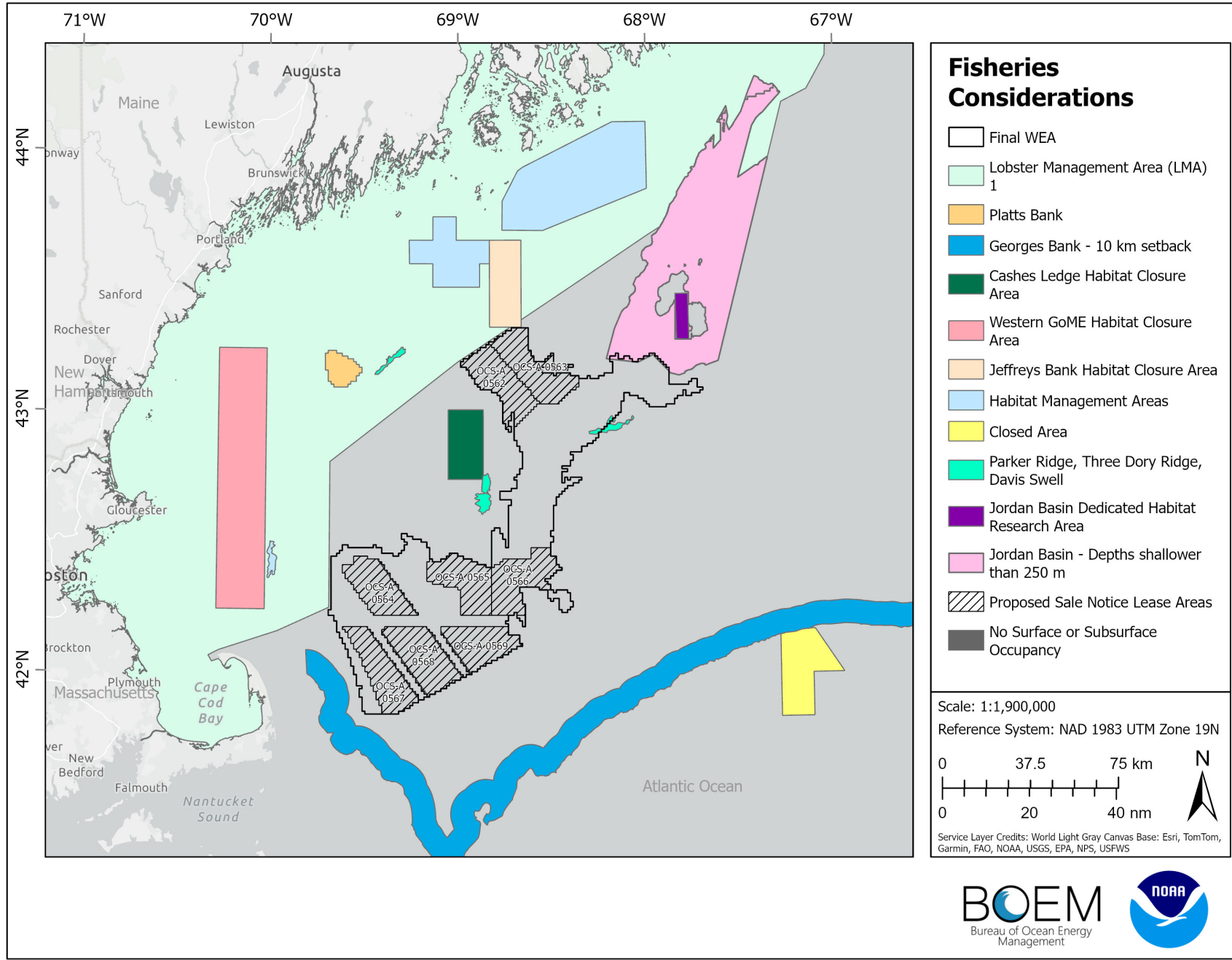


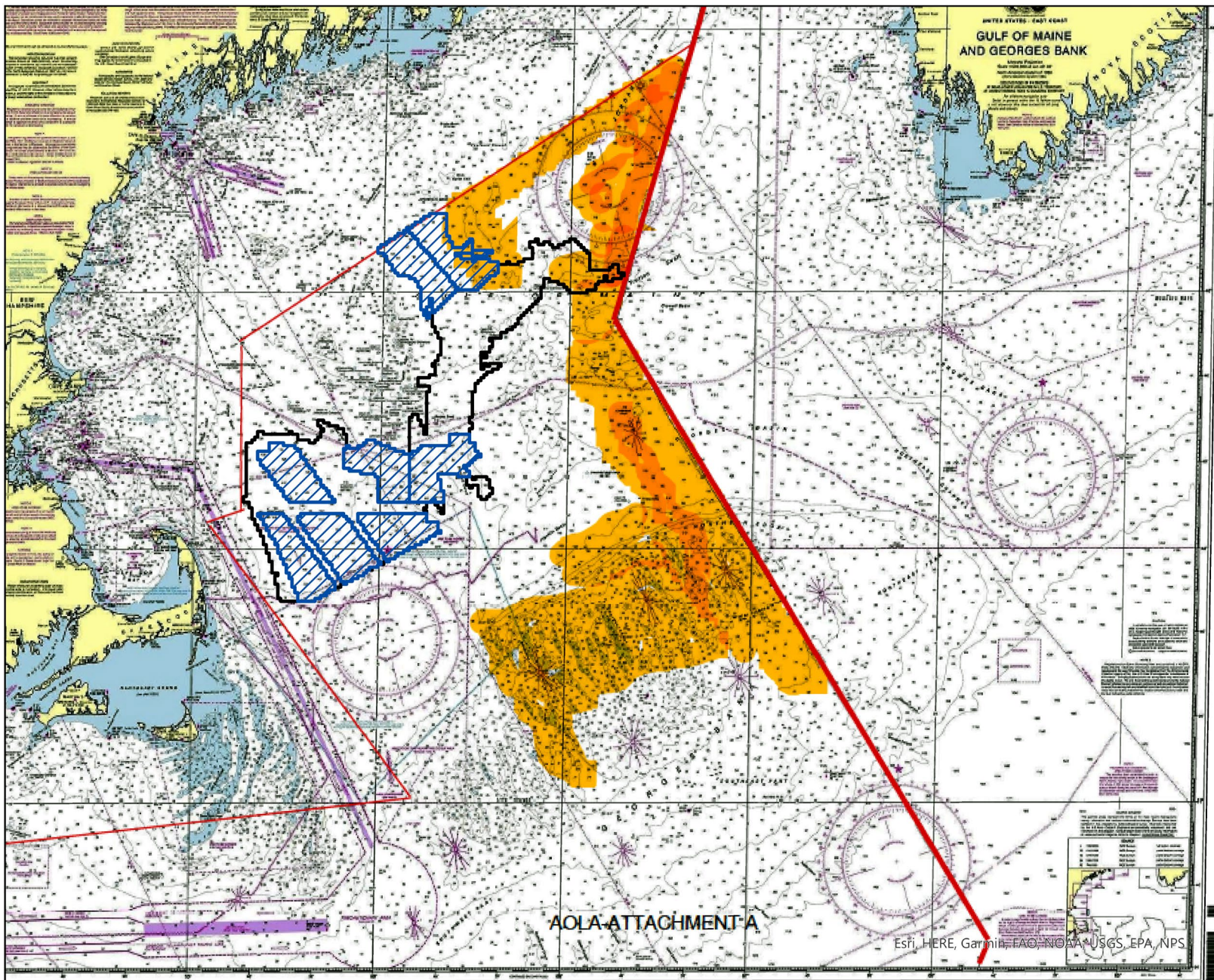
Map Date: 06/05/2023

OREP-2024-1052

NOTE: See <https://www.regulations.gov/comment/BOEM-2022-0040-0046> for original ME FWG comment letter.

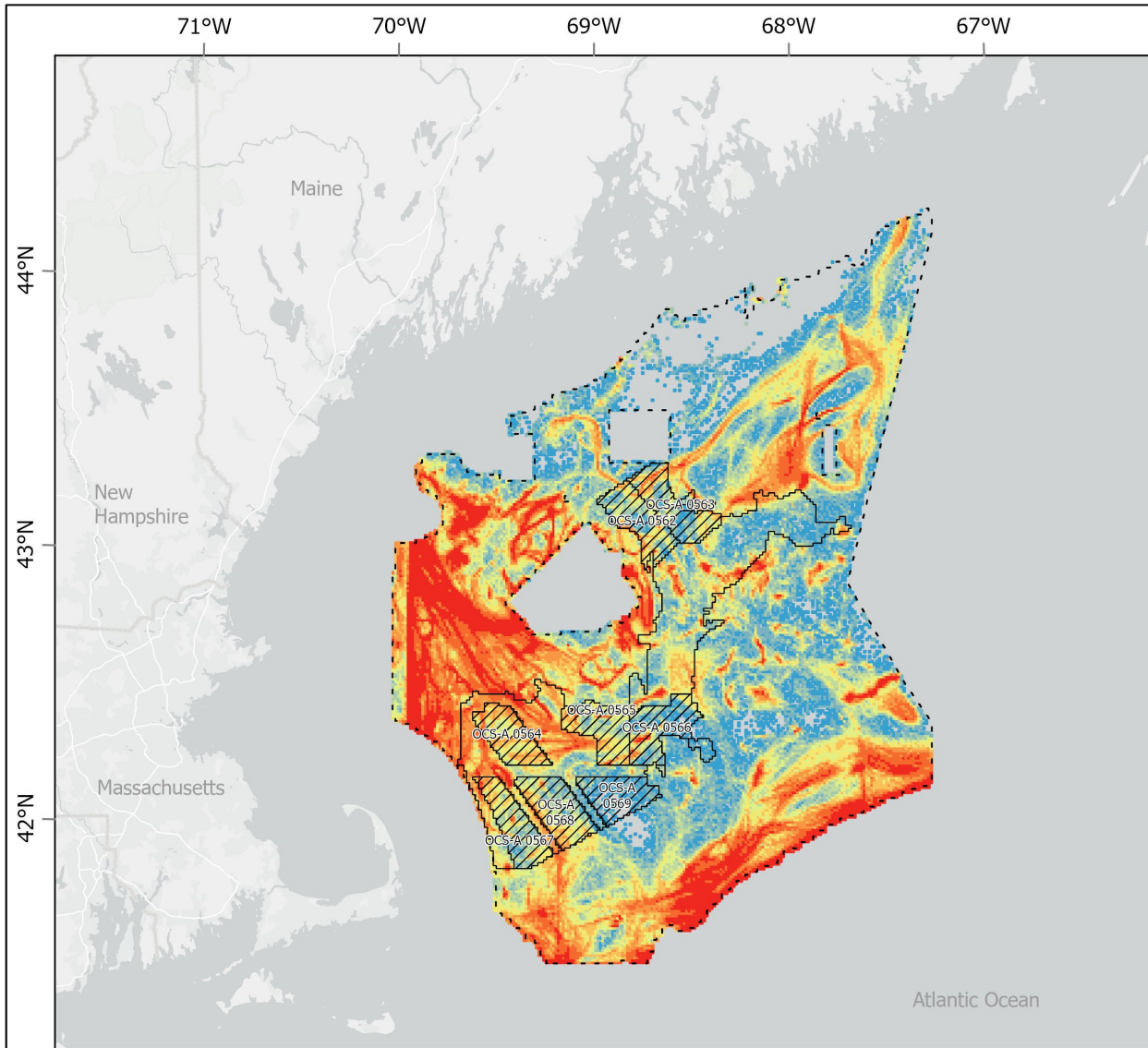






NOTE: The area in yellow is an **approximation** of the offshore lobster fleet's fishing footprint, as provided by the Atlantic Offshore Lobstermen's Association comment letter on the Draft WEA (11/20/2023). BOEM worked with NOAA NCCOS to georeference the footprint to create this **approximate** overlay of the Final WEA and Proposed Lease Areas.





**VMS Vessel Transits
2009 - 2021
All VMS Speed Filtered <
4 Knots**

BOEM Call Area

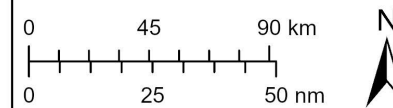
Final WEA

Sum of Polls

- 3 - 7
 - 8 - 13
 - 14 - 20
 - 21 - 31
 - 32 - 45
 - 46 - 64
 - 65 - 92
 - 93 - 132
 - 133 - 210
 - 211 - 1,889
- Proposed Sale Notice Lease Areas
- No Surface or Subsurface Occupancy

Scale: 1:2,300,000

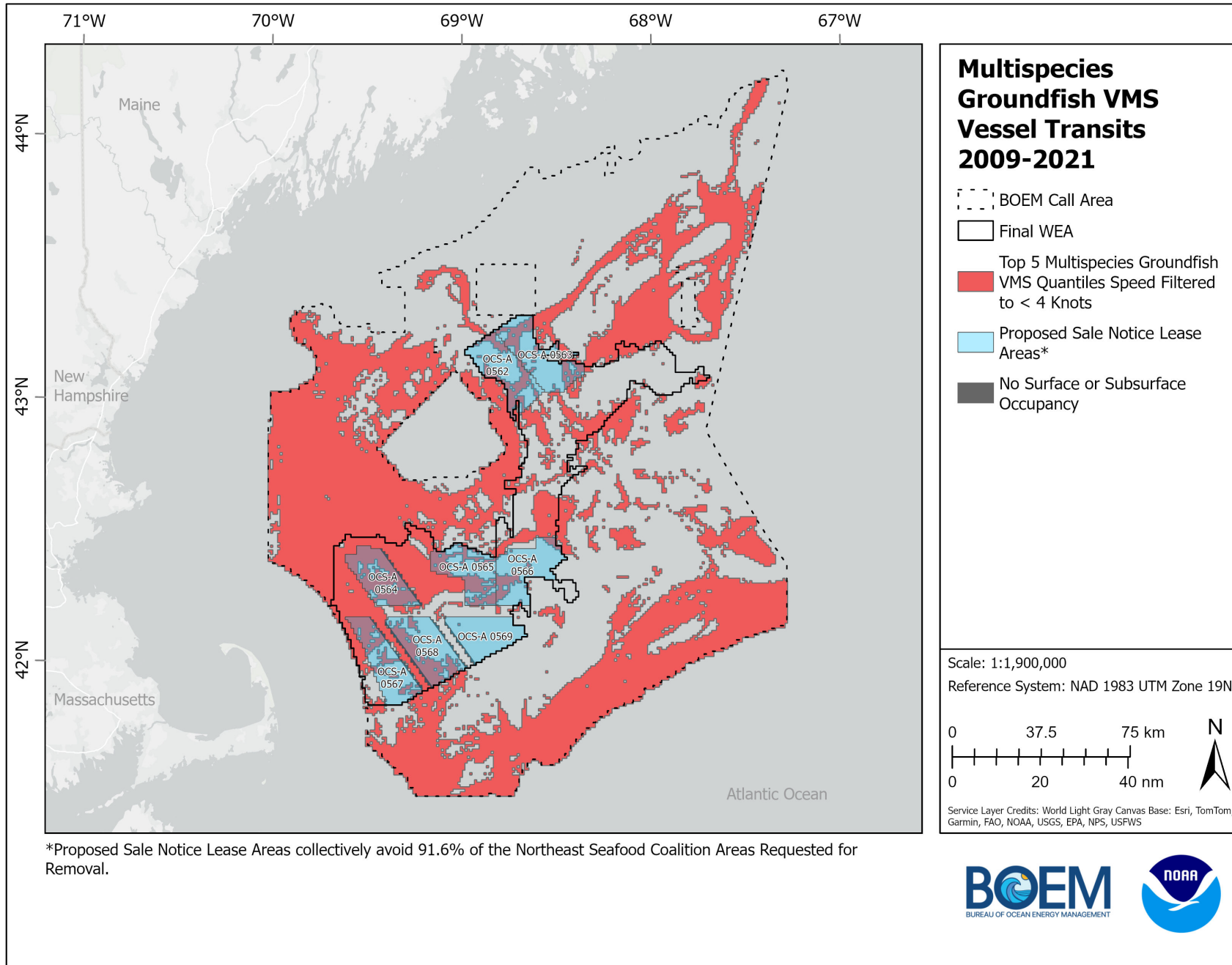
Reference System: NAD 1983 UTM Zone 19N



Service Layer Credits: World Light Gray Canvas Base: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

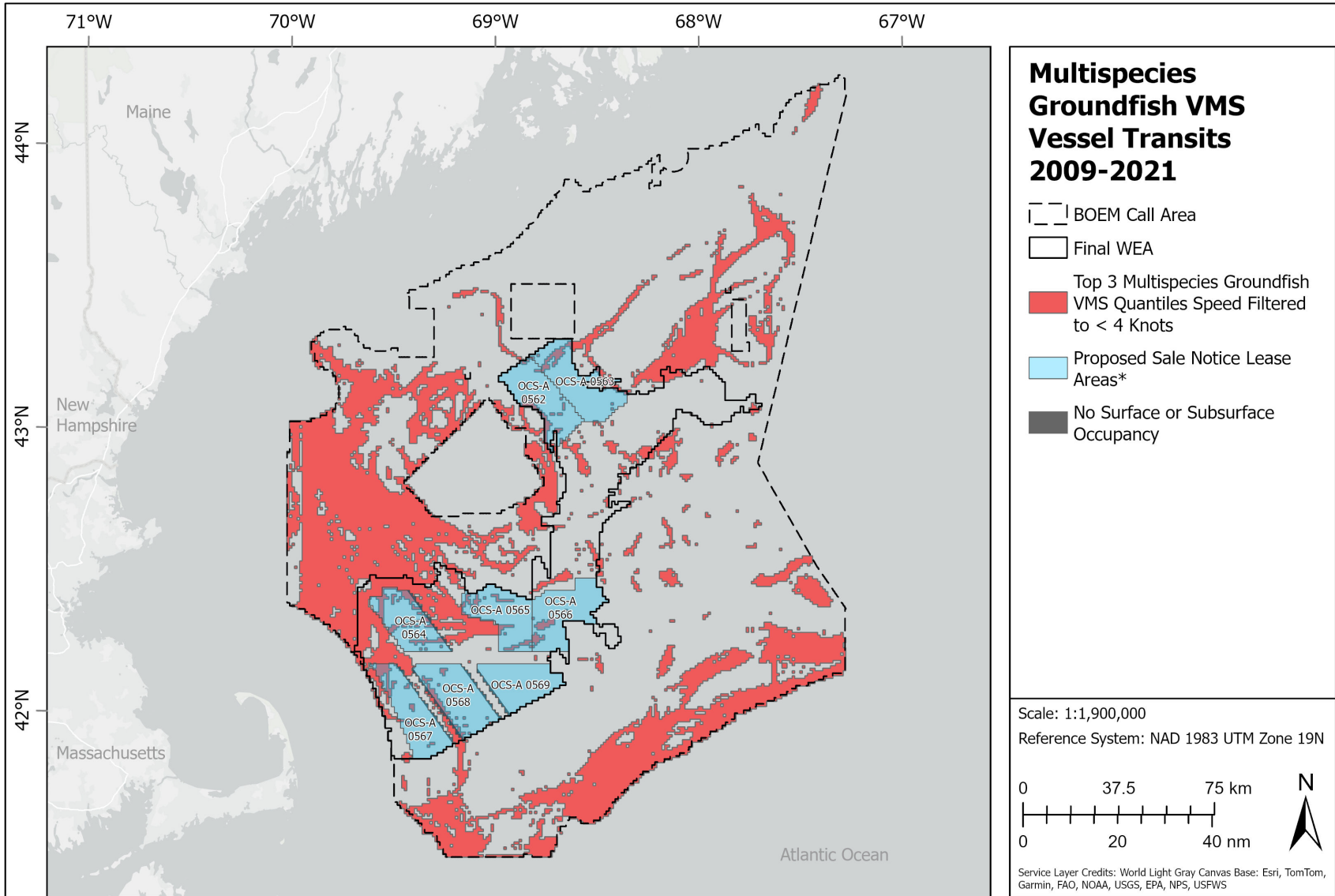
Vessel Monitoring System (VMS) Vessel Transits. NOAA National Marine Fisheries Service. 2009 - 2021. 1 km x 1 km resolution. Speed filtered to 4 knots to depict trawling speeds associated with fishery species including: herring, monkfish, multispecies (groundfish), declared out of fishery, scallop, ocean quahog/surflclam, squid/mackerel/butterfish. Data reflect the resolution at which data can be displayed to the public to ensure protection of Controlled Unclassified Information (CUI). Cells with < 3 unique vessels not displayed on map.





