BOEM
Bureau of Ocean Energy Management

Offshore Wind Energy Update

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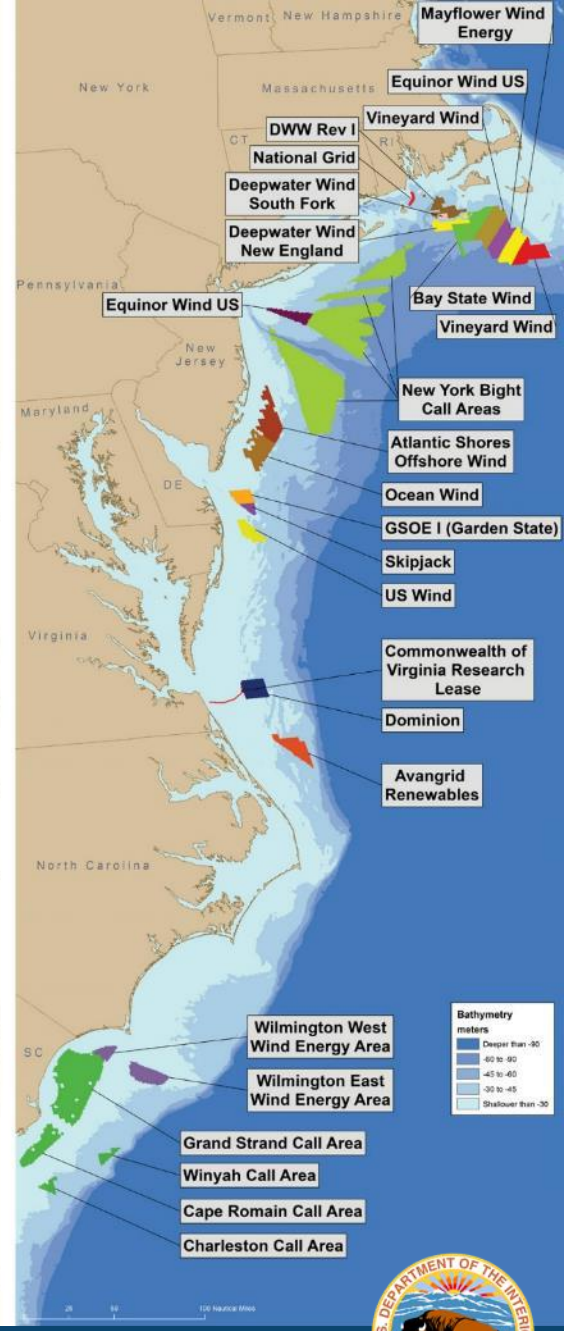
Office of Renewable Energy Programs

New England Fisheries Management Council

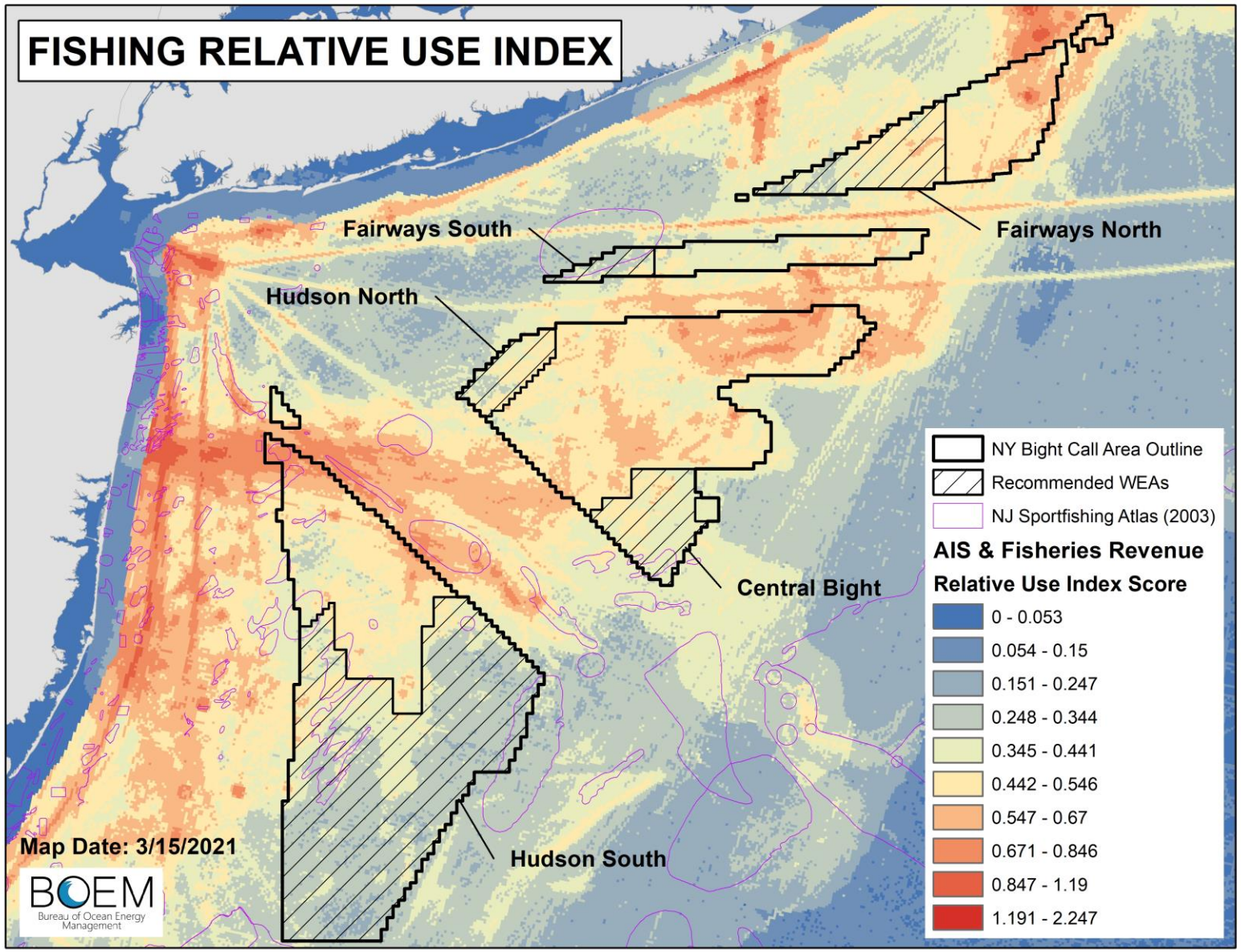
June 22, 2021

Renewable Energy Program by the Numbers

Competitive Lease Sales Completed:	8
Active Commercial Offshore Leases:	17
Site Assessment Plans (SAPs) Approved:	11
General Activities & Research Plans Approved:	2
Construction and Operations Plans (COPs):	
• Submitted	14
• Anticipated within next 12 months	2
Regulatory Guidance:	11
Leasing Under Consideration:	7
Steel in the Water:	2020



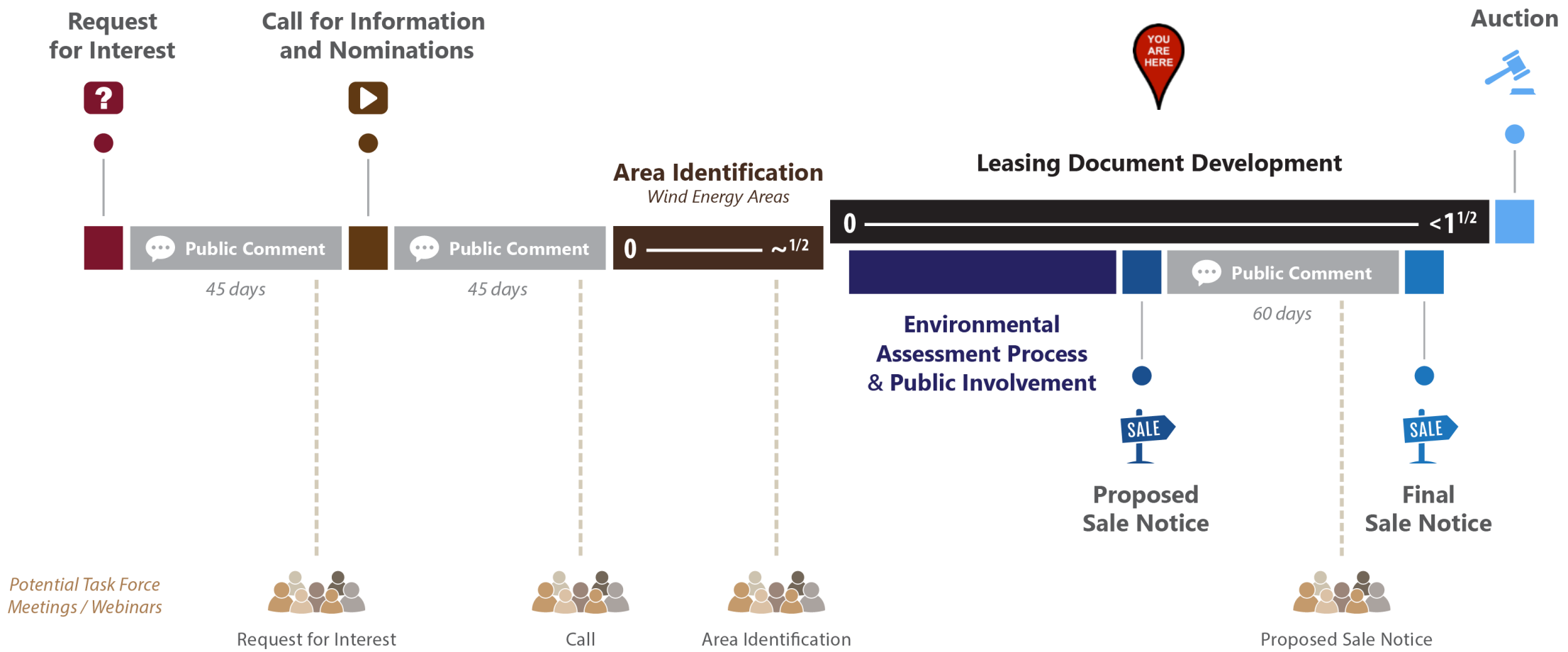
NY Bight Leasing



NY Bight Timeline

- **September 2017**
  - Request from NY
- **April 2018**
  - Call For Information and Nominations
- **Nov 2018**
  - Task Force meeting – Draft WEAs
- **March 2019**
  - New York Bight Transit Lane Workshop
- **December 2020**
  - Revised Department of Defense Analysis
- **March 2021**
  - WEAs announced
- **April 2021**
  - Task Force Meeting – Proposed Sale Notice
- **June 14, 2021**
  - Published Proposed Sale Notice (60 day comment period)