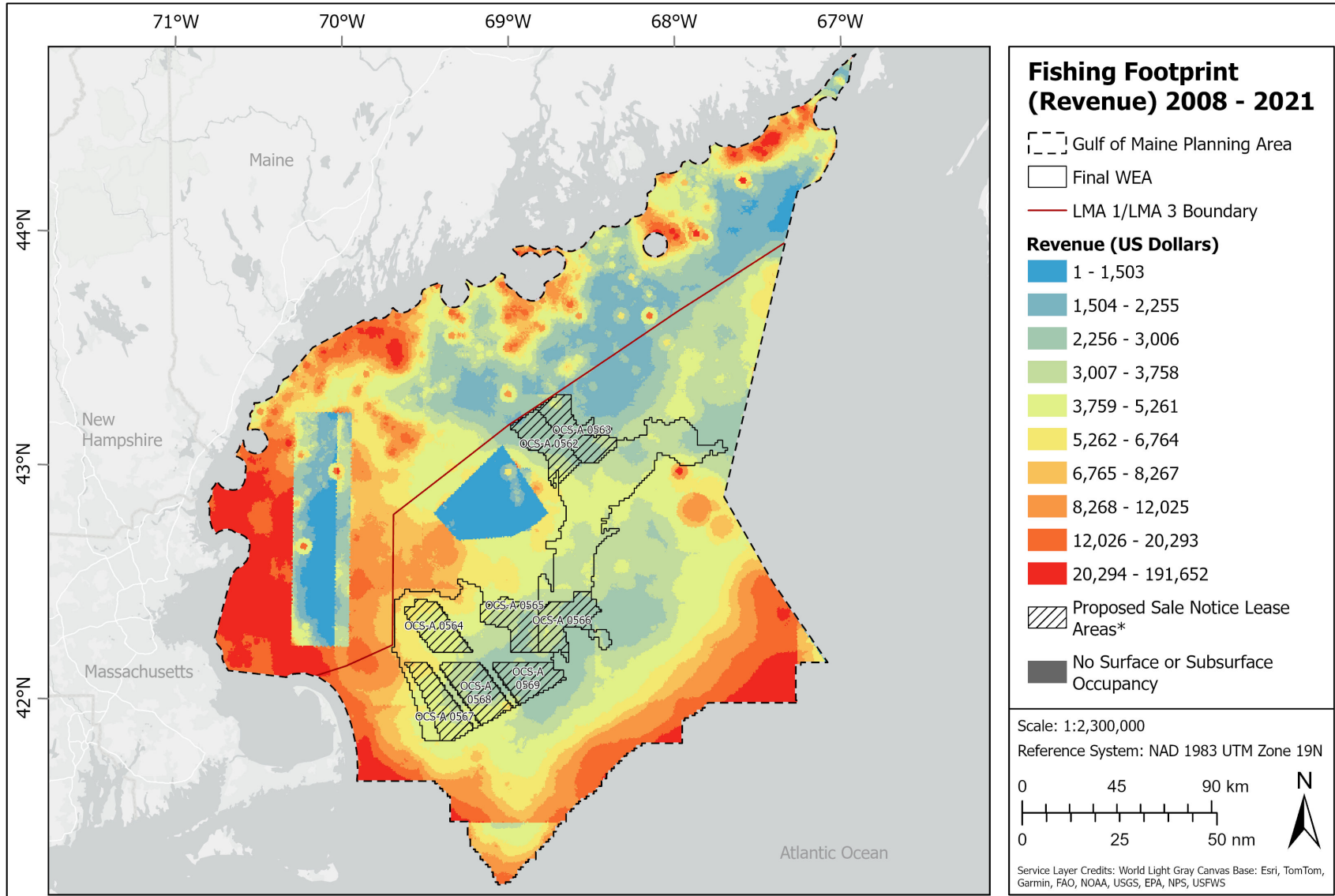
NOTE: See <https://www.regulations.gov/comment/BOEM-2023-0054-0120> for original NSC comment letter.





*Proposed Sale Notice Lease Areas collectively avoid 95.7% of the top 3 Groundfish VMS Quantiles within the Call Area.

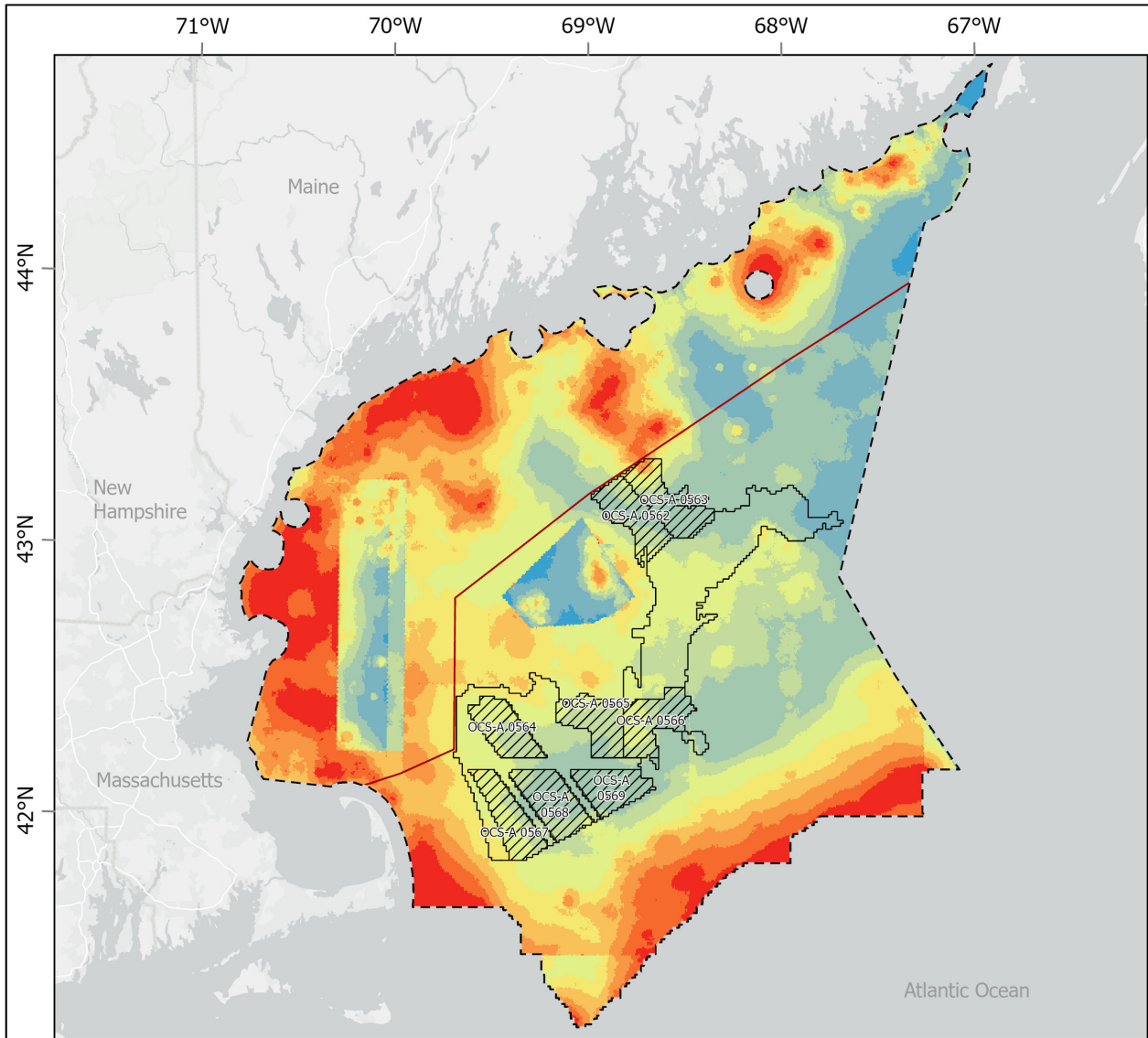




Fishing Footprint Commercial VTR Modeled Logbook Data. NOAA National Marine Fisheries Service. 2008 - 2021. 500 m (0.25 km²) resolution. Revenue displayed as total U.S. Dollars/0.25 km². Modeled data includes all gear types: bottom trawl, dredge, gillnet, lobster, longline, pots and traps, seine, and shrimp.

*Proposed Sale Notice Lease Areas collectively avoid 97% of the total fishing footprint revenue within the Planning Area.





Fishing Footprint (Landings) 2008 - 2021

- Gulf of Maine Planning Area
- Final WEA
- LMA 1/LMA 3 Boundary

Total Landings (Dressed Pounds)

- 1 - 782
- 783 - 1,565
- 1,566 - 2,347
- 2,348 - 3,130
- 3,131 - 4,694
- 4,695 - 6,259
- 6,260 - 8,606
- 8,607 - 13,300
- 13,301 - 22,689
- 22,690 - 199,507

- Proposed Sale Notice Lease Areas*
- No Surface or Subsurface Occupancy

Scale: 1:2,300,000
 Reference System: NAD 1983 UTM Zone 19N

Service Layer Credits: World Light Gray Canvas Base: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

Fishing Footprint Commercial VTR Modeled Logbook Data. NOAA National Marine Fisheries Service. 2008 - 2021. 500 m (0.25 km²) resolution. Modeled data includes all gear types: bottom trawl, dredge, gillnet, lobster, longline, pots and traps, seine, and shrimp.

*Proposed Sale Notice Lease Areas collectively avoid 97.6% of the total fishing footprint landings within the Planning Area.



Discussion Guidelines

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ENERGY MANAGEMENT

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Lease Stipulations and Bidding Credits

Luke Feinberg and Emma Chaiken

PSN: What does a lease do?

- Offers the exclusive right to the lessee to submit plans to BOEM that propose work on the lease.
 - Survey Plans, SAP, COP
 - NO construction authorization
- The lease is broken into sections, highlights include:
 - Addendum A – location and activities
 - Addendum B – LEASE TERM AND FINANCIAL SCHEDULE
 - Lease length, rent and operating payments
 - Addendum C - LEASE-SPECIFIC TERMS, CONDITIONS, AND STIPULATIONS

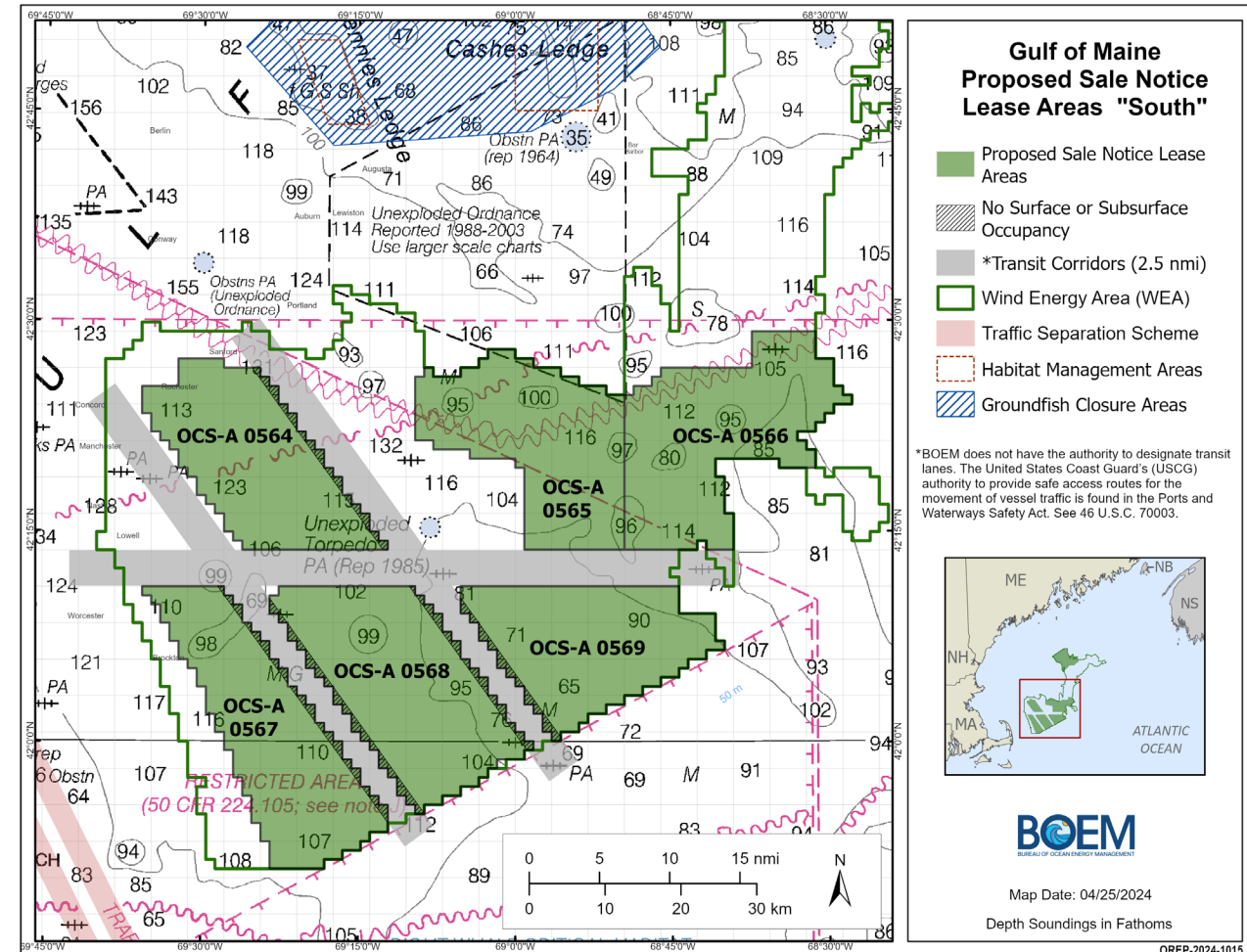
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY
MANAGEMENT

**COMMERCIAL LEASE OF
SUBMERGED LANDS FOR
RENEWABLE ENERGY DEVELOPMENT
ON THE
OUTER CONTINENTAL SHELF**

Paperwork Reduction Act of 1995 statement: This form does not constitute an information collection as defined by 44 U.S.C. § 3501 et seq. and therefore does not require approval by the Office of Management and Budget.

PSN: Lease Stipulations

- Areas of no surface/subsurface occupancy in the southern region of the Final WEA.
 - facilitate existing transit (three 2.5 nm corridors).
- “Good Neighbor” stipulation
 - neighboring leases must maintain 2 common lines of orientation (WTG layout) or have a setback from the lease boundary.
- PSN Questions:
 - Transit
 - Baseline monitoring for marine mammals/habitat



PSN: Addendum C Highlights

- Reporting - Enhanced Engagement
 - Communication Plans for fisheries, Tribes, and agencies
 - Progress Report every 6 months providing:
 - Summary of engagement with all affected ocean users, Tribes, stakeholders (including underserved communities)
 - Efforts to invest or direct benefits to, OR avoid, minimize, or mitigate conflict with, ocean users, Tribes, and stakeholders
 - Planned next steps to engage with ocean users, Tribes, and stakeholders
 - Progress Reports posted on BOEM website



PSN: Addendum C Highlights *continued*

- **Survey Plans**
 - Must submit plans for review prior to activities.
- **Protected Species**
 - Ensures that project activities comply with statutes related to protected species
 - Resulting from consultations with federal family resource agencies
- **Project Labor Agreements**
 - Must make every reasonable effort to enter a PLA for construction
- **Bidding Credit**
 - Details and commitments

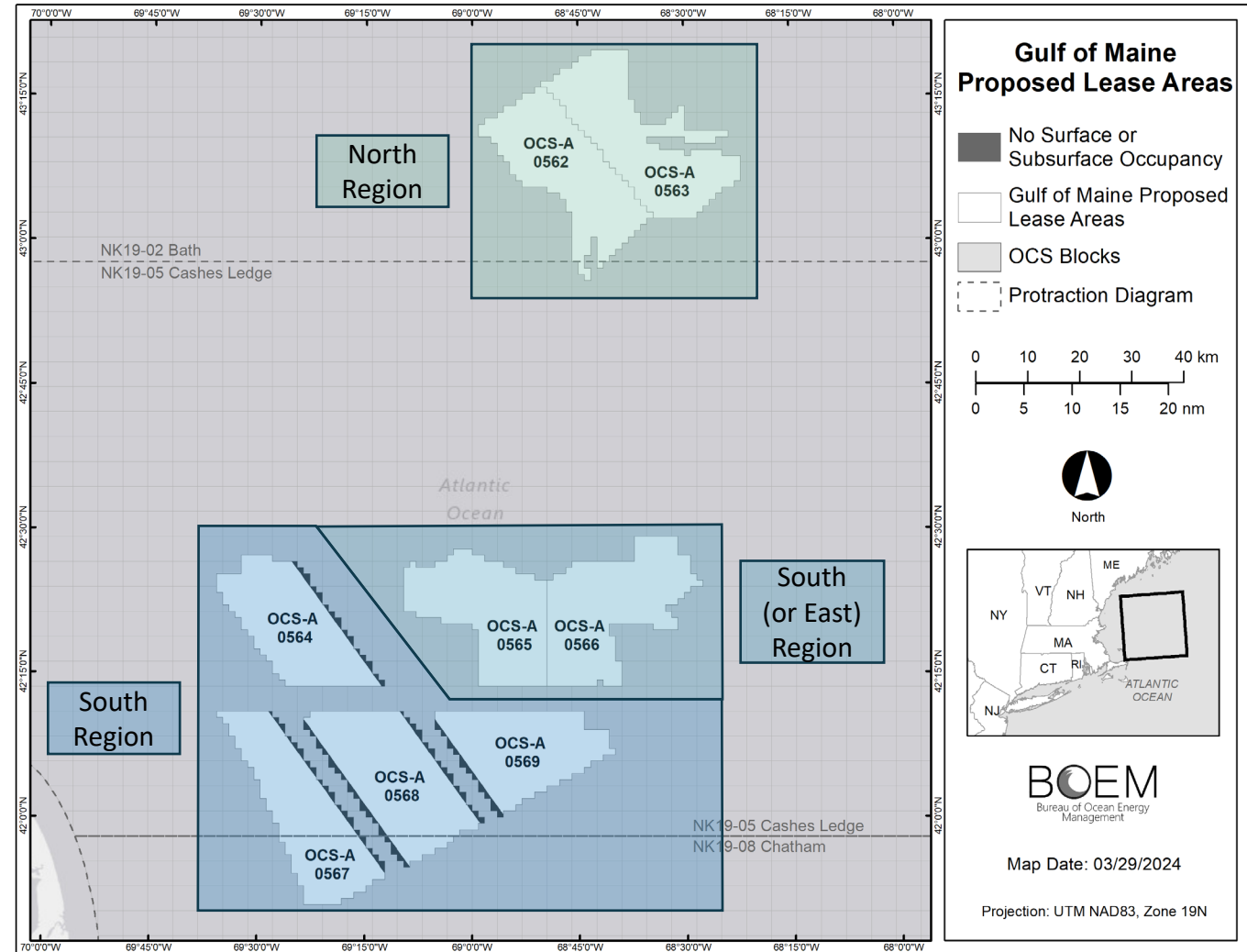
PSN: Auction Format

- As proposed, a bidder can win a maximum of two South Region leases, or one North Region lease and one South Region lease.

- Supports competitive bidding and States' desire for a competitive offtake procurement process.
- BOEM is soliciting public comment on the proposal, as well as an alternative structure that includes three regions.
 - Under this alternative, bidders could win a maximum of two leases, with a limit of one per region.

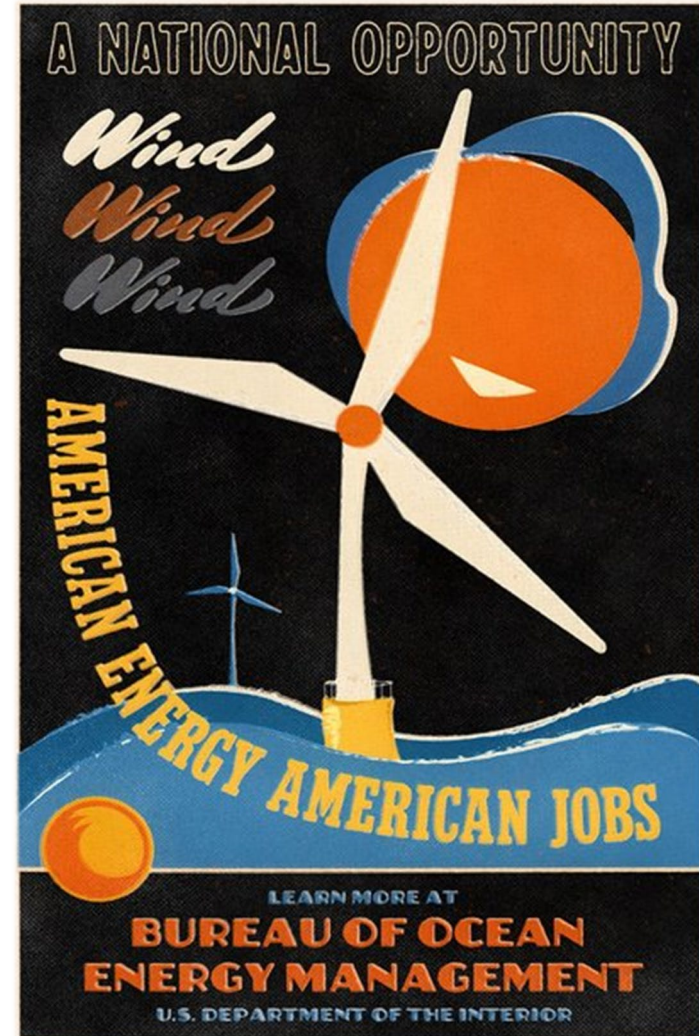
- Multiple-factor auction format.**

- The bidding system will be a combination of monetary (75%) and non-monetary factors (25%).
- The proposed minimum bid is \$50 per acre.



PSN: Bidding Credits

- Bidders may receive bidding credits up to 25% in exchange for committing to a qualifying monetary contribution to programs or initiatives supporting offshore wind.
 - The proposed bidding credits are the same as those offered in GOMW-1, although the individual credit percentages may vary.
 - Bidding credits are calculated as a percentage of the bid.



PSN: Bidding Credits

Two bidding credits are proposed:

1. **12.5% bidding credit for a commitment to invest in programs that will advance U.S. floating offshore wind energy workforce training and/or supply chain development.**
 - The credit is intended to incentivize investments that would not occur otherwise.
 - Includes investments in port infrastructure related to component manufacturing and assembly areas for offshore wind construction and deployment (e.g., foundations, turbine components).
2. **12.5% bidding credit for establishing or contributing to a Fisheries Compensatory Mitigation Fund.**
 - BOEM encourages lessees to work together to establish or contribute to a single regional fund



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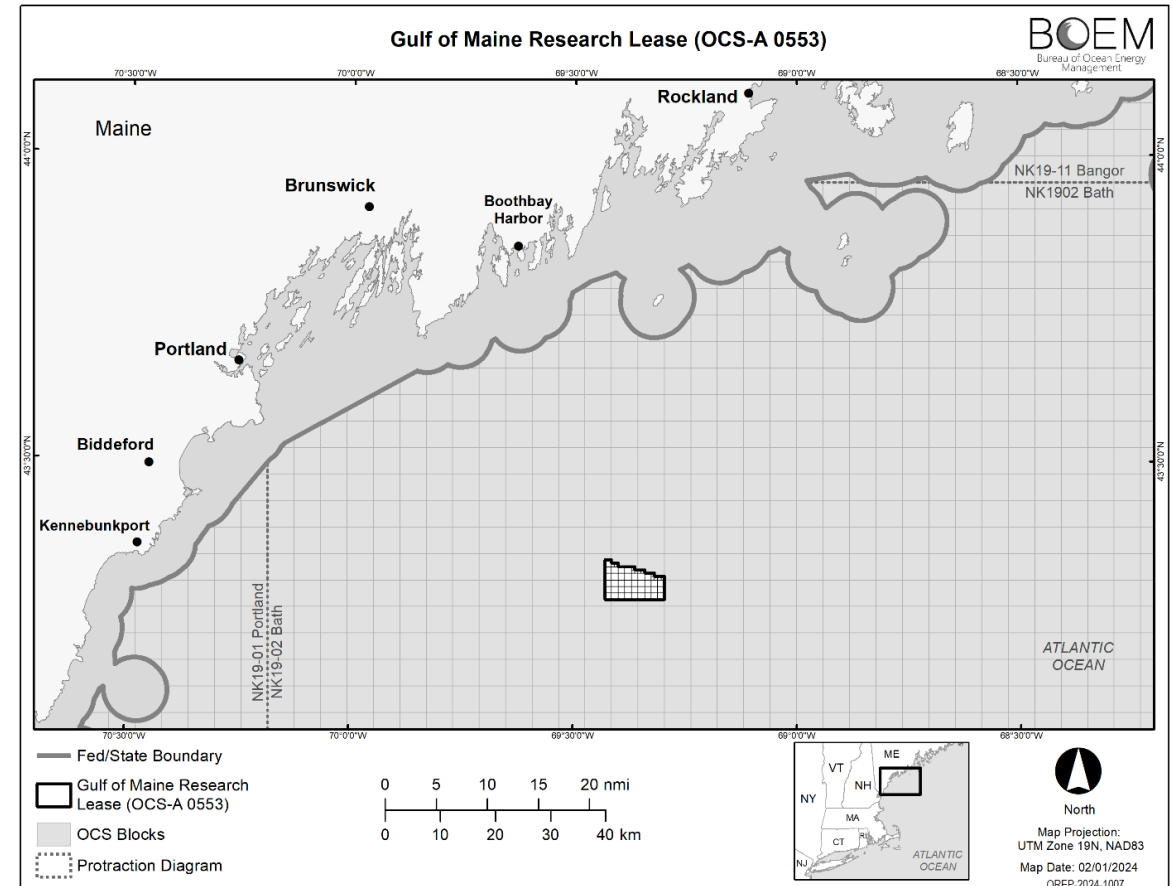
BOEM Virtual Meeting

Maine Research Lease

Luke Feinberg, Renewable Energy Program Specialist

Research Lease Location

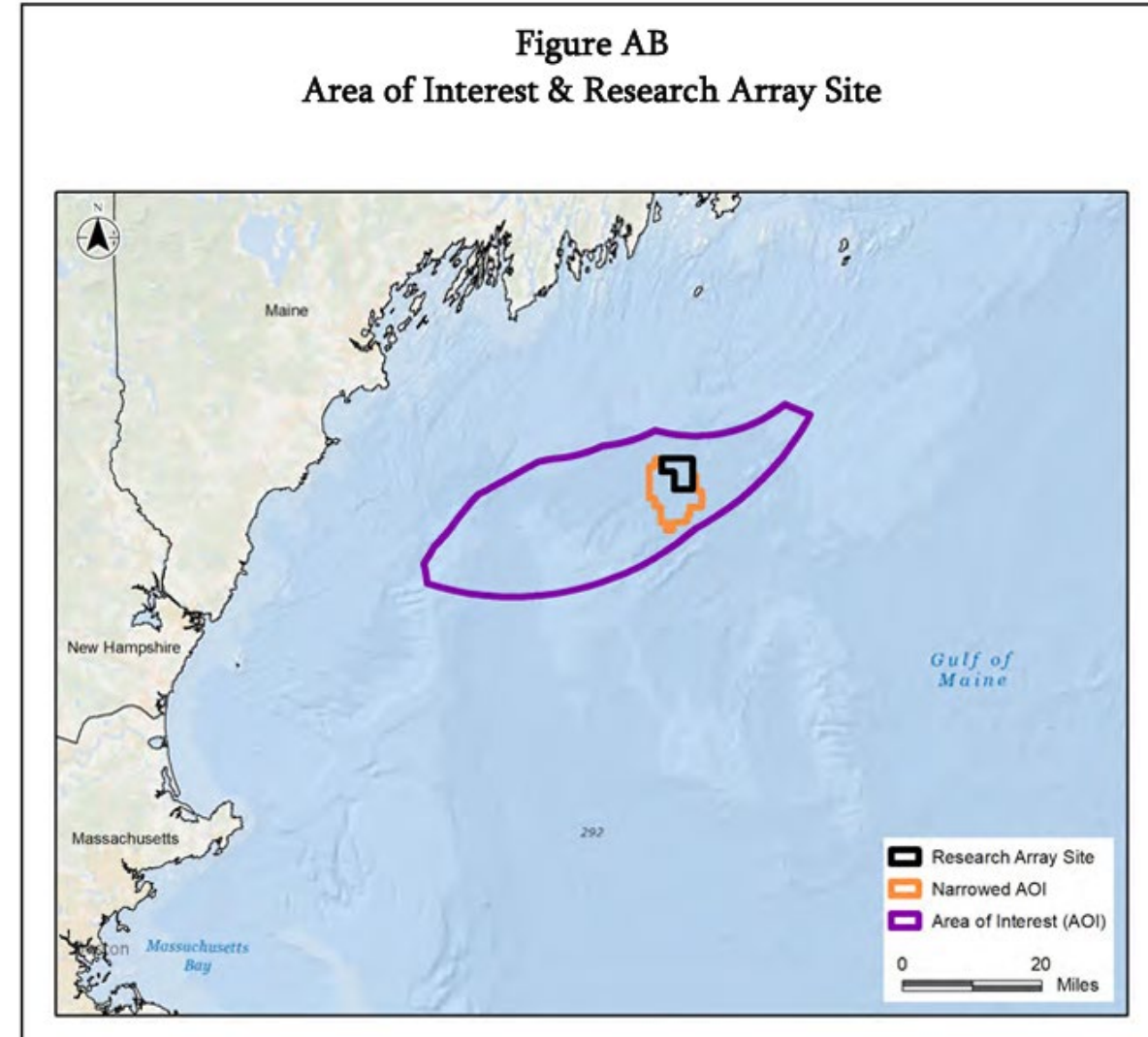
- Area selected represents the most deconflicted area in the RFCI that would facilitate the goals of the Research Lease
- How did we get here?



State Request



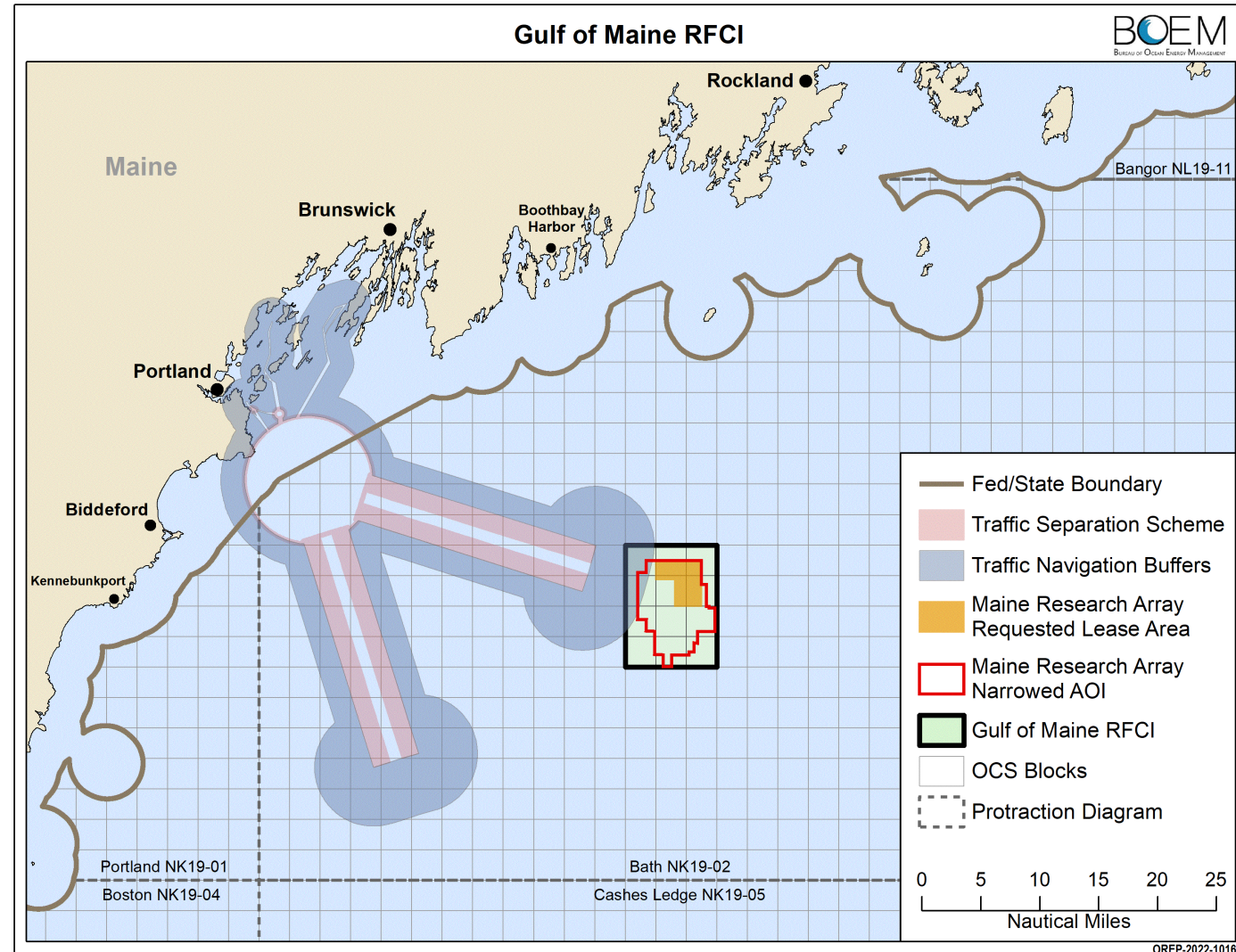
- Oct. 2021 Research Lease Application proposed the Requested Lease Area
- Collaborative spatial process outlined in the application identified ~9,700 acres as the Maine Research Array Requested Lease Area (BLACK)



Request for Competitive Interest



- August 19, 2022 – Request for Competitive Interest (RFCI) issued by BOEM
 - Area enlarged to account for use conflicts
 - Public comment
- March 20, 2023 – Determination of No Competitive Interest in the RFCI is published enabling leasing negotiations to begin



Site Review



- Review of the requested area for the research lease identified significant navigational conflict with the USCG Port Access Route Study: Approaches to Maine, New Hampshire, and Massachusetts (88 FR 20547) (April 6, 2023)

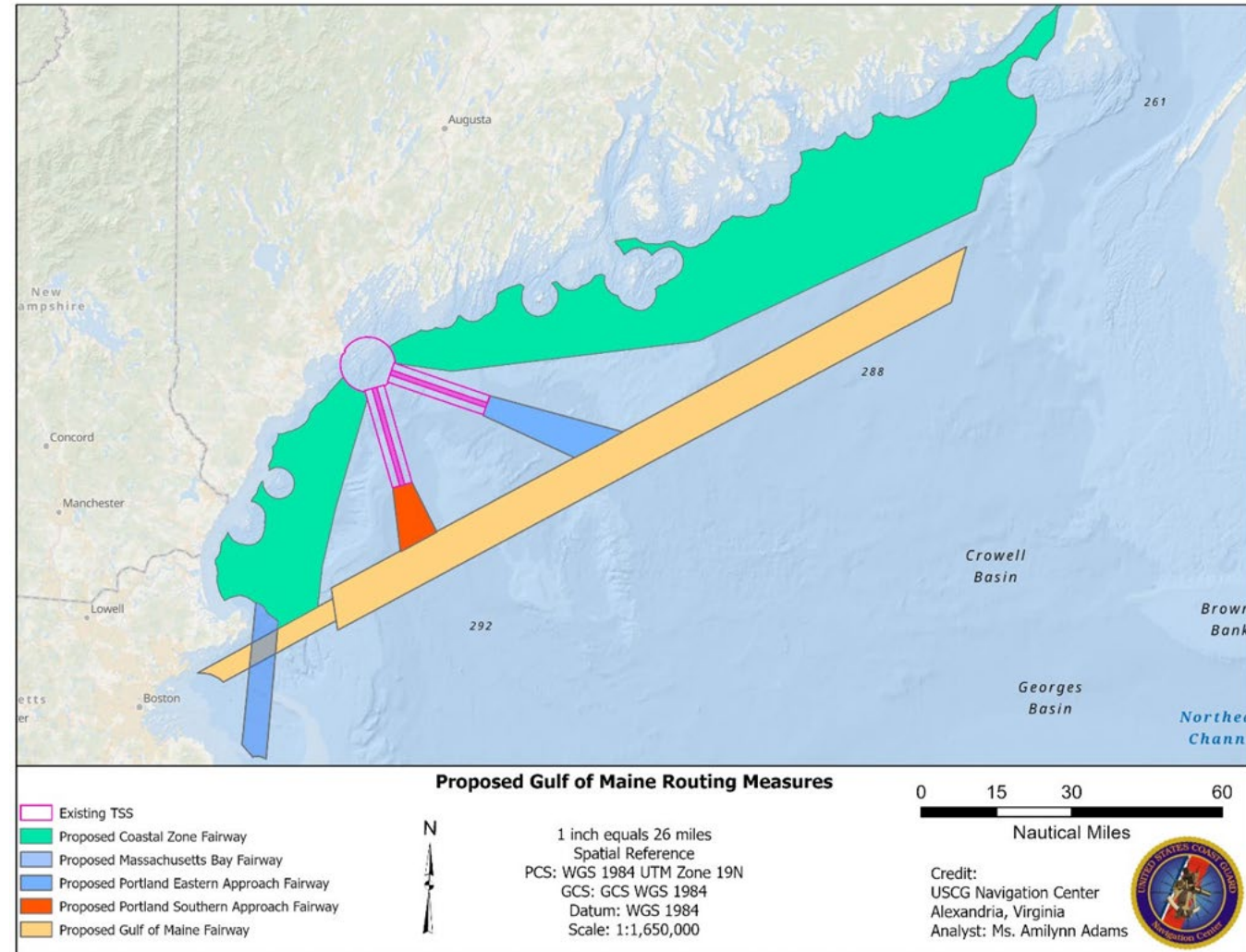
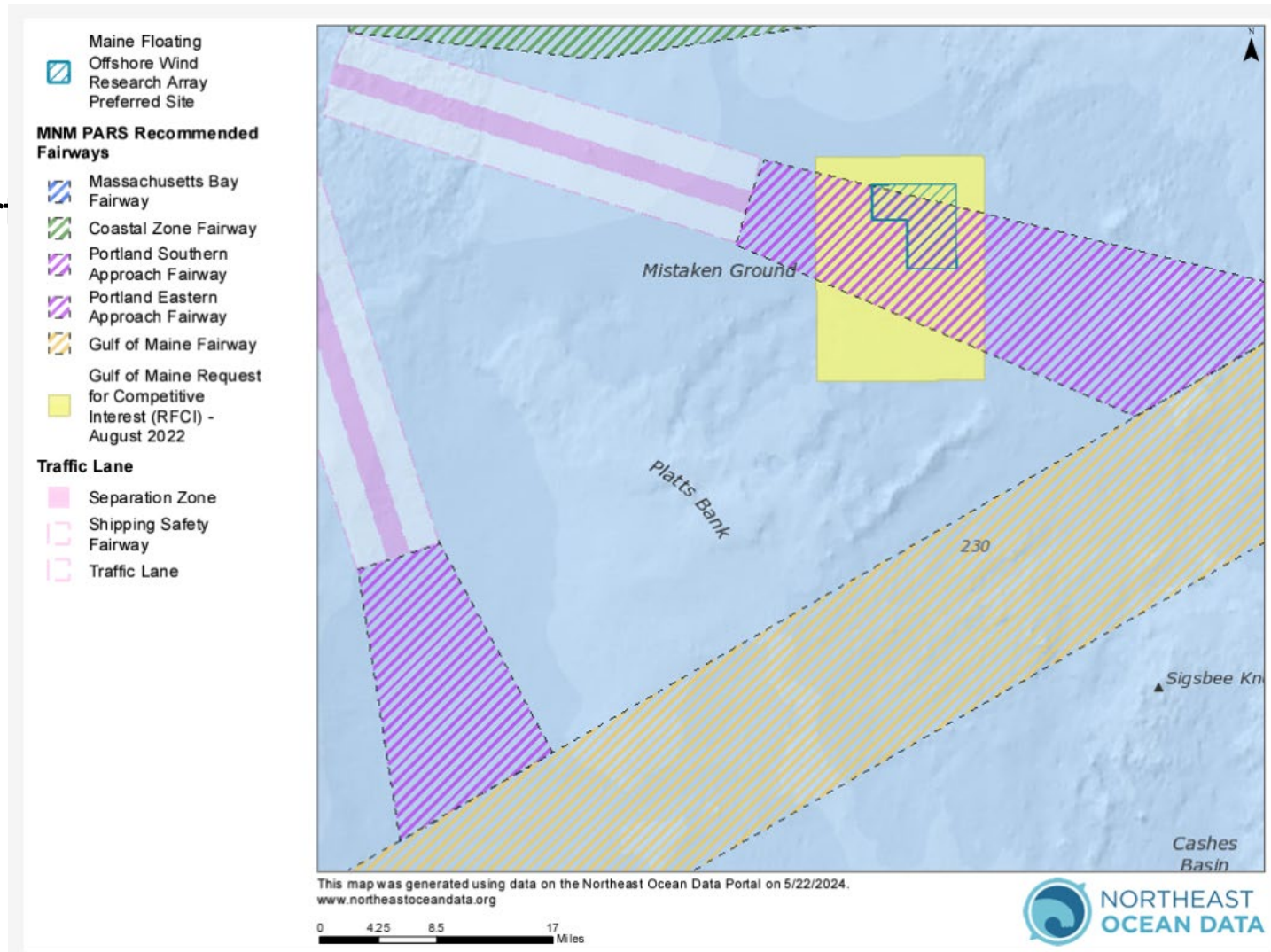


Figure 1-MNMPARS Recommended Fairways

Site Review



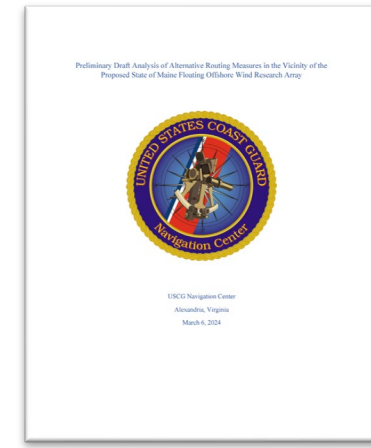
- Review of the requested area for the research lease identified significant navigational conflict with the USCG Port Access Route Study: Approaches to Maine, New Hampshire, and Massachusetts (88 FR 20547)