Request for Interest to Lease Sale



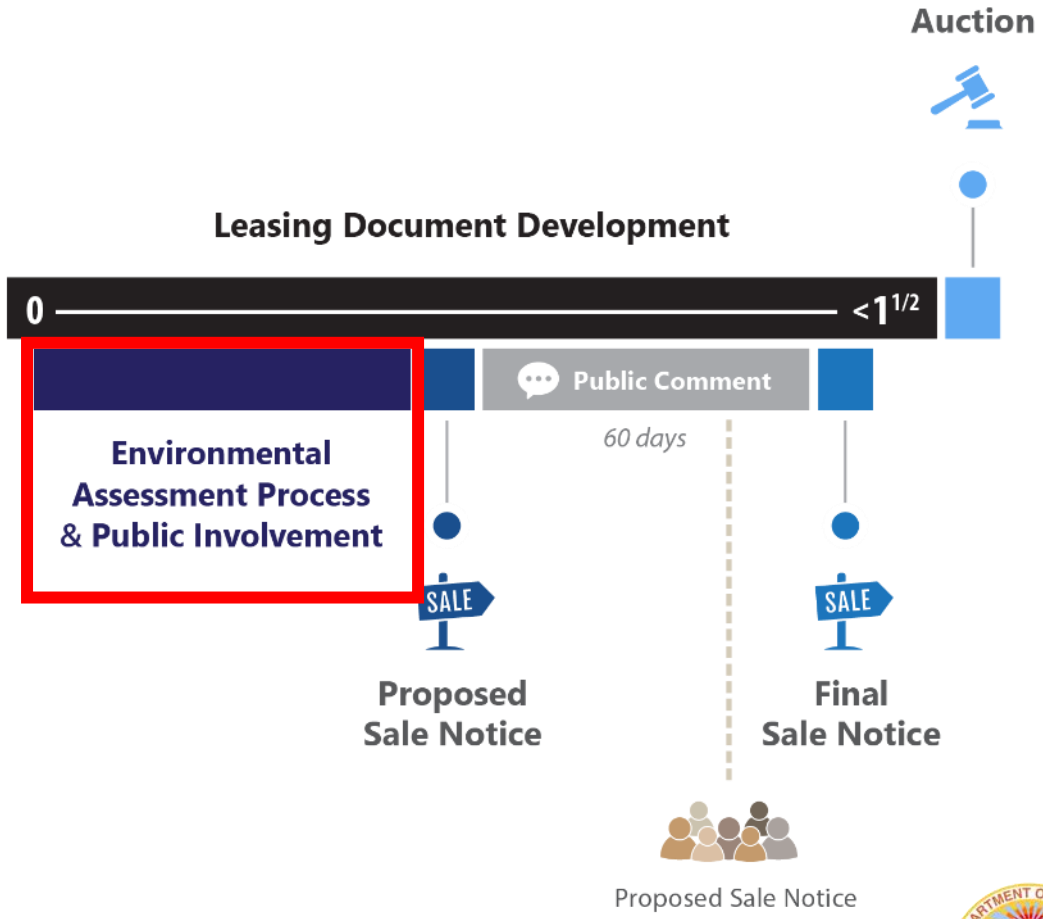
Environmental Assessment

Assesses Environmental Effects Associated with Leasing

- Site Characterization Activities
  - biological, geological, geotechnical, and archaeological surveys
- Site Assessment Activities
  - meteorological and oceanographic buoy deployment