Two modeling efforts

- USCG Preliminary Draft Analysis of Alternative Routing Measures in the Vicinity of the Proposed State of Maine Floating Offshore Wind Research Array¹
- BOEM partnership with NCCOS



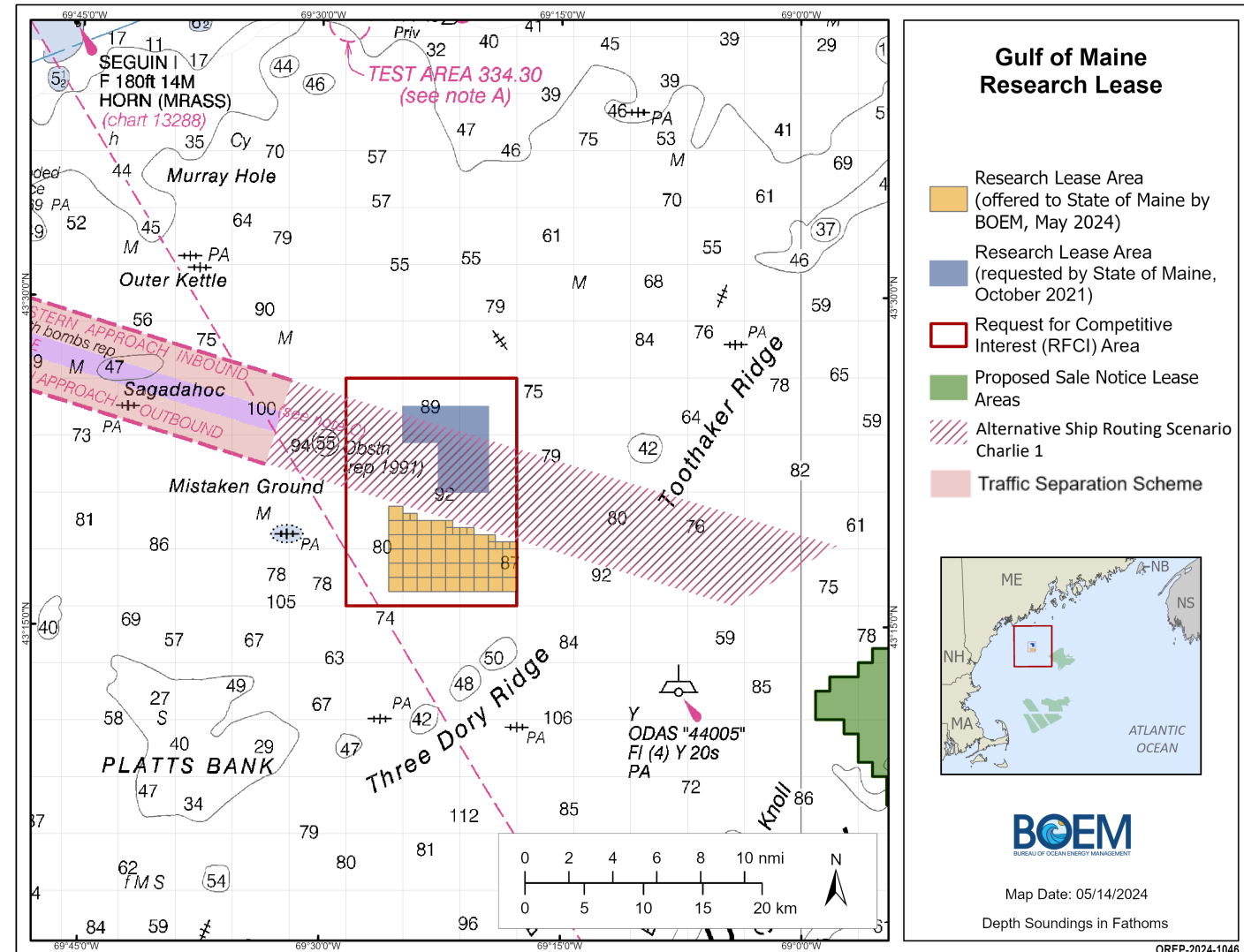
1. [Preliminary Draft Analysis of Alternative Routing Measures Near Proposed State of Maine Research Array.pdf \(uscg.gov\)](#)



Lease Area



- Given the constraints in the area, USCG, the State and Maine and BOEM identified a location for the research lease area (**ORANGE**) that aligns with the Alternative Ship Routing Scenario Charlie 1 which represented the least amount of risk
- USCG has not designated fairways in the Gulf of Maine.
- 15,000 acres; 32.2 statute miles or 28.0 nm from mainland.
 - More acres than requested to account for:
 - Additional site survey
 - deconfliction
 - Lessee limited to a 9,700 acre project (original request)



Maine Research Lease: Lease Stipulations

Similar structure to commercial leases, but what stipulations are different?

- **Navigational Safety** – Lessee may not include in their RAP any portion of the leased area that overlaps with any proposed or officially designated traffic measures implemented by the USCG
- **Research Framework** – requirement to outline how the lessee will implement the research framework outlined in original application. Data from research to be made **public**
- Reporting required on research progress every **6 months**
- Project proposed is limited to **9,700 acres**, not the whole lease area

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY
MANAGEMENT

**RESEARCH LEASE OF SUBMERGED
LANDS FOR RENEWABLE ENERGY
ACTIVITIES ON THE OUTER
CONTINENTAL SHELF**

Paperwork Reduction Act of 1995 statement: This form does not constitute an information collection as defined by 44 U.S.C. § 3501 et seq. and therefore does not require approval by the Office of Management and Budget.

Maine Research Lease: Goals and Opportunity

- Research leases must support the future production, transportation, or transmission of renewable energy
- **No** fees or payments as research is expected to benefit the public
- The Research Lease is expected to continue to **inform the commercial process**. Dialogue to date has:
 - Increased awareness of offshore wind
 - Identified opportunities and challenges





BOEM BUREAU OF OCEAN
ENERGY MANAGEMENT

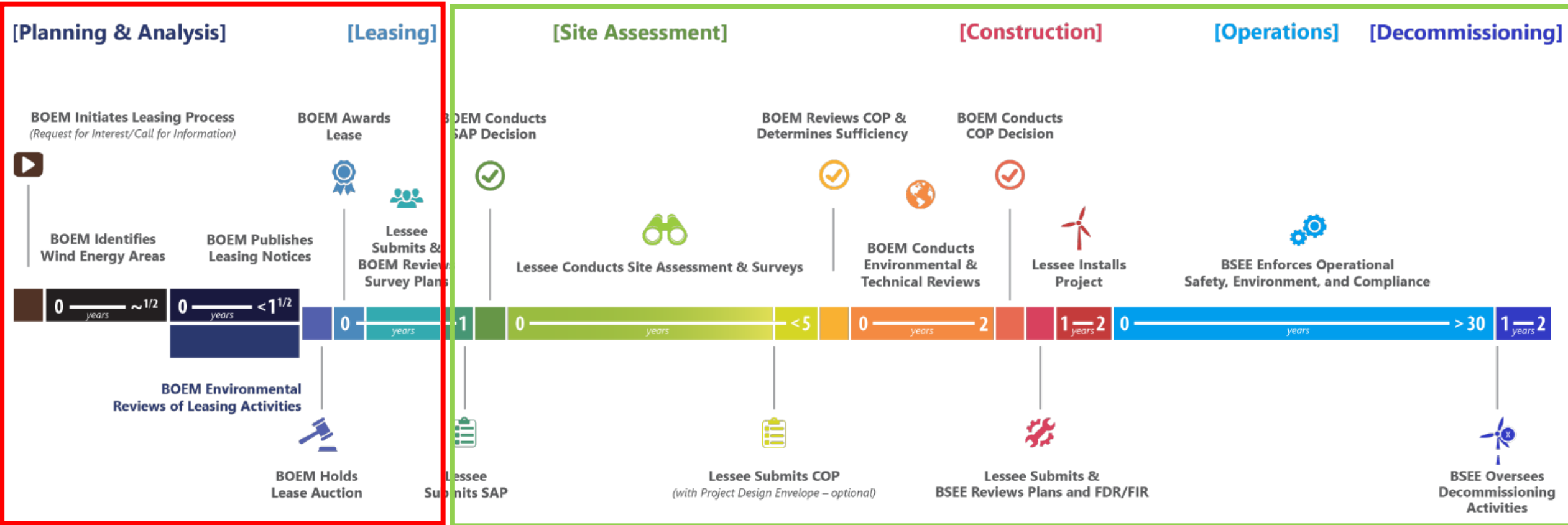
BOEM Virtual Meetings

Next Steps

Renewable Energy Authorization Process

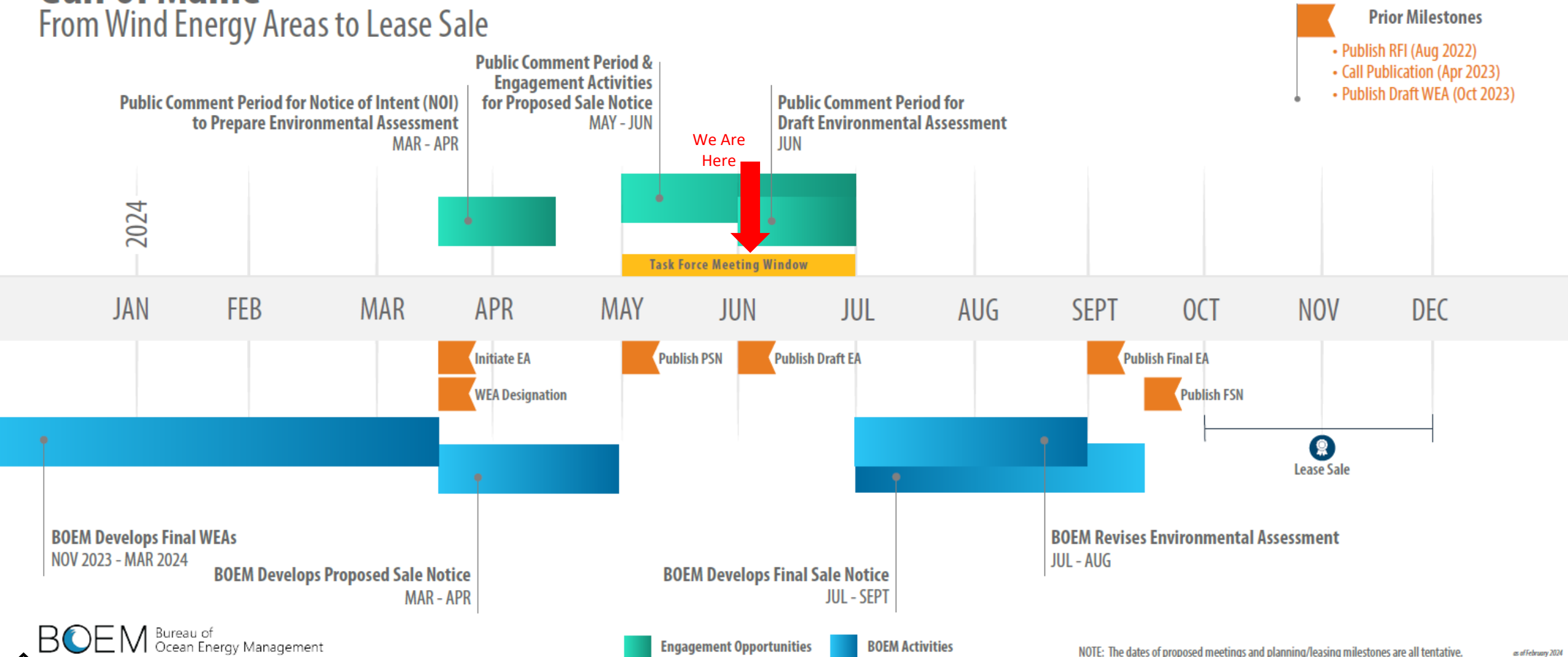
Pre-Lease Issuance

Post-Lease Issuance



Gulf of Maine

From Wind Energy Areas to Lease Sale



PSN: Public Meetings (In-Person)

- For the most up-to-date public meeting information, see [BOEM's website](#).
- **Open House – Portland, Maine**
 - Date: Tuesday, May 28, 2024
 - Time: 5-8pm
 - Location: Holiday Inn Portland-by the Bay (88 Spring Street Portland, ME 04101)
- **Open House – Portsmouth, New Hampshire**
 - Date: Wednesday, May 29, 2024
 - Time: 5-8pm
 - Location: Urban Forestry Center (45 Elwyn Rd, Portsmouth, NH 03801)
- **Open House – Danvers, Massachusetts**
 - Date: Thursday, May 30, 2024
 - Time: 5-8pm
 - Location: DoubleTree by Hilton, North Shore (50 Ferncroft Rd, Danvers, MA 01923)
- **Task Force Meeting – Plymouth, MA**
 - Date: Friday, May 31, 2024
 - Time: 8:30am-4:30pm
 - Location: Hotel 1620 (180 Water St, Plymouth, MA 02360)



PSN: Public Meetings (Virtual)

- For the most up-to-date public meeting information, see [BOEM's website](#).
- **General Public**
 - Date: Thursday, May 23, 2024
 - Time: 6-8pm
- **Commercial Fishing (Mobile & Fixed Gear)**
 - Date: Thursday, June 6, 2024
 - Time: 5-7pm
- **Recreational Fishing and Highly Migratory Species**
 - Date: Tuesday, June 11, 2024
 - Time: 5-7pm
- **Environmental Non-Governmental Organizations (eNGOs)**
 - Date: Monday, June 10, 2024
 - Time: 1:30-3:30pm
- **Commercial Maritime (Shipping)**
 - Date: Monday, June 10, 2024
 - Time: 4-6pm



Stay in Touch!

U.S. DEPARTMENT OF THE INTERIOR







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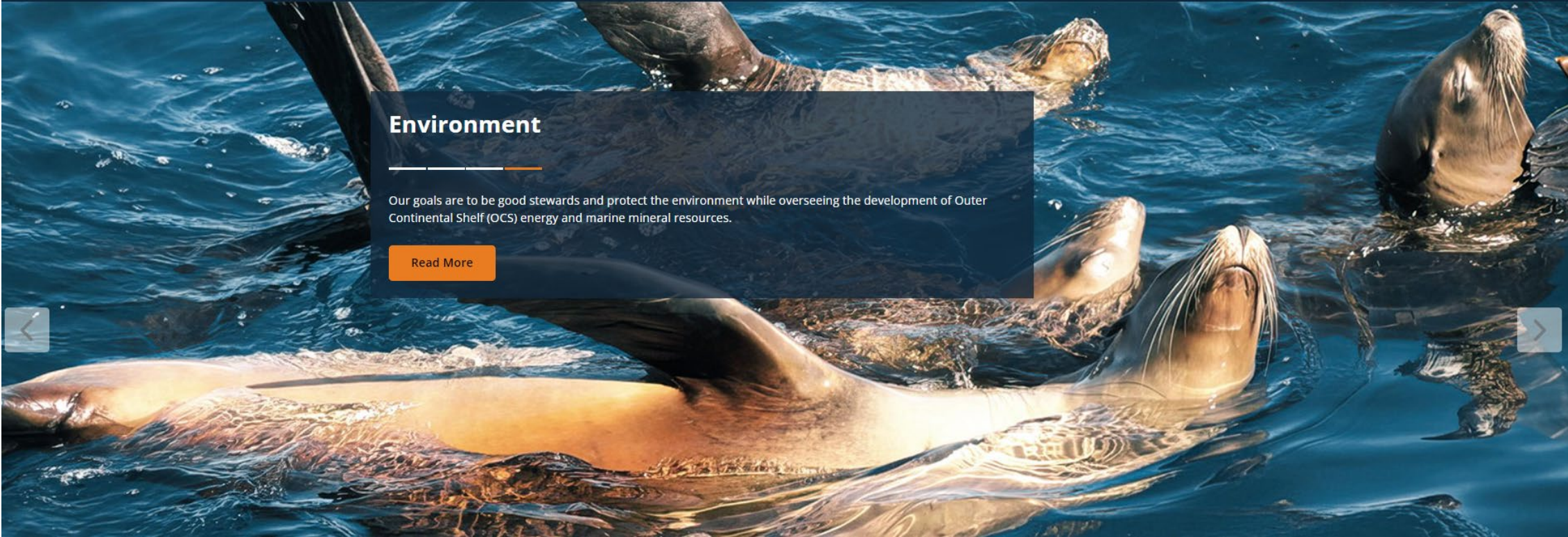
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Environment

Our goals are to be good stewards and protect the environment while overseeing the development of Outer Continental Shelf (OCS) energy and marine mineral resources.

[Read More](#)

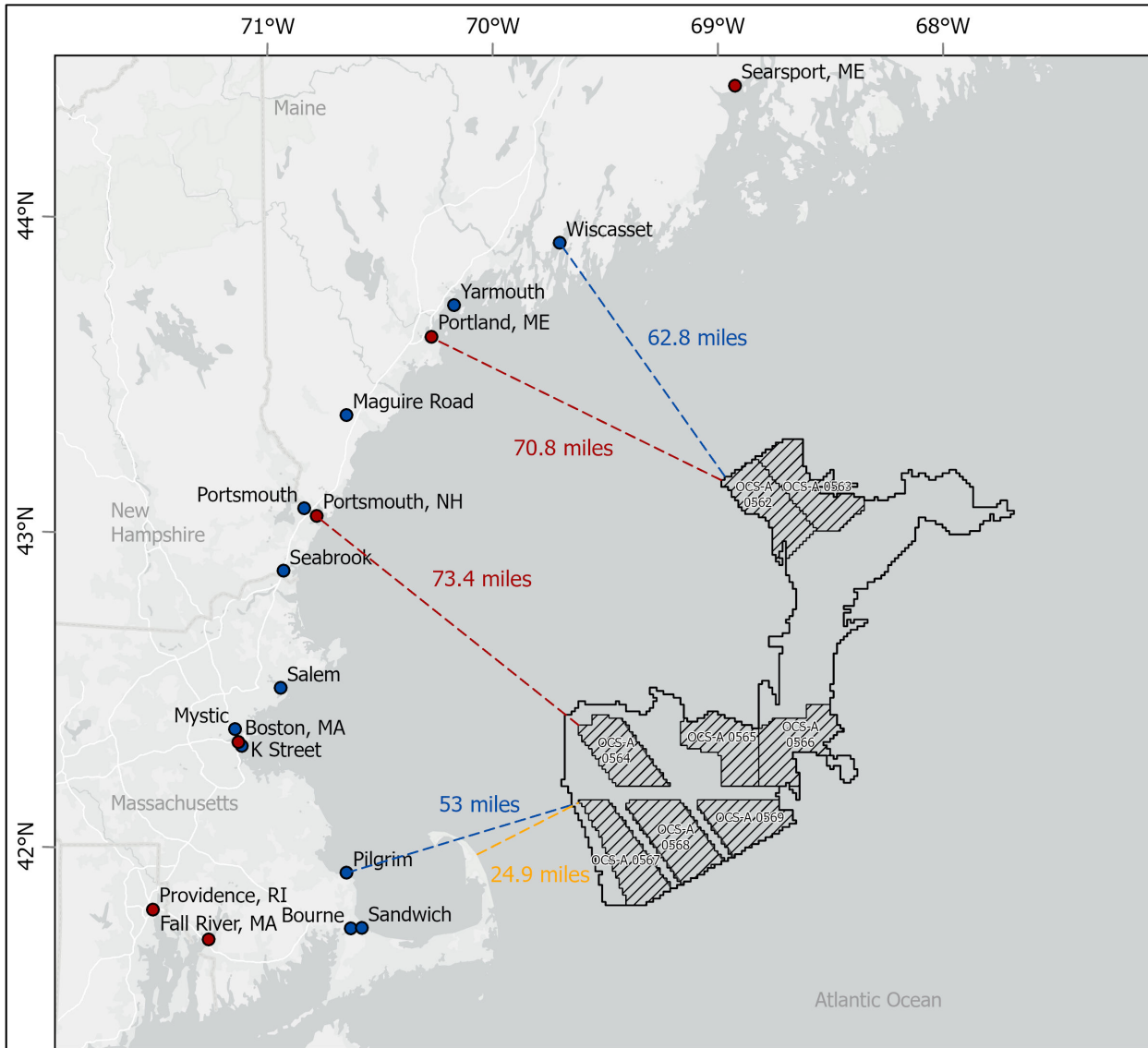












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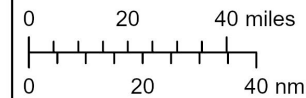


Distance to Shore, Principal Ports and Points of Interconnection

-  Final WEA
-  Principal Ports
-  Points of Interconnection
-  Shortest Distance to Principal Port
-  Shortest Distance to Point of Interconnection
-  Shortest Distance to Mainland
-  Proposed Sale Notice Lease Areas
-  No Surface or Subsurface Occupancy

Scale: 1:2,000,000

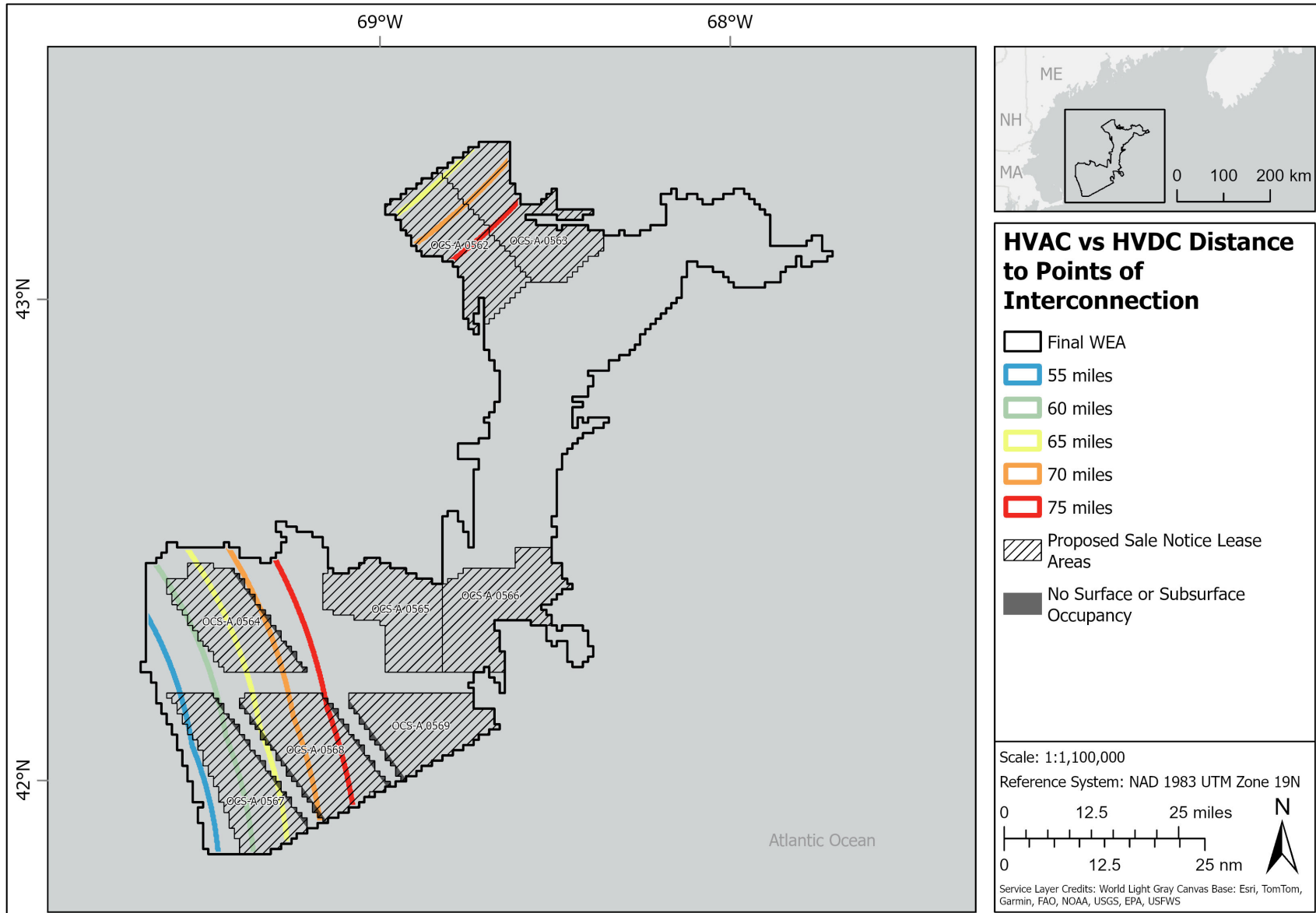
Reference System: NAD 1983 UTM Zone 19N



Service Layer Credits: World Light Gray Canvas Base: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

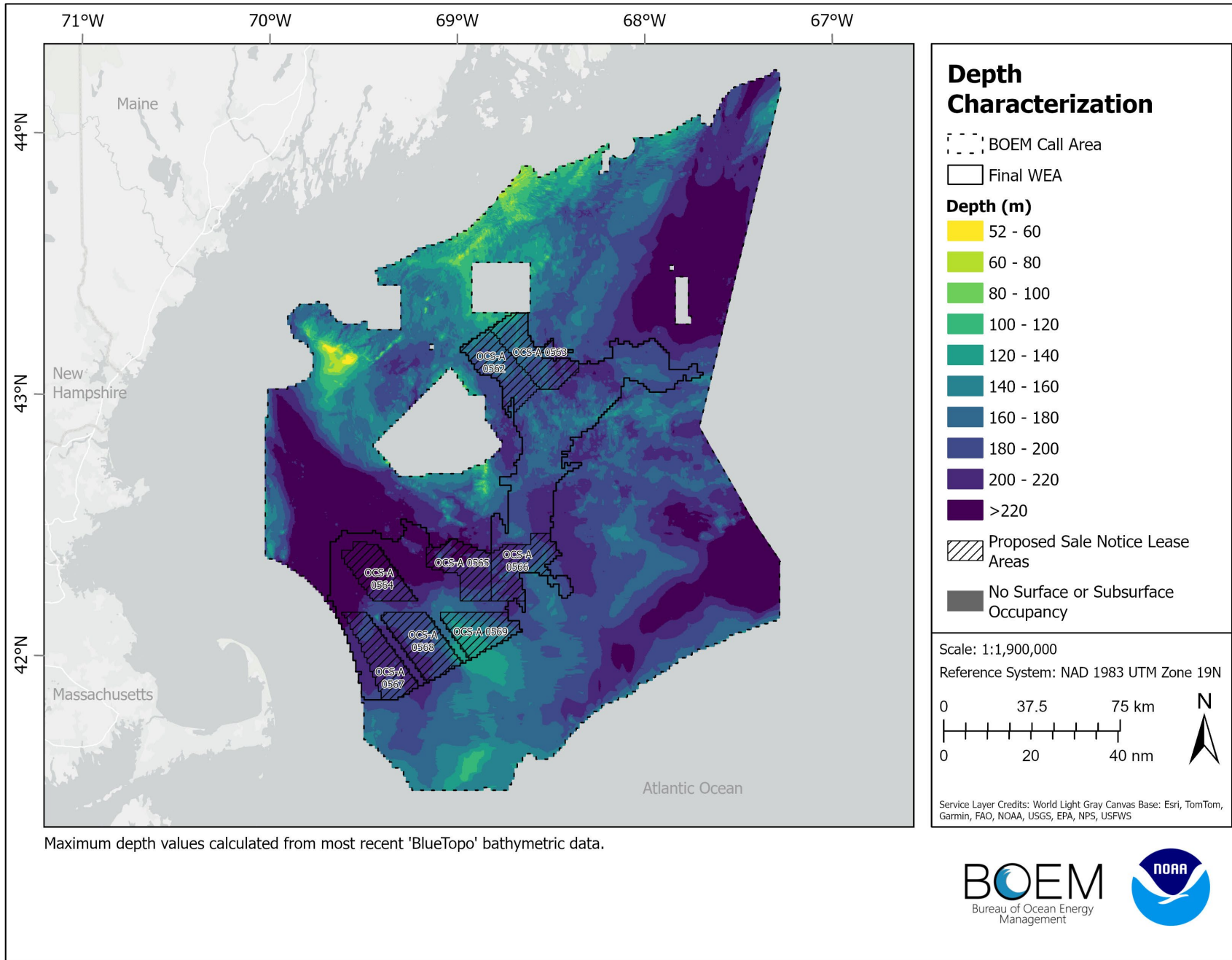
Principal Ports. NOAA Office for Coastal Management. 2019. Principal Ports are the top 150 U.S. ports based upon total annual tonnage. Variation in annual tonnage at a port may result in exclusion or inclusion on the Principal Port list. Points of Interconnection. National Renewable Energy Laboratory and Bureau of Ocean Energy Management. 2023. Points of Interconnection include: Wiscasset, Yarmouth, Maguire Road, Portsmouth, Seabrook, Salem, Mystic, K Street, Pilgrim, Sandwich, and Bourne.

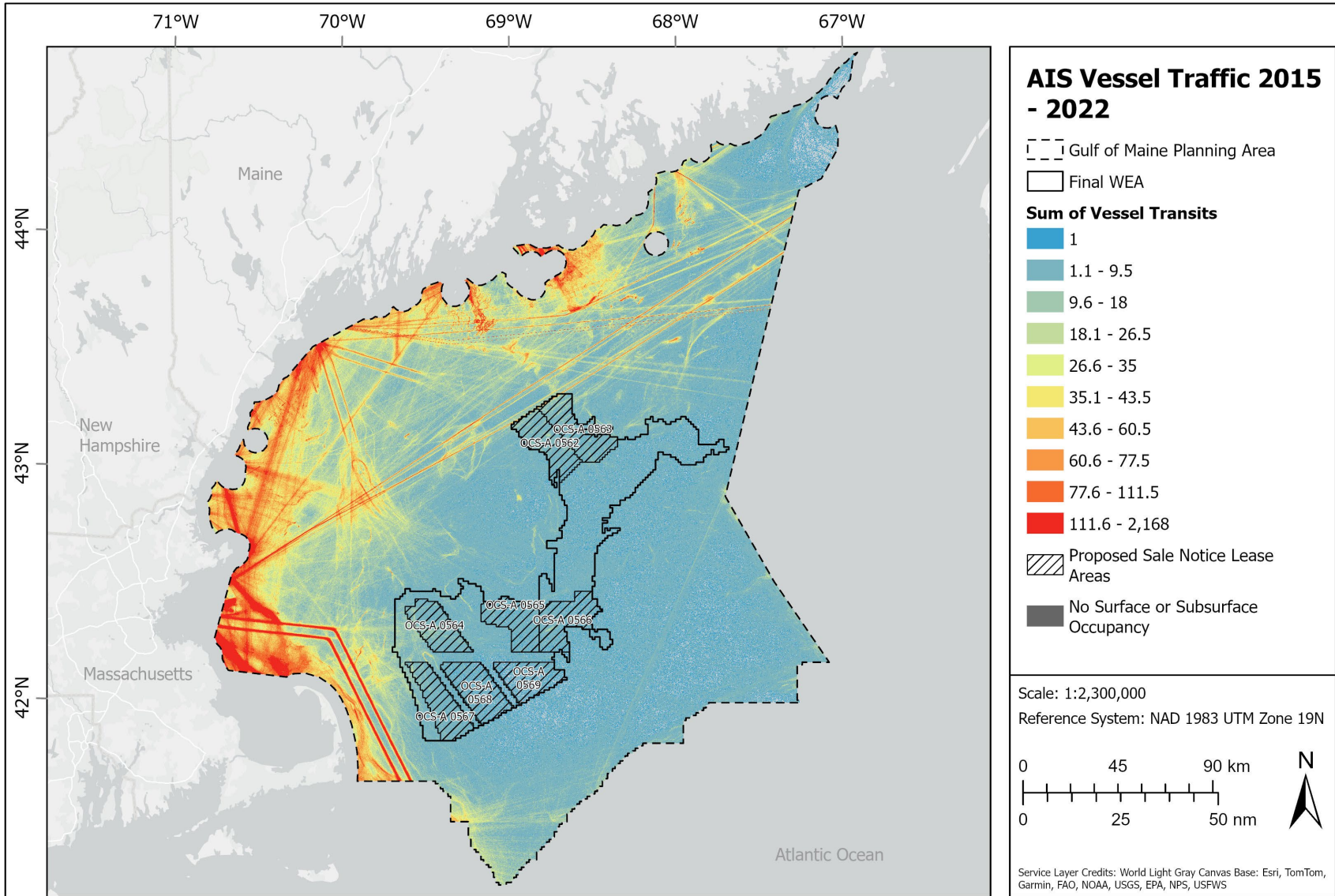




Points of Interconnection. National Renewable Energy Laboratory and Bureau of Ocean Energy Management. 2023. Points of Interconnection include: Wiscasset, Yarmouth, Maguire Road, Portsmouth, Seabrook, Salem, Mystic, K Street, Pilgrim, Sandwich, and Bourne. Distance is calculated using a linear function or "as the crow flies". A 0 - 75 mile linear gradient was applied.