Scoping Comment Period ended April 28, 2021

Comment period on EA will be concurrent with the Notice of Availability



Proposed Sale Notice

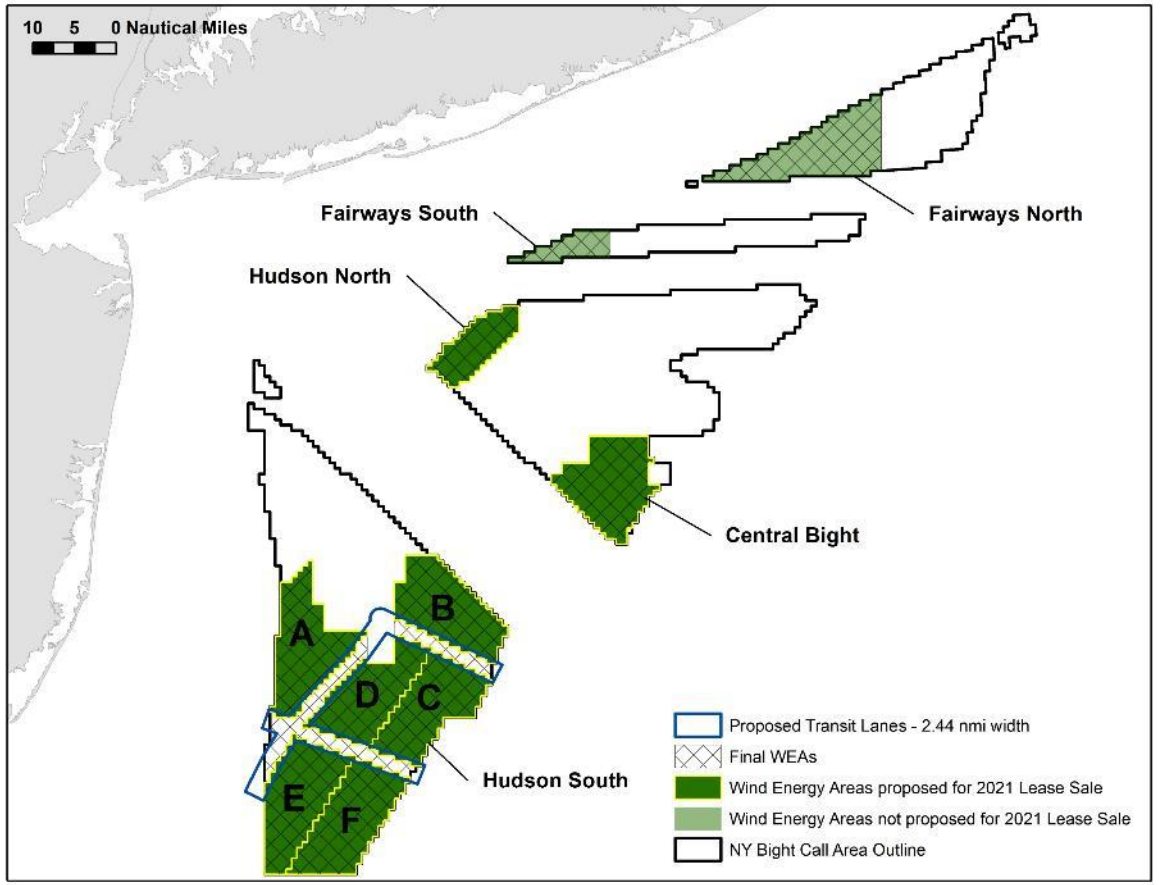
What is in the PSN?

- Area for leasing
- Fiscal terms
- Auction details and format
- Proposed lease terms
- Last opportunity to submit company qualification materials
  - Legal
  - Technical
  - Financial
- Nonmonetary factors

Auction Seminar for potential bidders

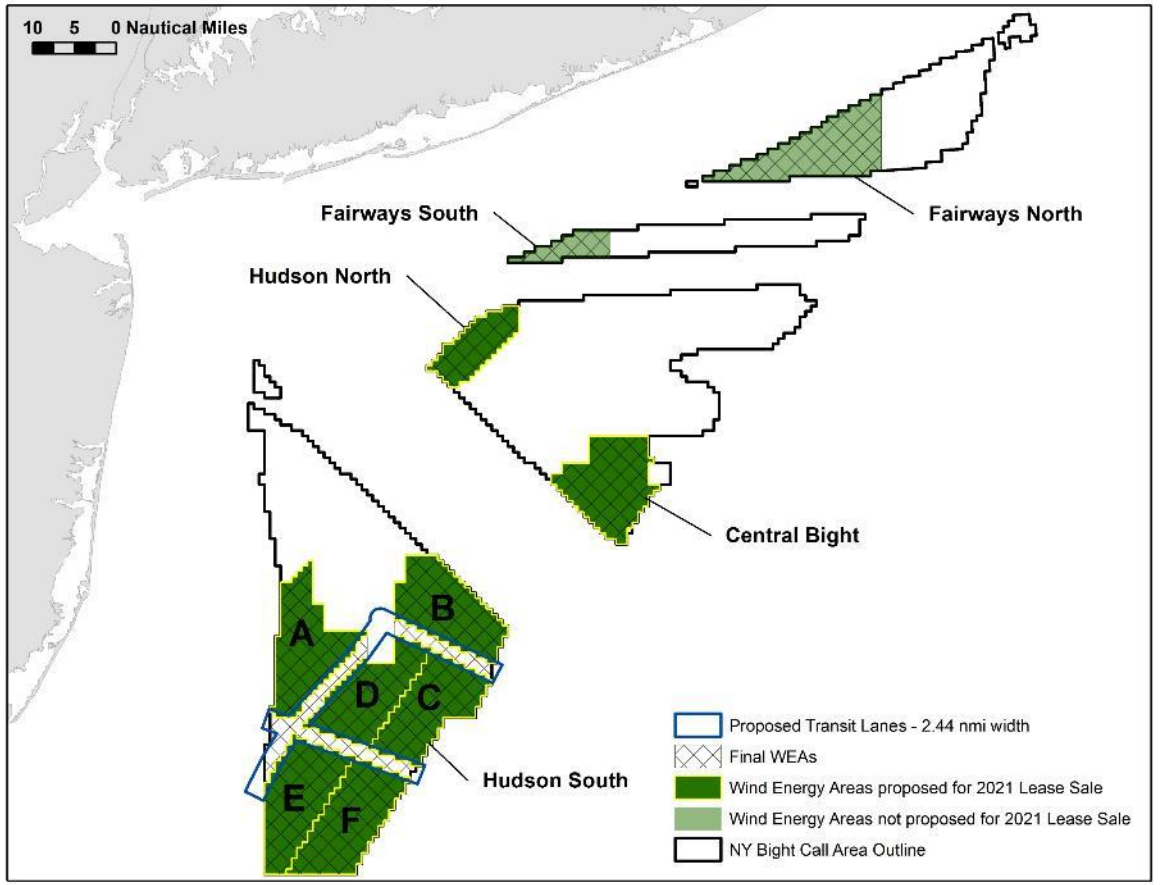
Proposed Lease Areas

- **Represents a balance between existing users and emerging industry**
- **Eight areas**
  - 627,000 acres
  - 7.6+ GW, conservatively
  - ~2.7 million homes powered
- **Fairways North and South**
  - Not considered for leasing, in part, due to maritime traffic, proposed fairway, commercial fisheries, commercial viability



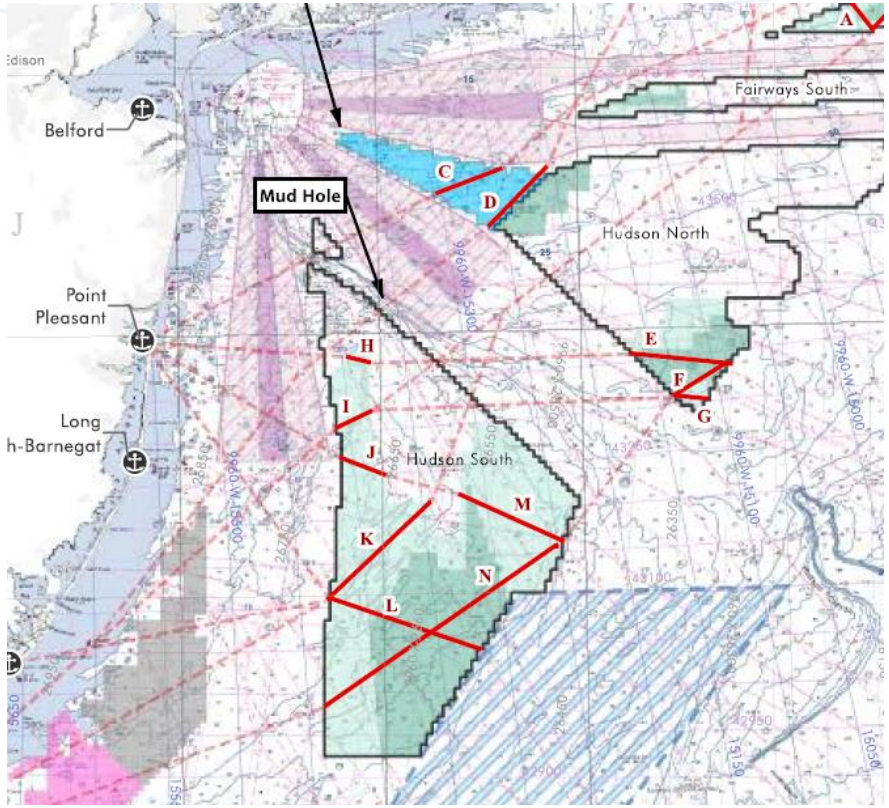
Proposed Lease Areas: Hudson North and HS-A

- **Aware of outstanding conflicts**
  - Hudson North – USCG Proposed Tug Tow Lane
  - HS-A – DOD Activities