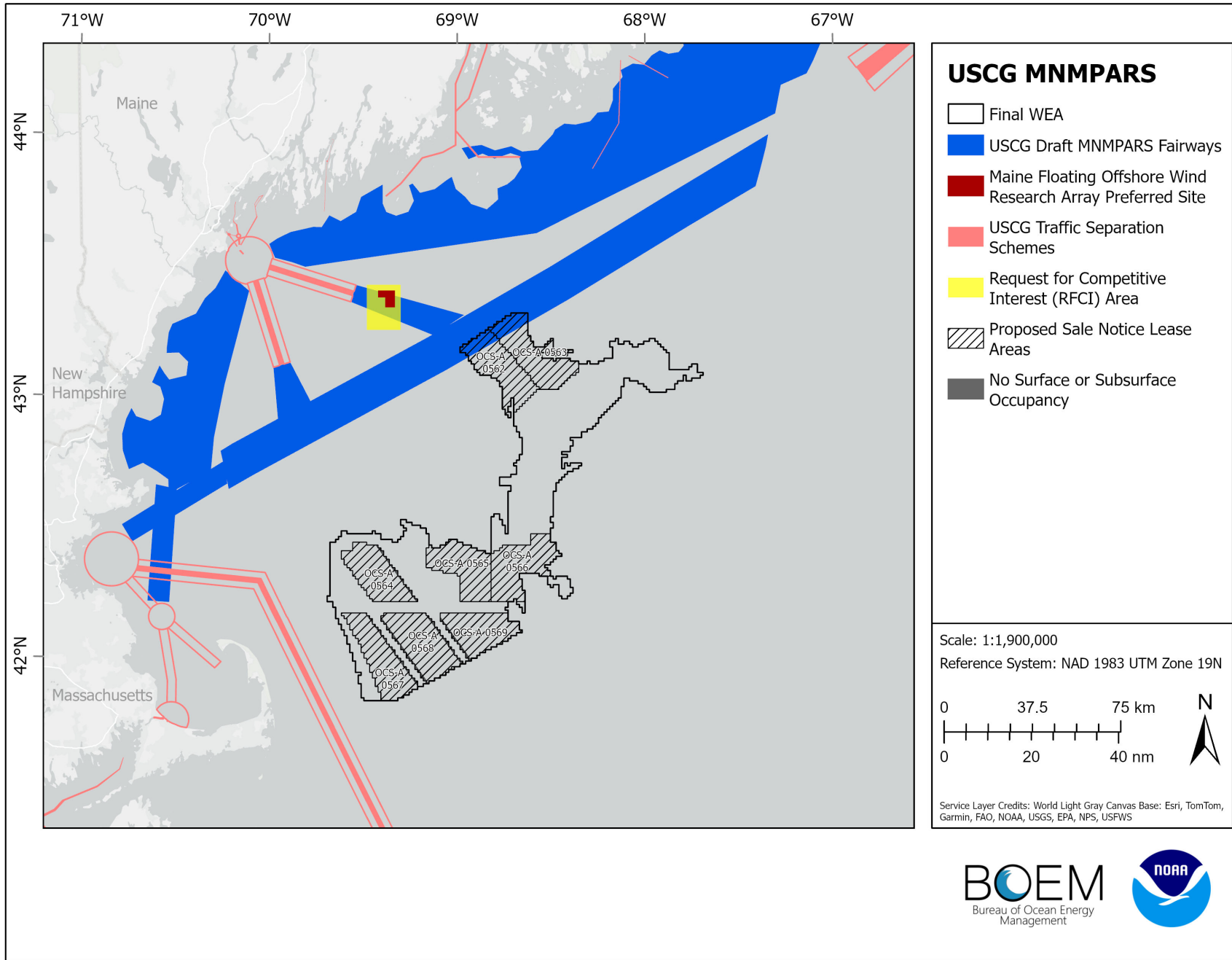


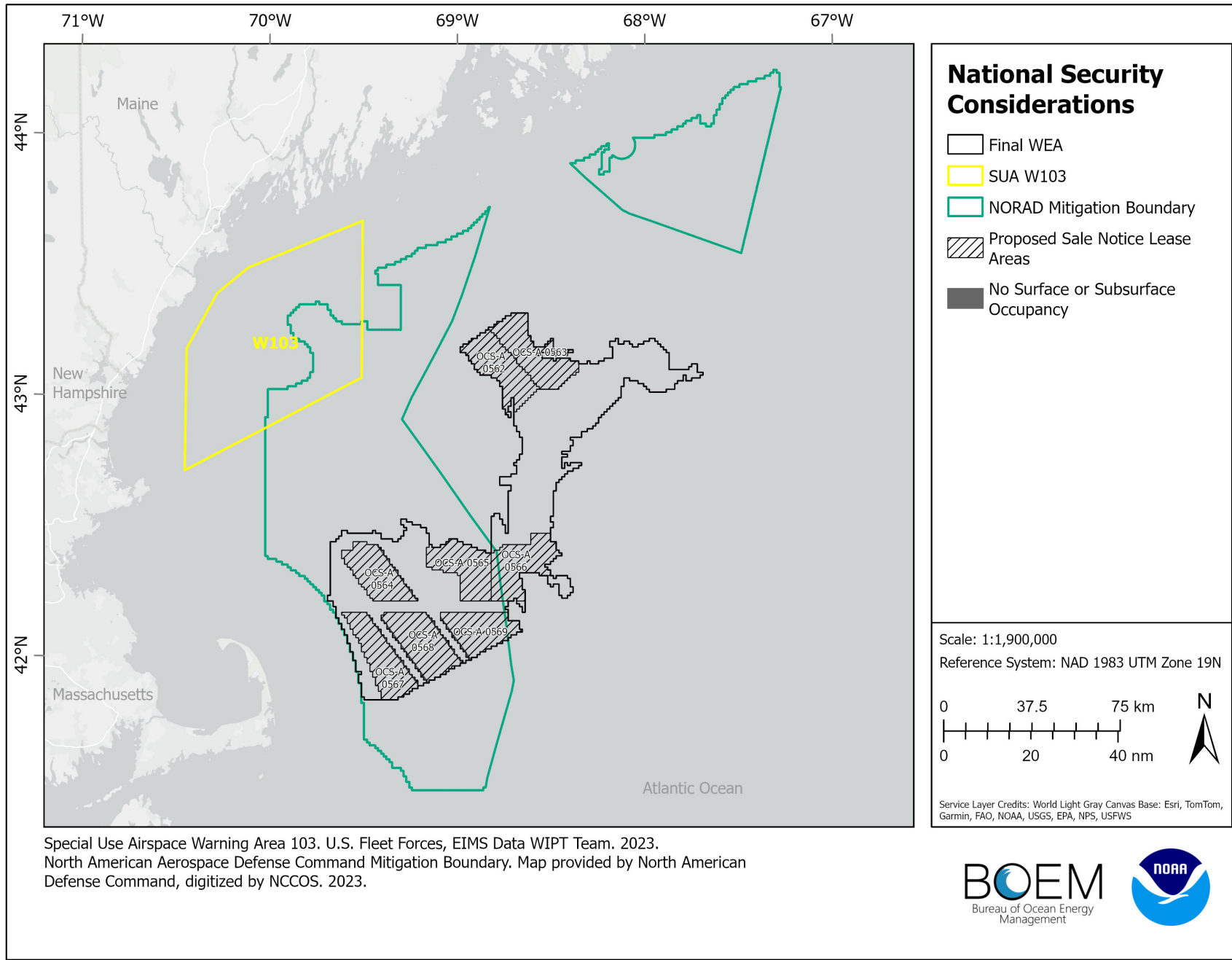


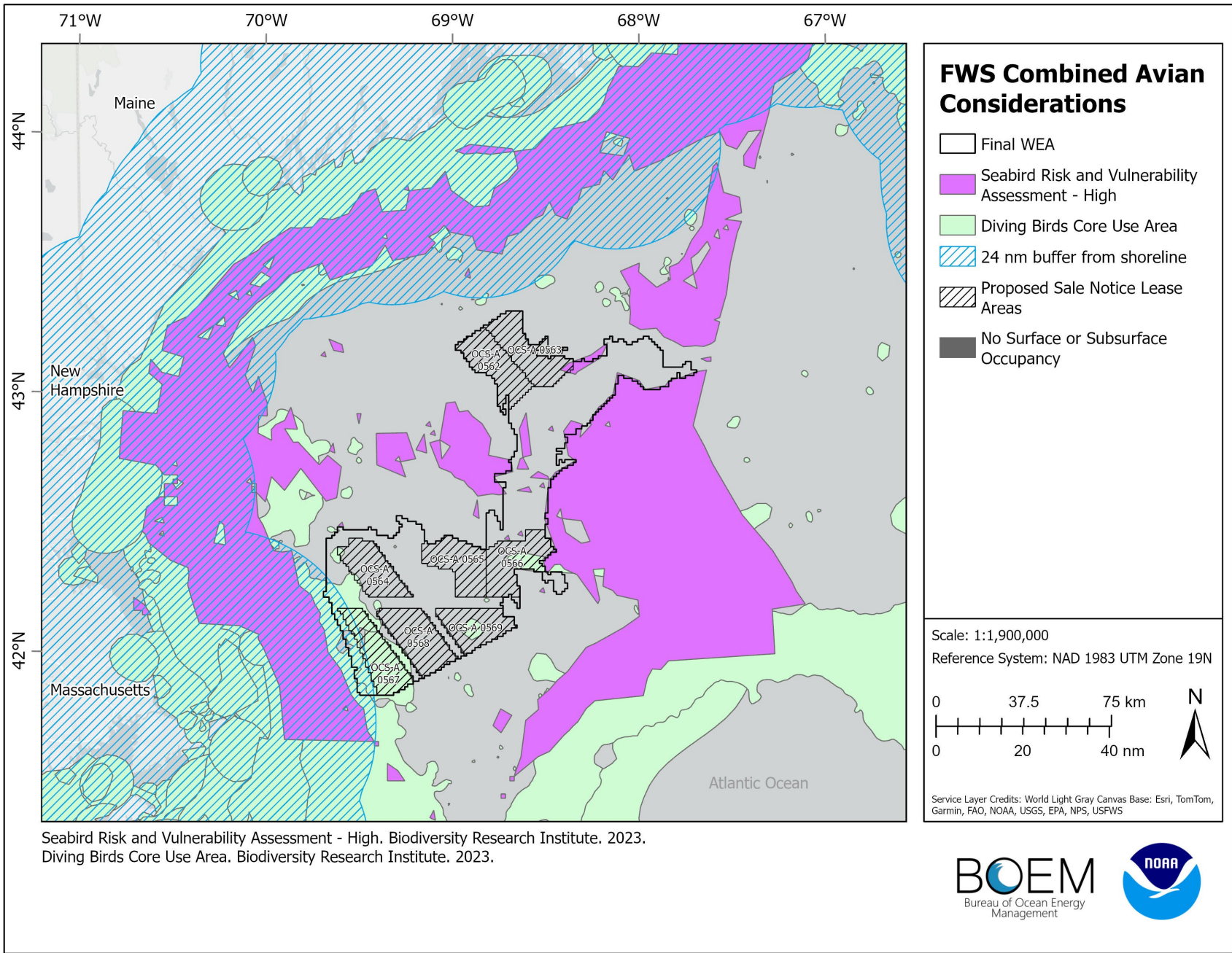


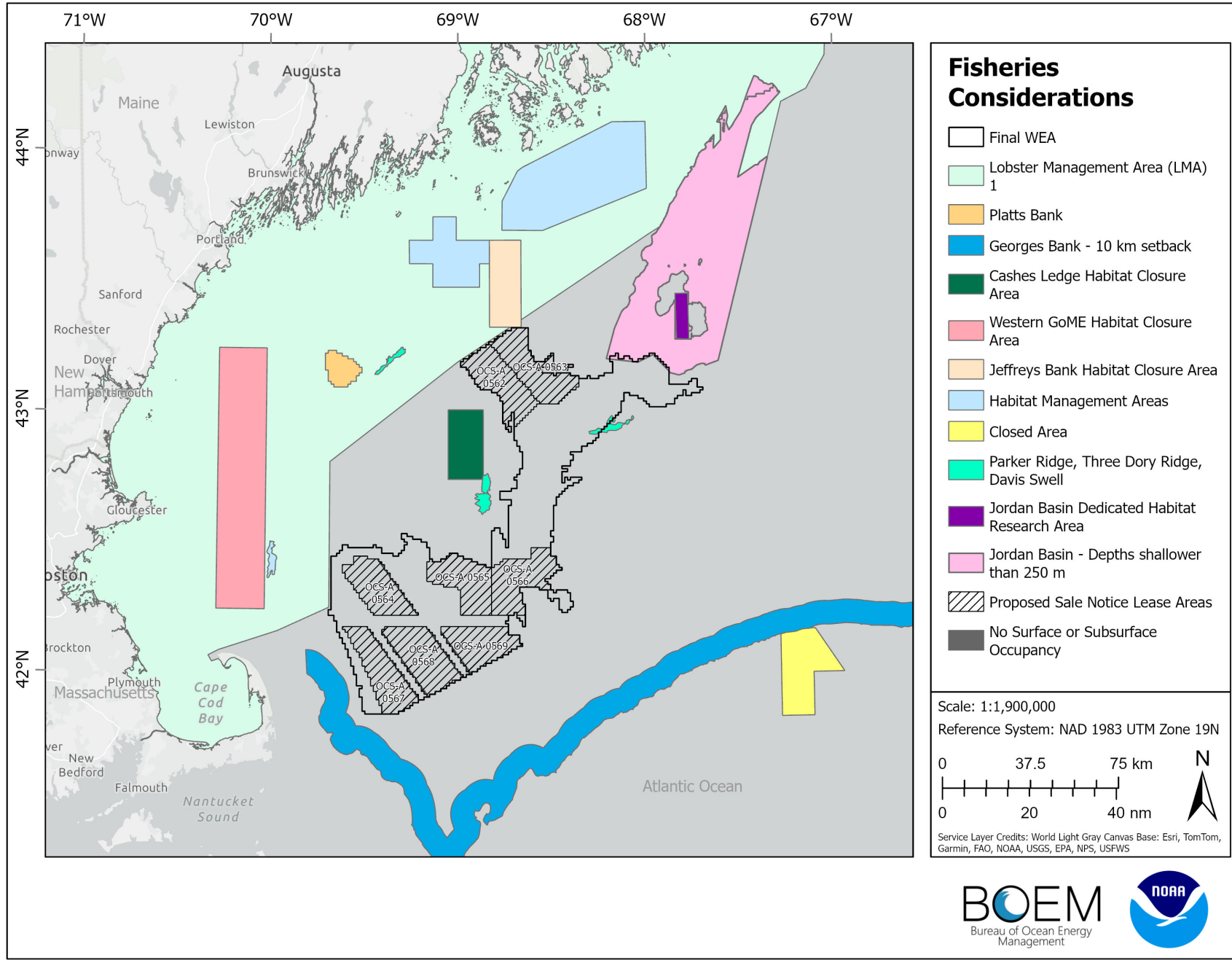
Automatic Identification System (AIS) Vessel Transit Counts. U.S. Coast Guard Navigation Center. 2015 - 2022. Vessel types include: cargo, military, other, passenger, pleasure and sailing, tanker, tug and tow, and fishing.

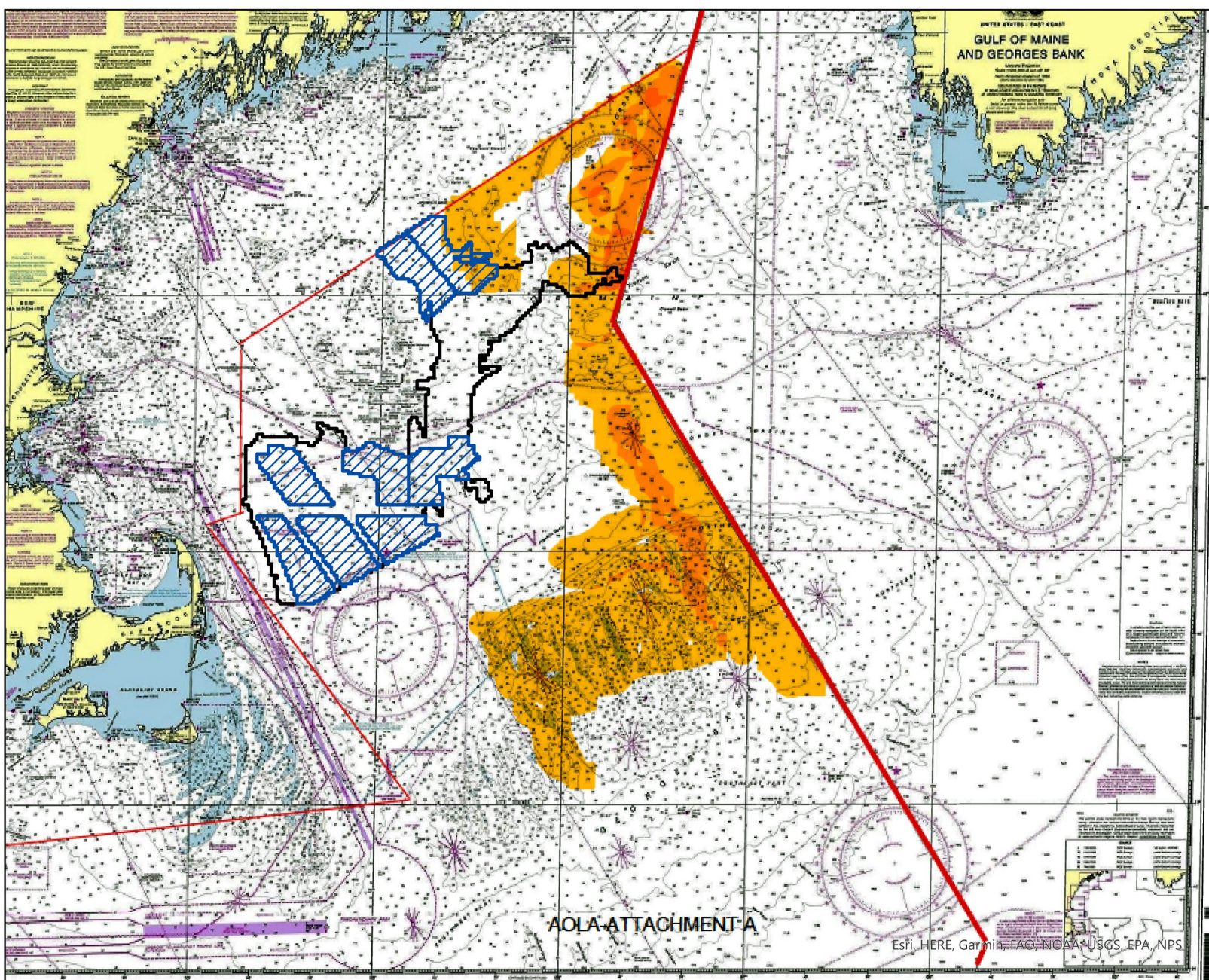






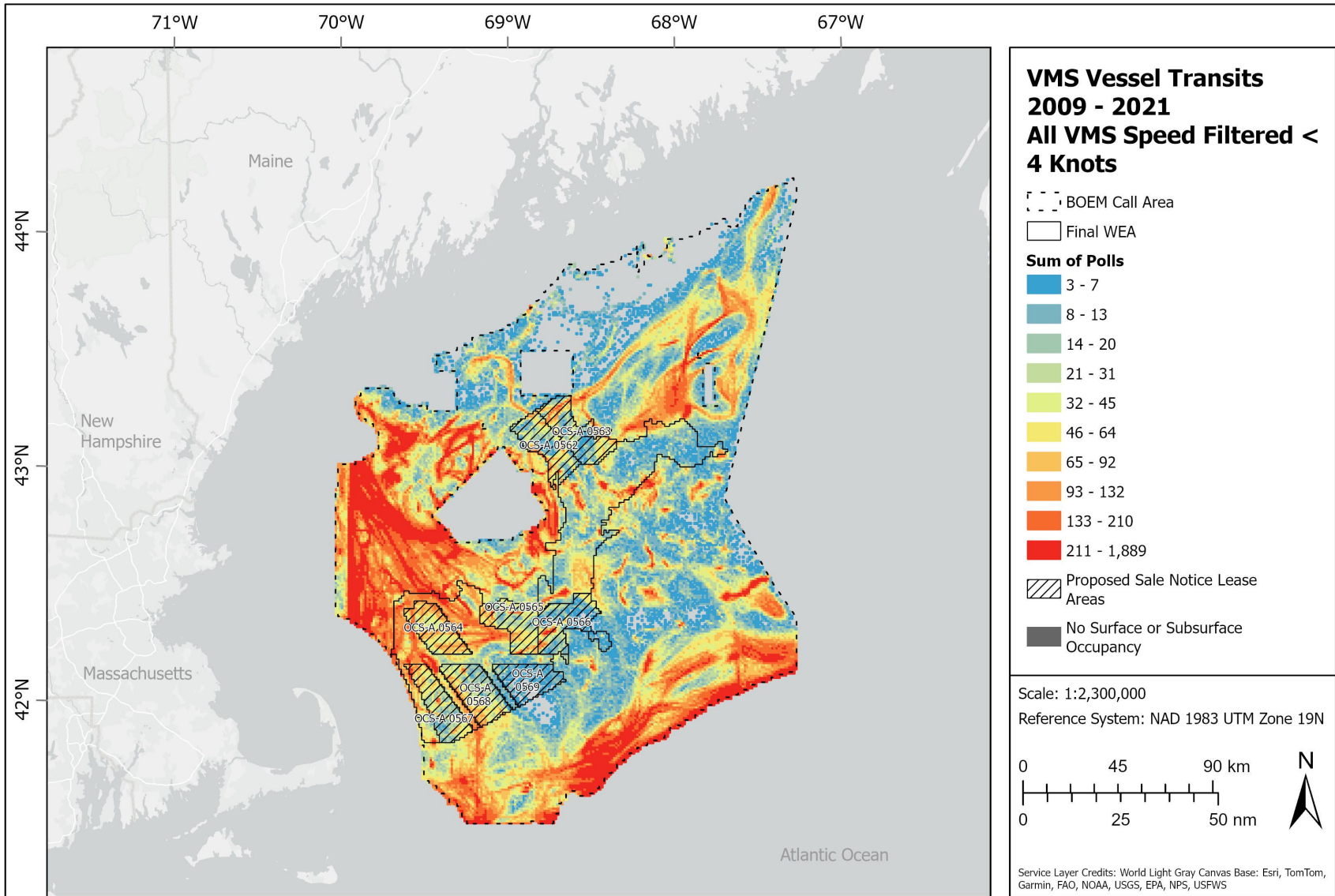






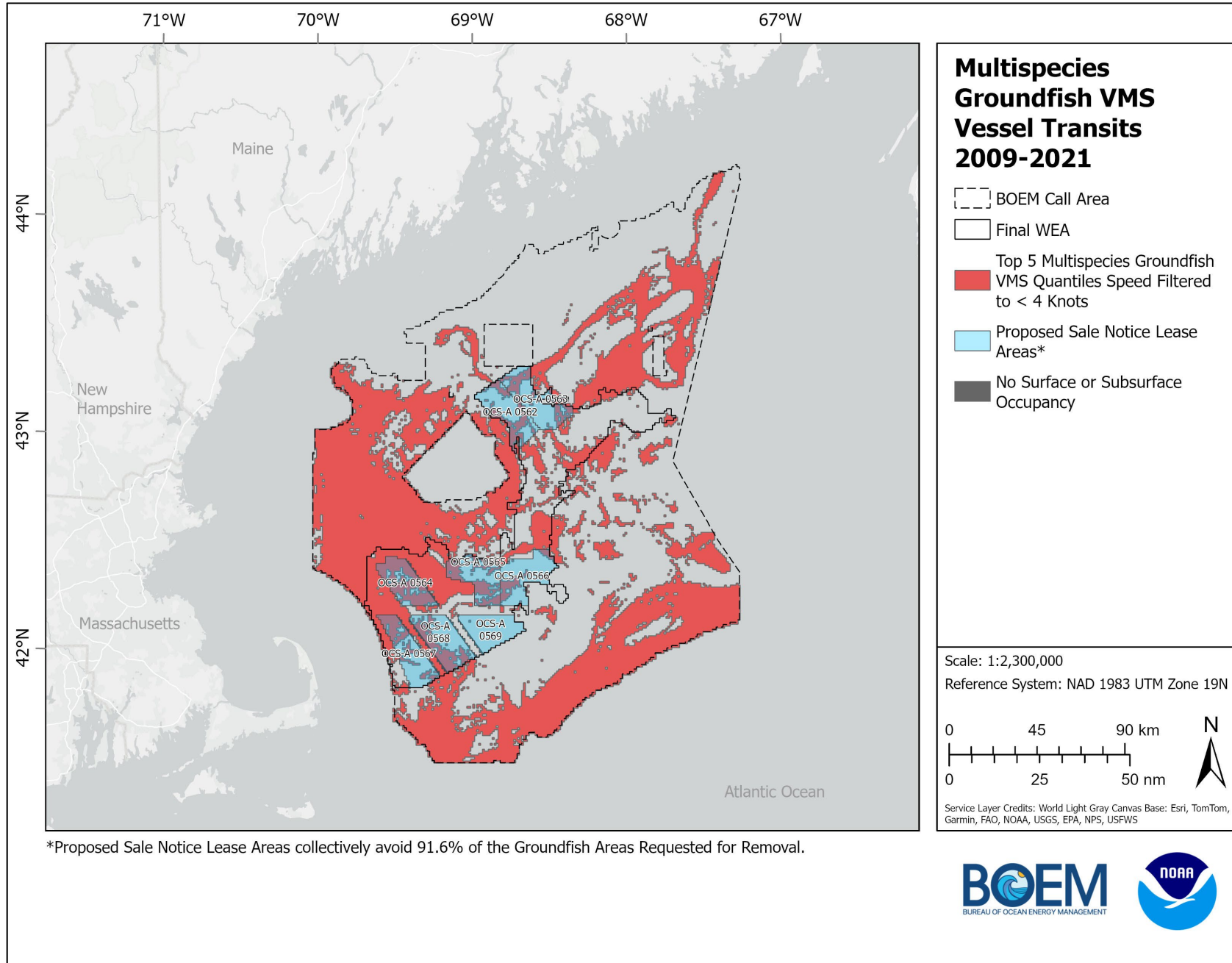
Note: The area in yellow is an **approximation** of the offshore lobster fleet's fishing footprint, as provided by the Atlantic Offshore Lobstermen's Association comment letter on the Draft WEA (11/20/2023). BOEM worked with NOAA NCCOS to georeference the footprint to create this **approximate** overlay of the Final WEA and Proposed Lease Areas.

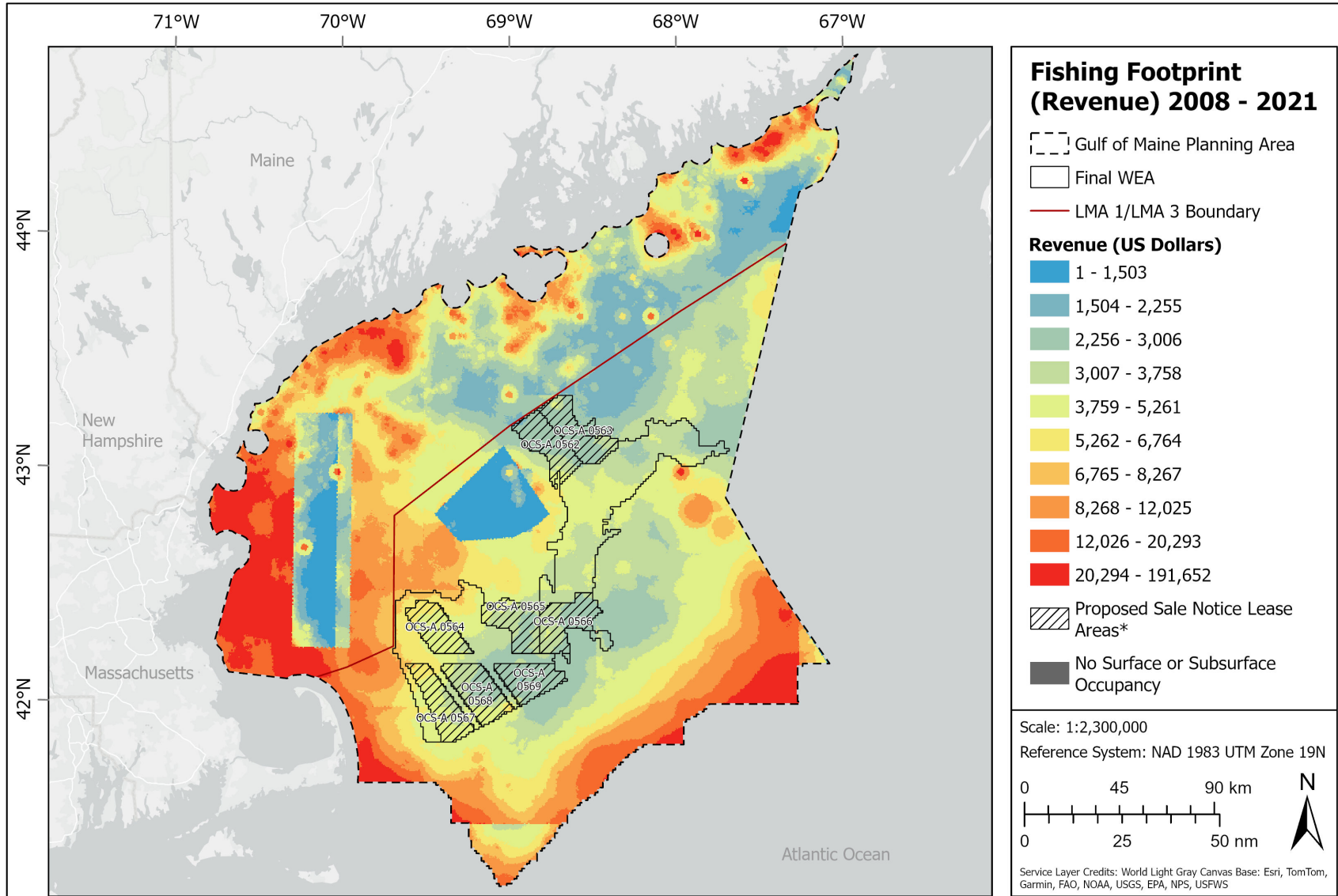




Vessel Monitoring System (VMS) Vessel Transits. NOAA National Marine Fisheries Service. 2009 - 2021. 1 km x 1 km resolution. Speed filtered to 4 knots to depict trawling speeds associated with fishery species including: herring, monkfish, multispecies (groundfish), declared out of fishery, scallop, ocean quahog/surflclam, squid/mackerel/butterfish. Data reflect the resolution at which data can be displayed to the public to ensure protection of Controlled Unclassified Information (CUI). Cells with < 3 unique vessels not displayed on map.