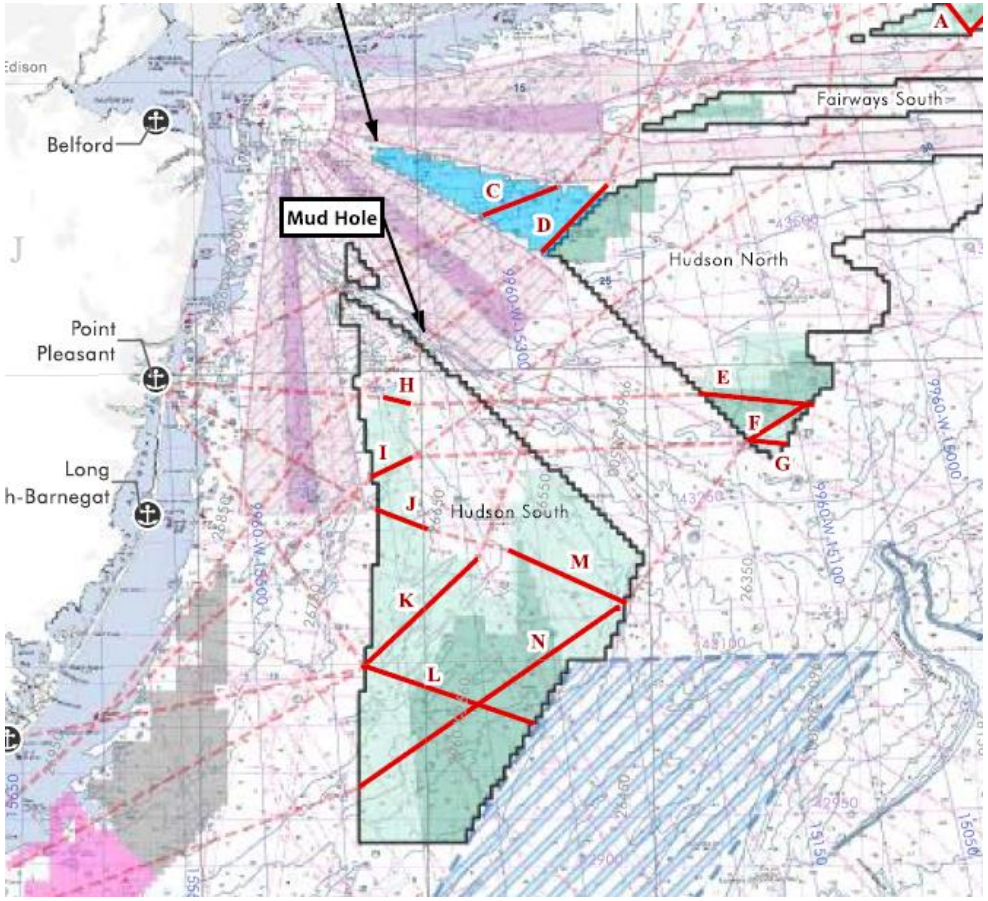
Hudson South: Transit Lanes

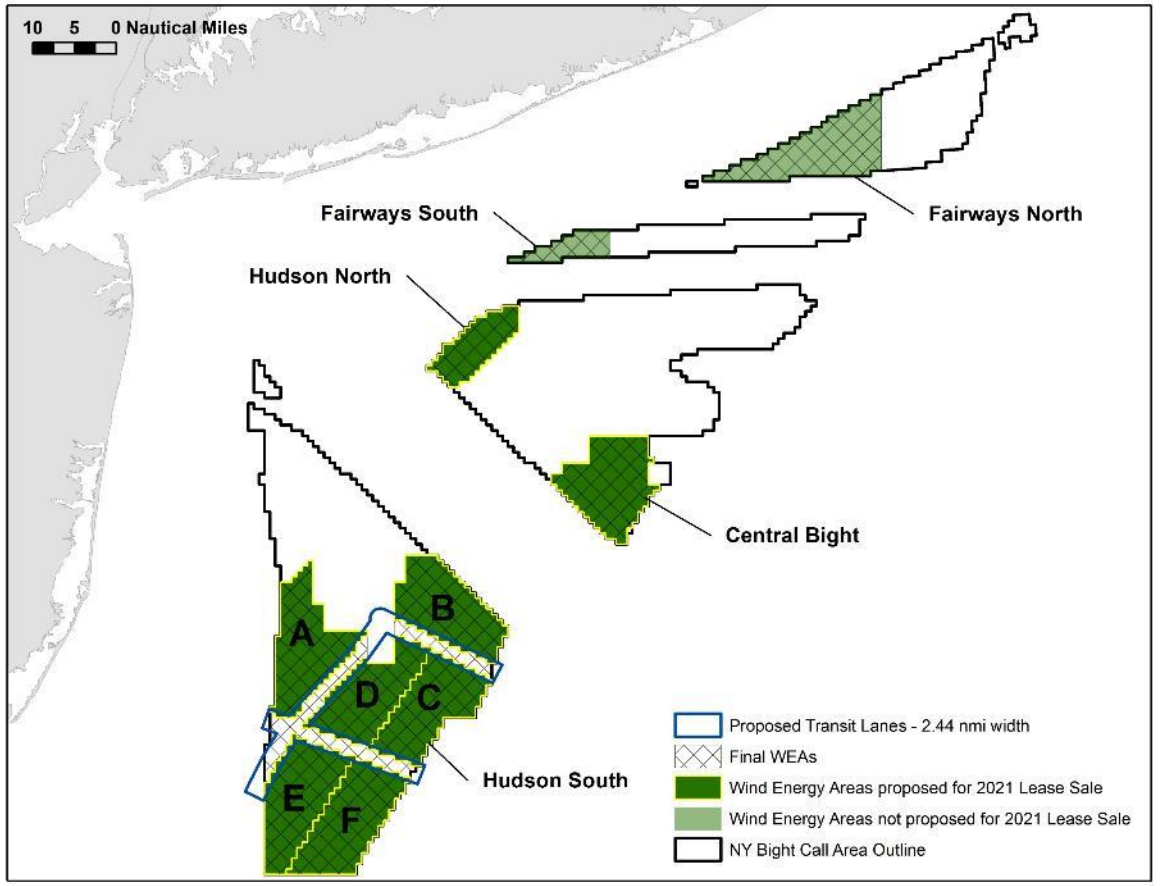
- **NYSERDA, NYSDEC, and RODA Workshop and Outreach Summary**
  - June 2020
- **Transit Lanes Width**
  - 2.44 nmi wide
  - Permanent International Association of Navigation Congress (PIANC)
  - Areas of overlap – no surface occupancy



Permanent International Association of Navigation Congresses (PIANC) (2018, March). Interaction Between Offshore Wind Farms and Maritime Navigation (MarCom WG Report No. 161 - 2918). ISBN: 978-2-87223-250-5. Pg. 24.

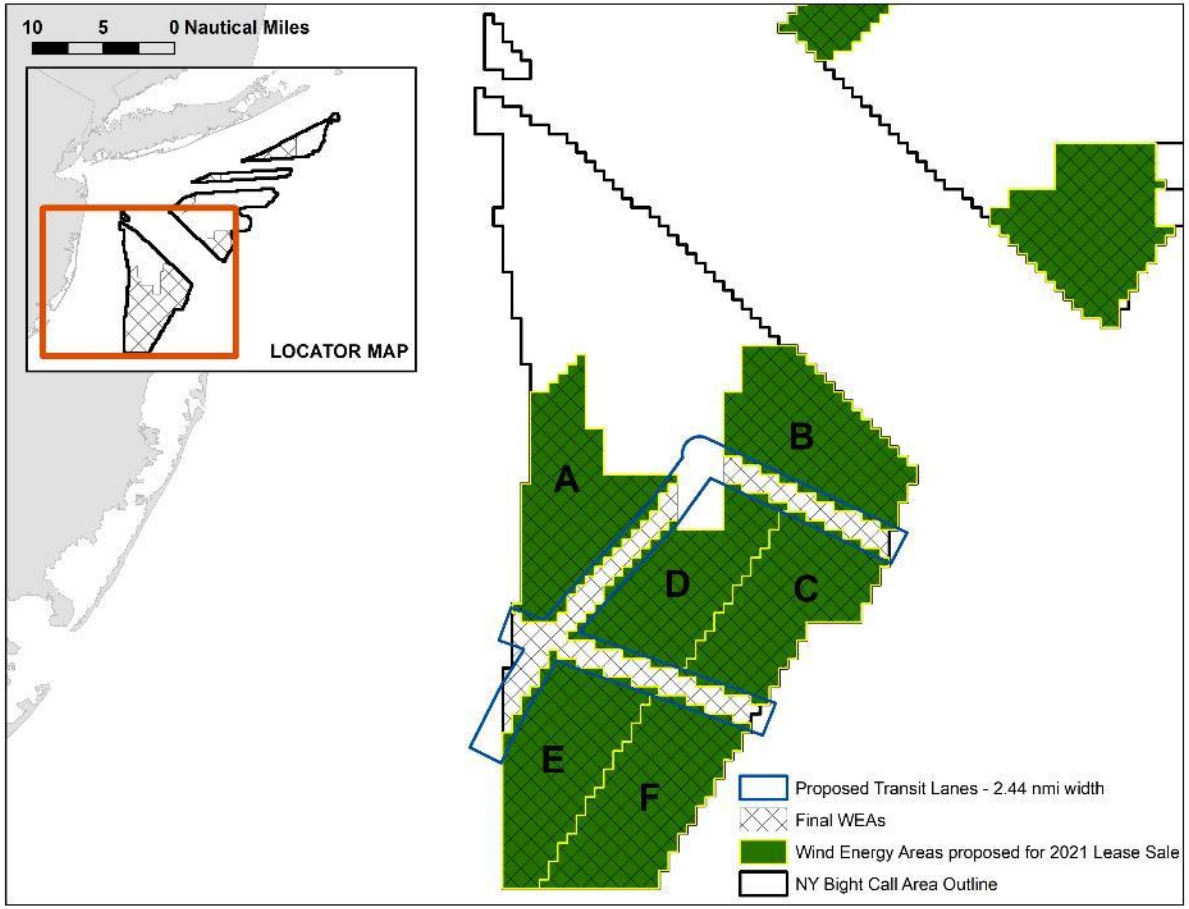
Hudson South: Transit Lanes





Hudson South

- **Hudson South was subdivided so each area:**
  - is of roughly equal commercial viability and size;
  - includes transit lanes to account for vessel traffic patterns, fisheries, and DoD concerns;
  - is laid out in a manner to reduce wake effect; and
  - facilitates fair return to the government pursuant to the Outer Continental Shelf Lands Act.