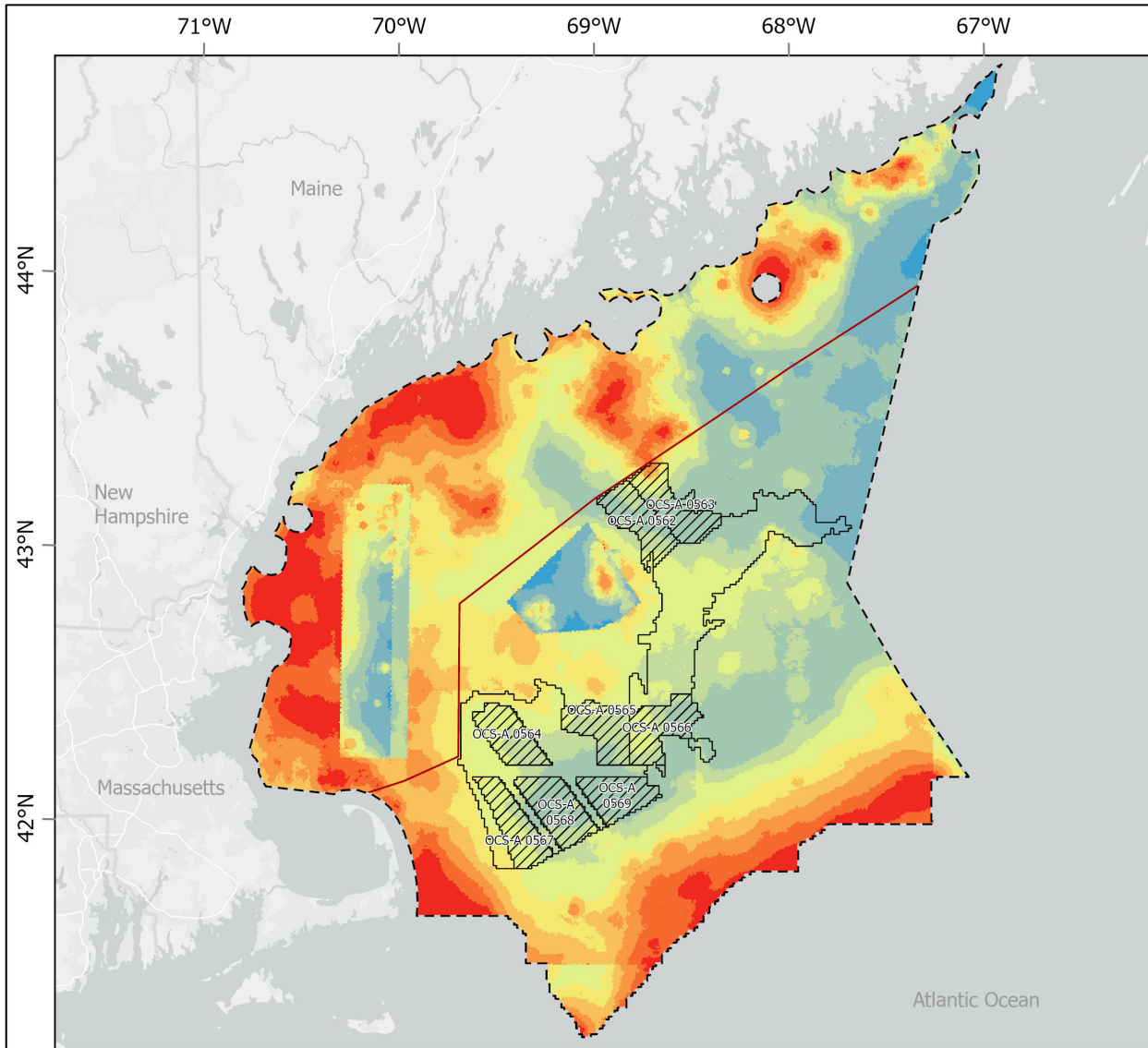




Fishing Footprint Commercial VTR Modeled Logbook Data. NOAA National Marine Fisheries Service. 2008 - 2021. 500 m (0.25 km²) resolution. Revenue displayed as total U.S. Dollars/0.25 km². Modeled data includes all gear types: bottom trawl, dredge, gillnet, lobster, longline, pots and traps, seine, and shrimp.

*Proposed Sale Notice Lease Areas collectively avoid 97% of the total fishing footprint revenue within the Planning Area.





Fishing Footprint (Landings) 2008 - 2021

- Gulf of Maine Planning Area
- Final WEA
- LMA 1/LMA 3 Boundary

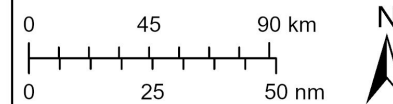
Total Landings (Dressed Pounds)

- 1 - 782
- 783 - 1,565
- 1,566 - 2,347
- 2,348 - 3,130
- 3,131 - 4,694
- 4,695 - 6,259
- 6,260 - 8,606
- 8,607 - 13,300
- 13,301 - 22,689
- 22,690 - 199,507

- Proposed Sale Notice Lease Areas*
- No Surface or Subsurface Occupancy

Scale: 1:2,300,000

Reference System: NAD 1983 UTM Zone 19N

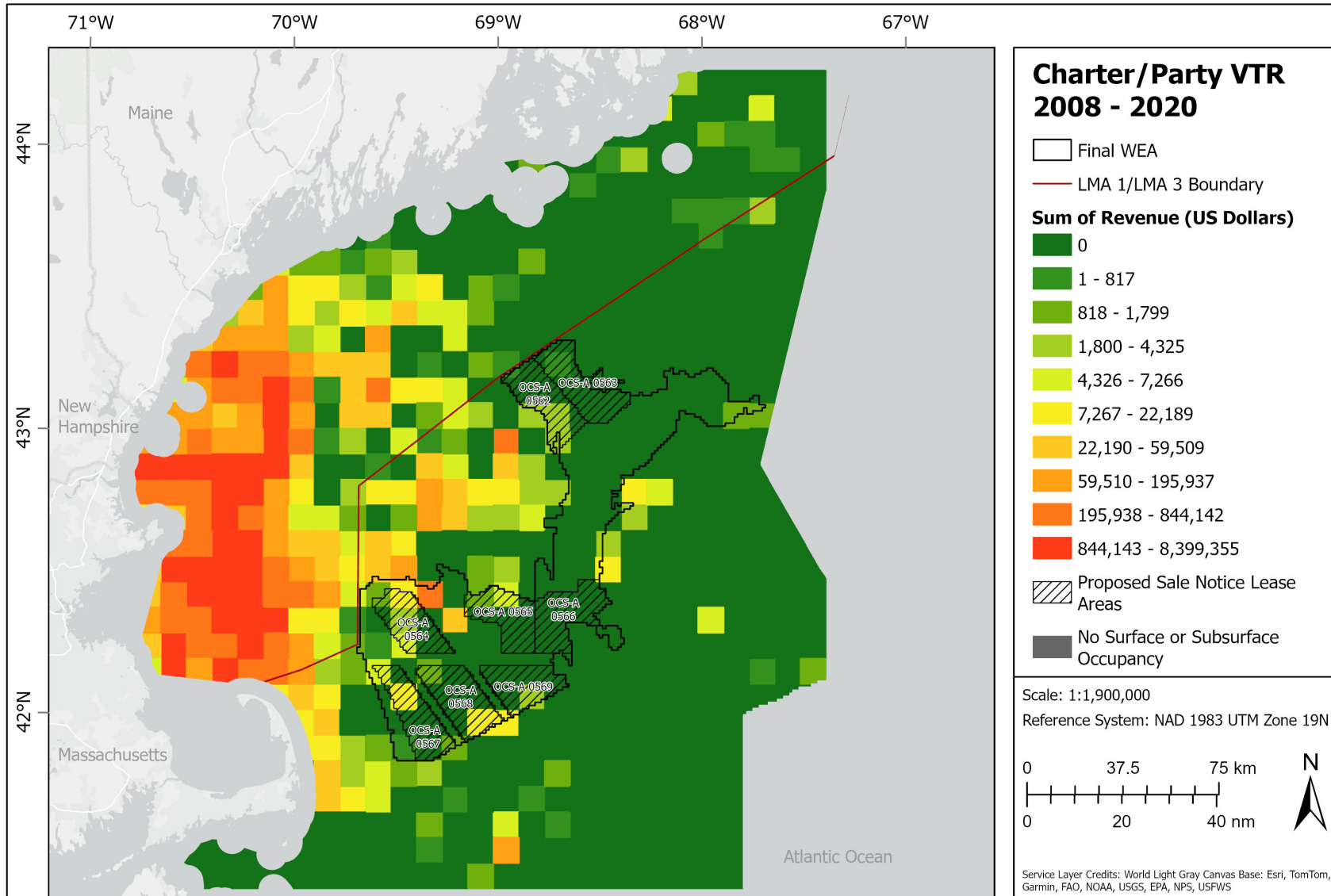


Service Layer Credits: World Light Gray Canvas Base: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

Fishing Footprint Commercial VTR Modeled Logbook Data. NOAA National Marine Fisheries Service. 2008 - 2021. 500 m (0.25 km²) resolution. Modeled data includes all gear types: bottom trawl, dredge, gillnet, lobster, longline, pots and traps, seine, and shrimp.

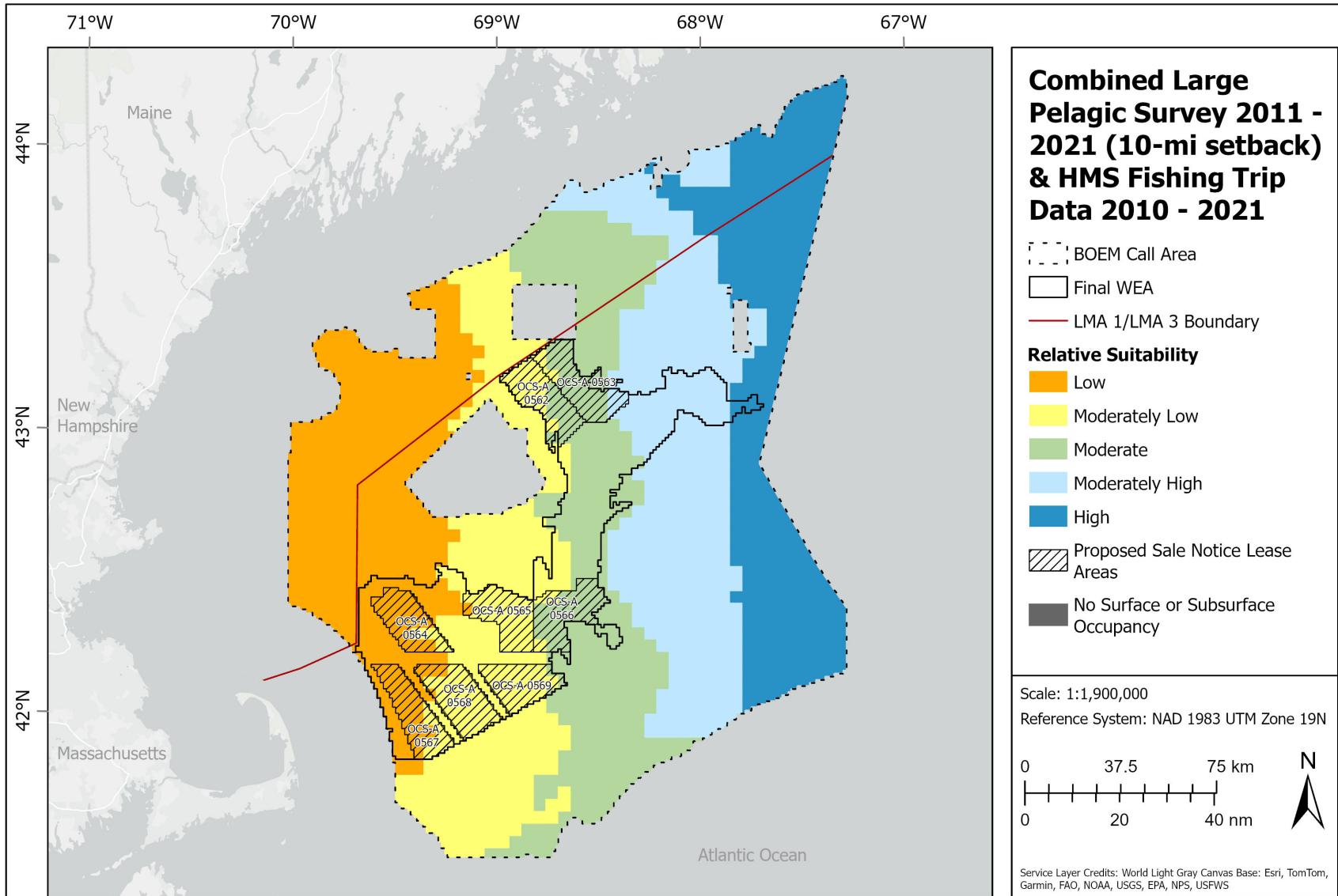
*Proposed Sale Notice Lease Areas collectively avoid 97.6% of the total fishing footprint landings within the Planning Area.





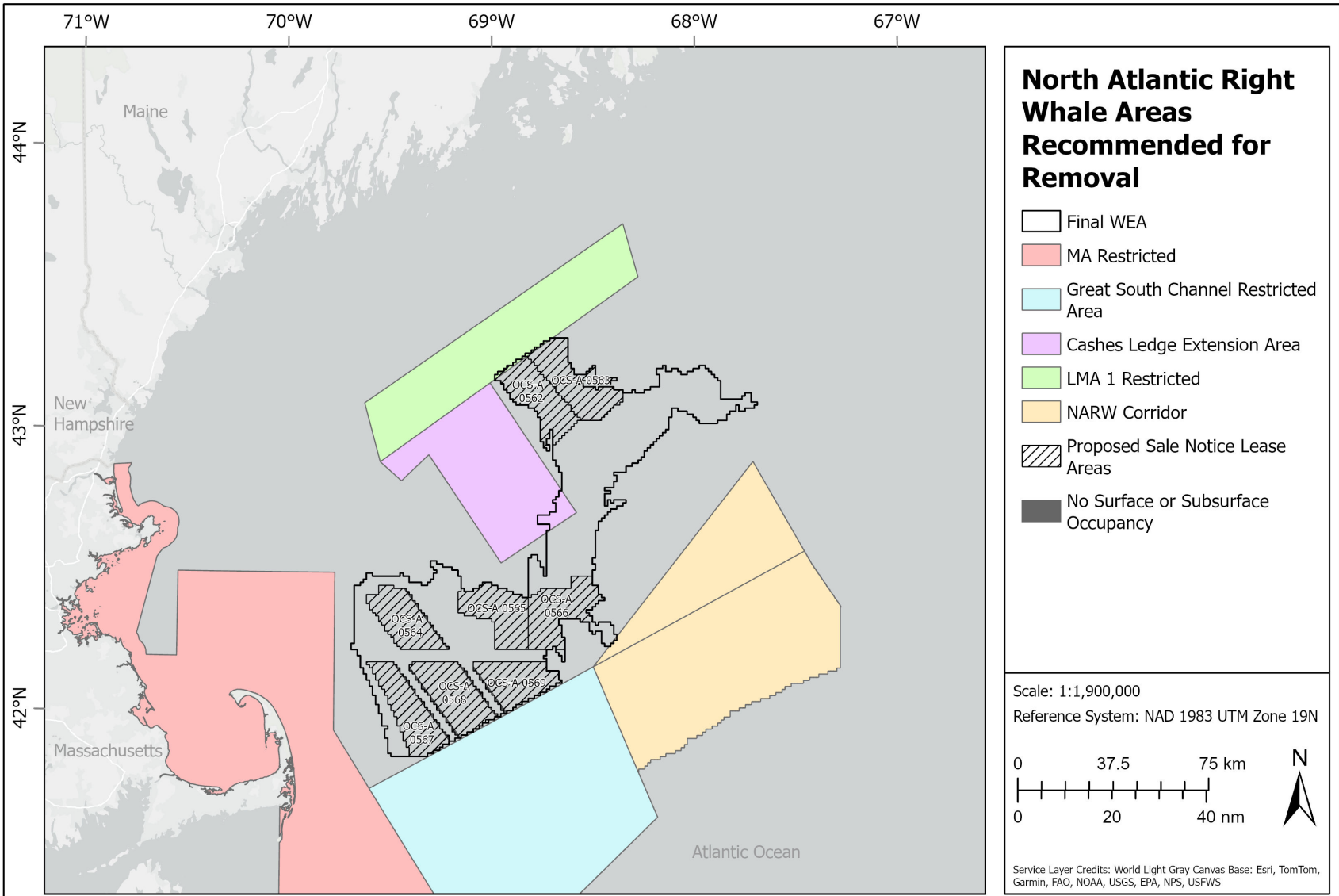
Charter/Party VTR Data. NOAA National Marine Fisheries Service. 2008 - 2020. 193.2 km² resolution. Trip point locations are required to be submitted by any vessel issued GARFO charter party permit. Points represent best approximate position of that trip. Points are linked with survey derived angler price data to calculate revenue.





Large Pelagic Survey Data. NOAA National Marine Fisheries Service. 2011 - 2021. Trip point data was received from NOAA NMFS. A 10-mi setback was applied to each trip point to capture potential fishing extent. Trip points and corresponding setbacks were overlaid on the 10-acre grid and a total trip count per grid cell was calculated. Highly Migratory Species Fishing Trip Data. Marine Department of Marine Resources. 2010 - 2021. A combined data layer was created using the two data layers.

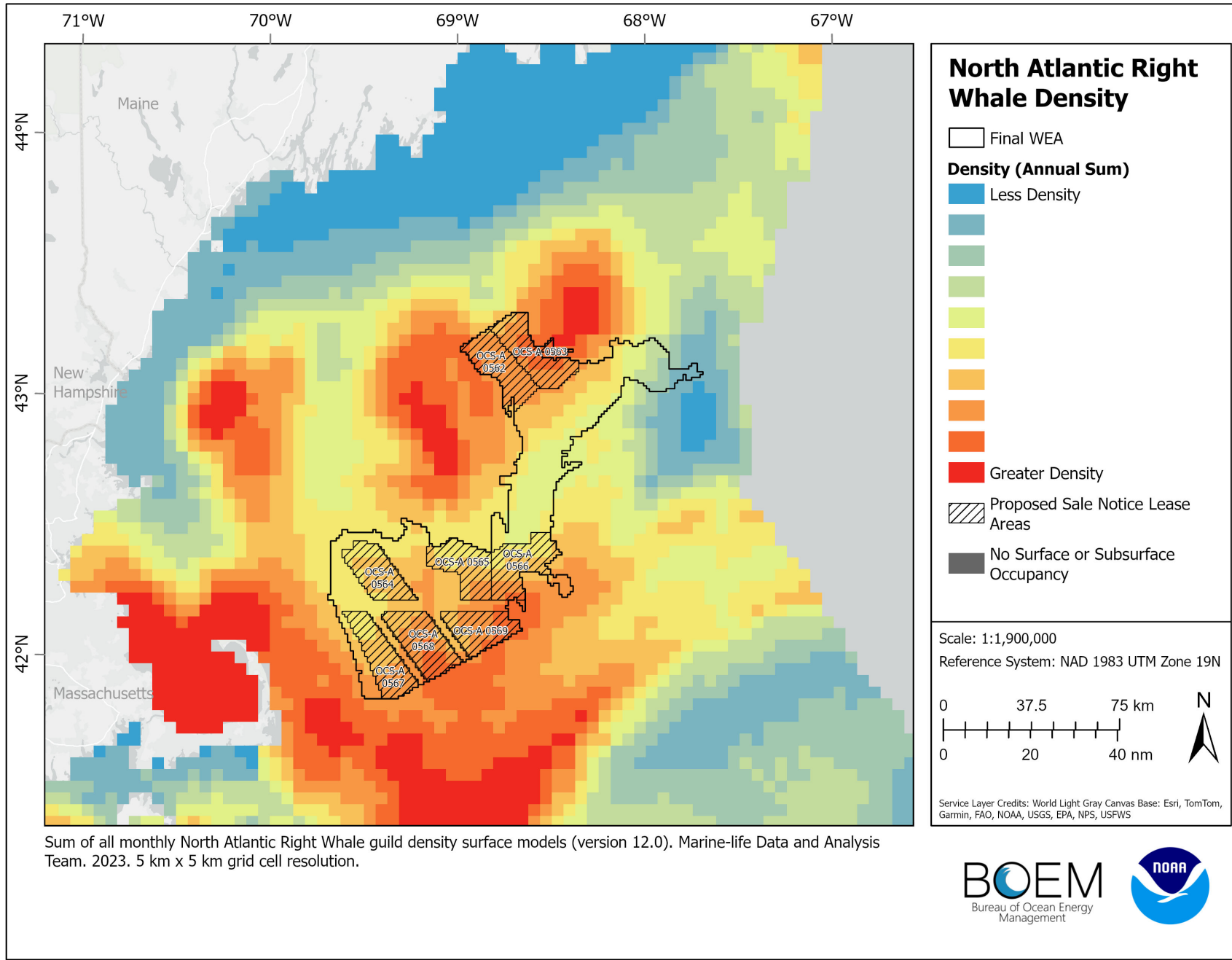


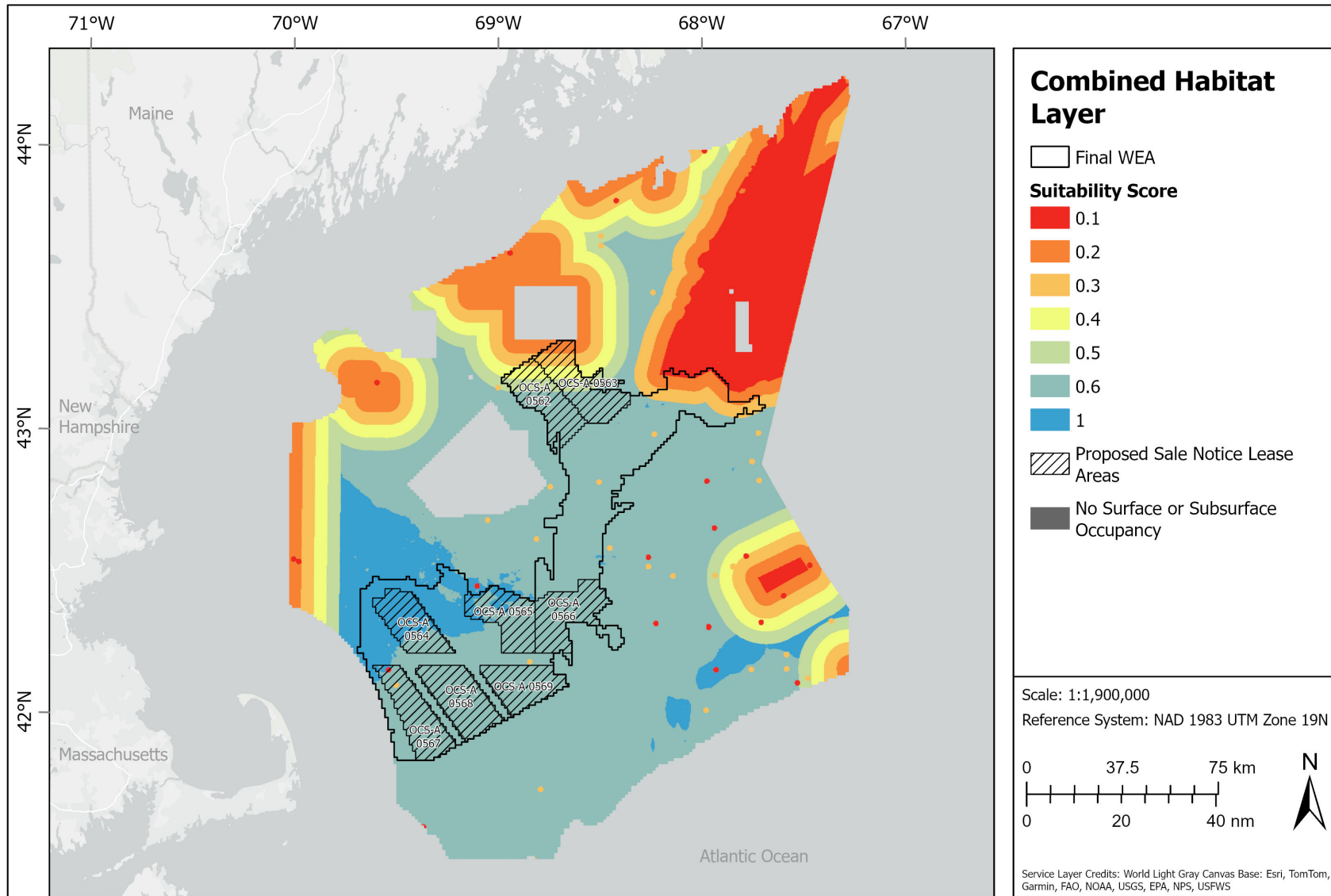


Massachusetts Restricted Areas. NOAA National Marine Fisheries Service. 2022.
 Great South Channel Restricted Area. NOAA National Marine Fisheries Service. 2022.
 Cashes Ledge Extension Area. NOAA National Marine Fisheries Service. 2023.
 Lobster Management Area 1 Restricted Area. NOAA National Marine Fisheries Service. 2022.
 North Atlantic Right Whale Corridor. NOAA National Marine Fisheries Service. 2023.

Service Layer Credits: World Light Gray Canvas Base: Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

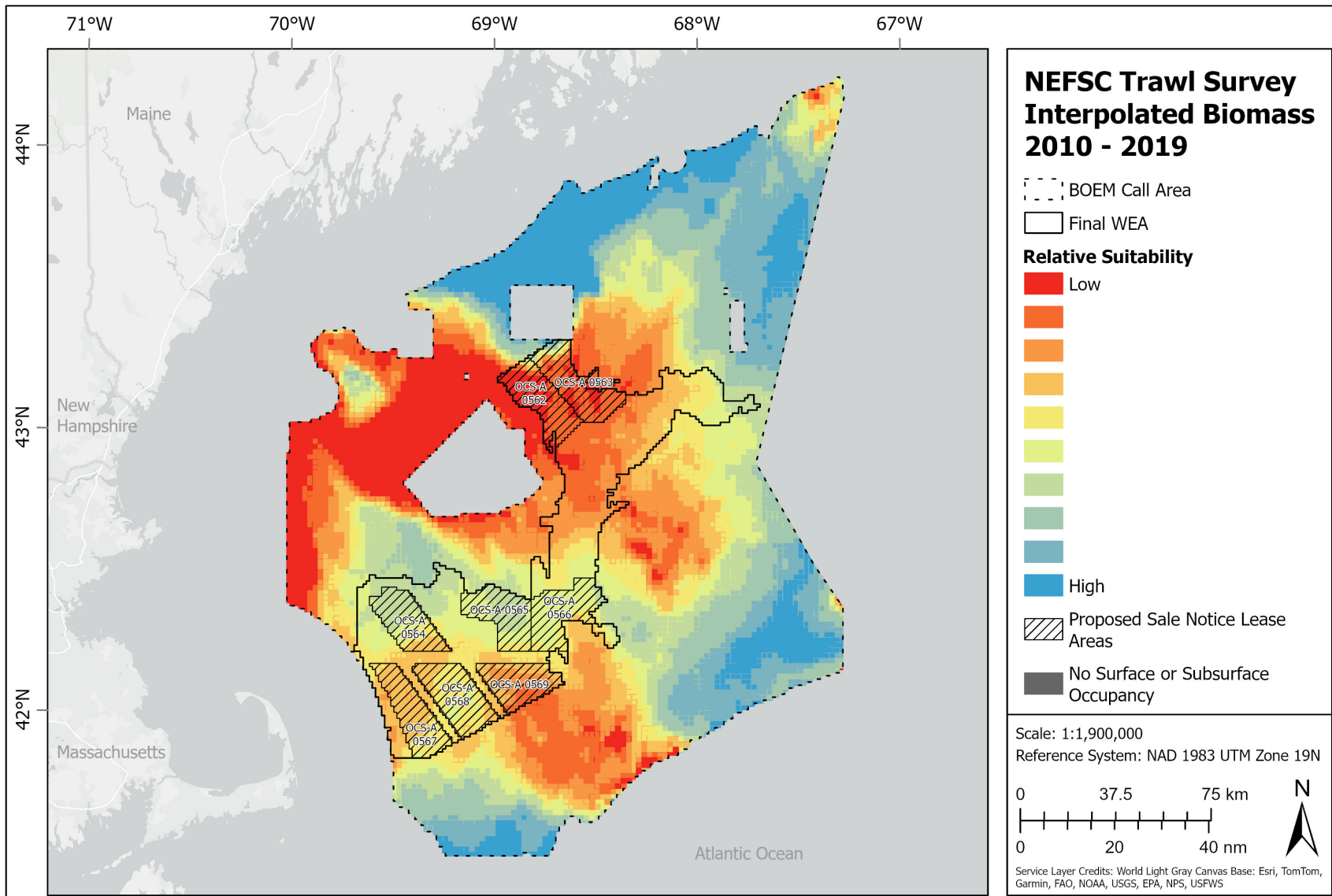






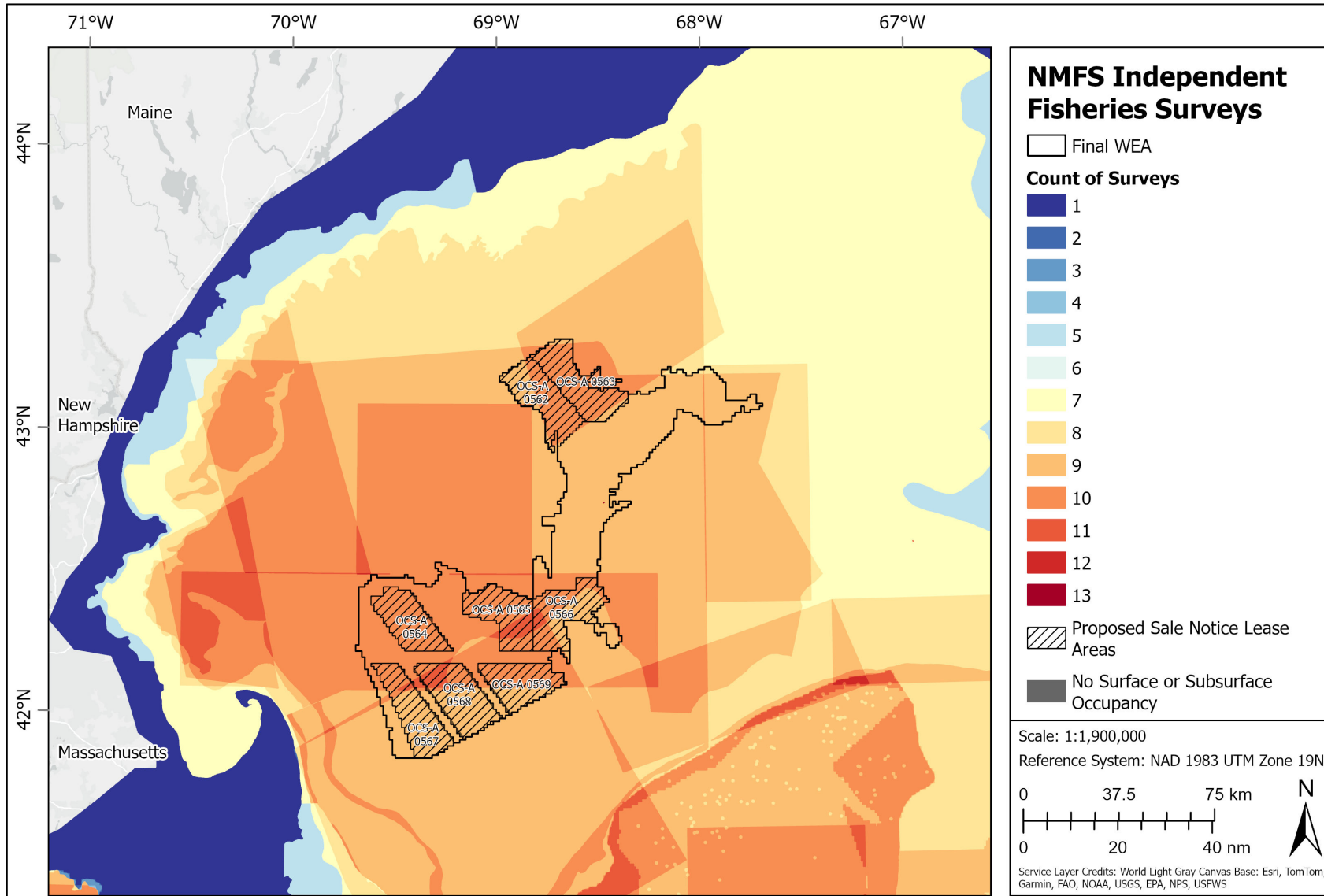
Combined Habitat Layer. Prepared by BOEM, this data layer drew from comments received on the Gulf of Maine Draft WEA received from NOAA National Marine Fisheries Service, the New England Fishery Management Council, and The Nature Conservancy. Habitats include: Jordan Basin based on 200 m contour (10 km setback), coral and sponge point data (1 km setback), Habitat Management Areas not designated by NEFMC (20 km setback), Coral Protection Areas (20 km setback), CPAs considered but not designated by NEFMC (20 km setback), sea pen point data (1 km setback), HAPCs, potential and known coral and hardbottom.





NEFSC Trawl Survey Interpolated Biomass. Duke University Marine-life Data and Analysis Team (MDAT). 2010 - 2019. Retrieved from Northeast Ocean Data Portal. 2 km x 2 km resolution. The following species were included in the Spring surveys: Atlantic cod, monkfish (goosefish), pollock, and witch flounder. The following species were included in the Fall survey: Acadian redfish, American plaice and Atlantic herring. Individual species were combined using a geometric mean.





NMFS Independent Fisheries Surveys. NOAA National Marine Fisheries Service. 2023. Survey footprints include: EcoMon 1-4, Bottom Trawl Spring/Fall, AMAPPS Aerial, CRB Bottom Longline, North Atlantic Right whale, Shrimp, Surfclam, Scallop-Shellfish, and Ocean Quahog.



Renewable Energy Goals: How many acres are needed?

- Planning and Analysis phase is based on winnowing – starting large, receiving feedback and deconflicting
- Spatial modeling acreage assumptions
 - Call and Draft WEA comments documented several capacity requests
 - MA – 10 GW of capacity by 2050
 - ME – 3 GW of capacity by 2040
 - ISO-NE – 18GW
 - American Clean Power – 20 GW
- PSN Lease Areas are ~ 944,000 acres (developable acres).

Capacity (GW) to acreage – Energy Density*

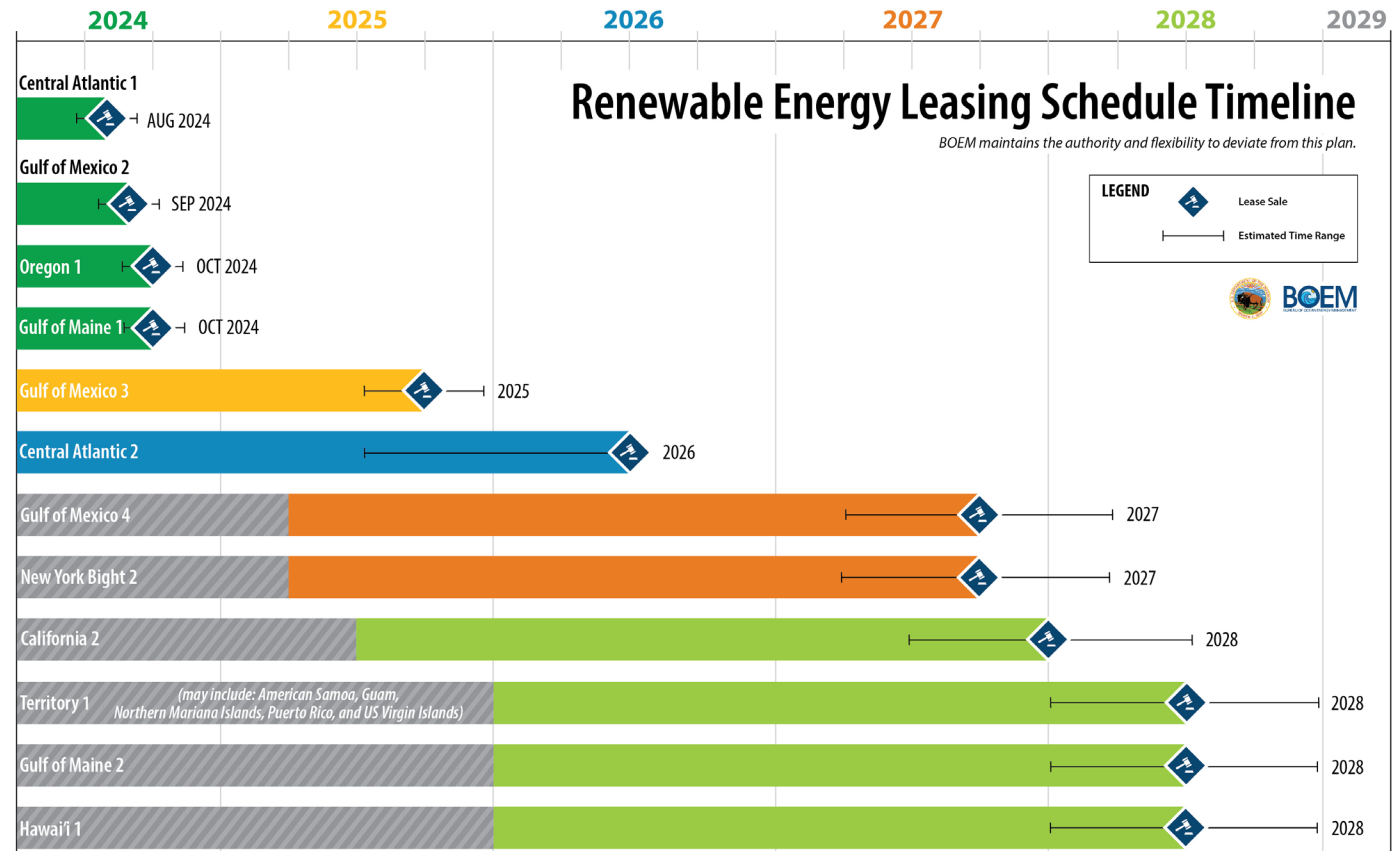
MW	PLANNING DENSITY (Old)	PLANNING DENSITY (New)	AVERAGE DENSITY OF BOEM PROPOSED PROJECTS
	~0.012 MW/acre or 3 MW/km ²	~0.016 MW/acre or 4 MW/km ²	~ 0.019 MW/acre or 4.7 MW/km ²
13,000	1,083,333	812,500	684,211
18,000	1,500,000	1,125,000	947,368
20,000	1,666,667	1,250,000	1,052,632

*Energy density estimates are highly variable, and mostly based on fixed offshore wind experience.



5-Year Renewable Energy Leasing Schedule

- April 2024, Secretary Haaland [announced](#) new 5-year renewable energy leasing schedule
- Required under new “[Modernization Rule](#)”
- Gulf of Maine-2 sale is envisioned for 2028.
 - BOEM asked about “Phased leasing” approach when we [published the Draft WEA](#) in October 2023.
 - [Area Identification memo](#) referenced broad support received for a phased leasing; however, recommendations for scale and timing of phases varied widely across individuals and stakeholder groups.
 - The Secretary’s announcement is a continuation of this conversation on “phased leasing”
 - The timing and scope of a second Gulf of Maine sale would be directly informed by the results of the 2024 sale, as well as the future position of potentially affected Tribes, Gulf of Maine states, stakeholder engagement, relevant market conditions, and regional energy goals.



PSN: Lease Area Details

PSN Areas	Region	Total Acres	Developable Acres
OCS-A 0562	North	121,339	121,339
OCS-A 0563	North	132,369	132,369
OCS-A 0564	South	110,308	105,499
OCS-A 0565	South	115,290	115,290
OCS-A 0566	South	127,388	127,388
OCS-A 0567	South	123,118	117,391
OCS-A 0568	South	134,149	123,389
OCS-A 0569	South	106,038	101,757
Total		969,999	944,422
Average		121,250	118,053