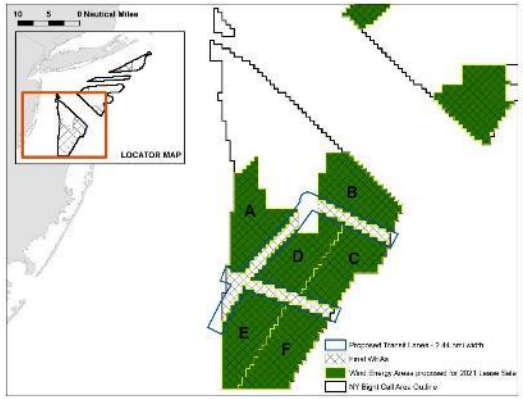


New York Bight Milestones

Milestone	Action	Target Date
Environmental Assessment	NOA Draft EA	July 2021
	30-Day Comment Period	July-August 2021
	NOA Final EA/FONSI	September 2021
Proposed Sale Notice	Publish PSN	June 14, 2021
	60-Day Comment Period	June 14 - August 13, 2021
Final Sale Notice	Publish FSN	Fall 2021
	Minimum 30-Day Waiting Period	
Lease Sale	Sale Date	Late 2021 or Early 2022

Questions for Council Consideration

- **Number, size, orientation, and location of the proposed lease areas**
  - which lease areas, if any, should be prioritized for inclusion, or exclusion, from this lease sale and/or future lease sales
  - Alternative subdivisions
- **Transit Corridors**
  - Reflections on proposed transit corridors

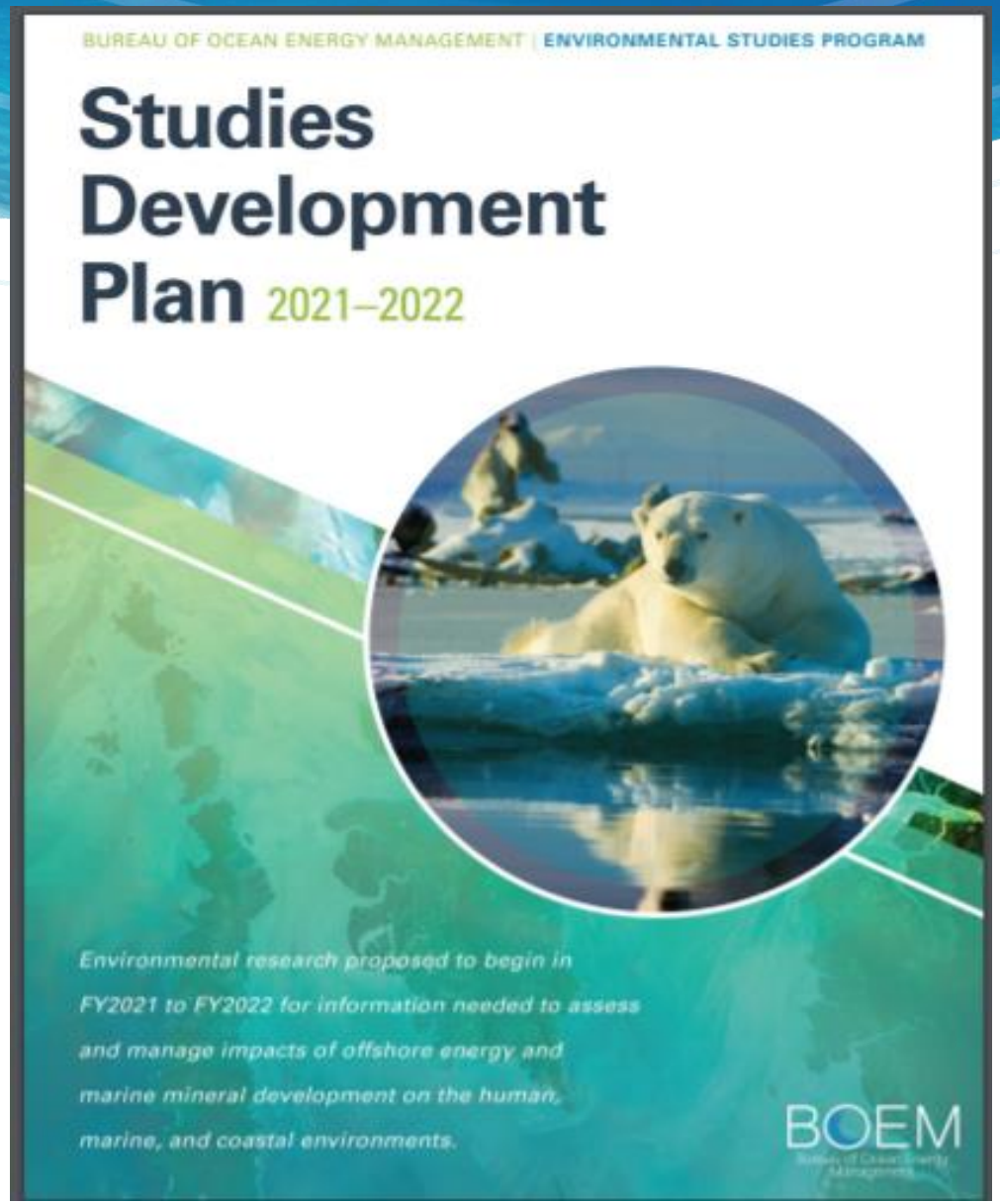


- **Stakeholder Engagement**
  - BOEM is proposing a lease stipulation that would require lessees provide a semi-annual progress report that summarizes engagement with existing users
  - Methods to improve coordination between lessees, stakeholders, and Tribes
- **Prescribed layouts**
  - Should BOEM consider prescribing uniform and aligned turbine layouts to Lease Areas, especially in the Hudson South WEA?

https://www.boem.gov/renewable-energy/state-activities/new-york-bight

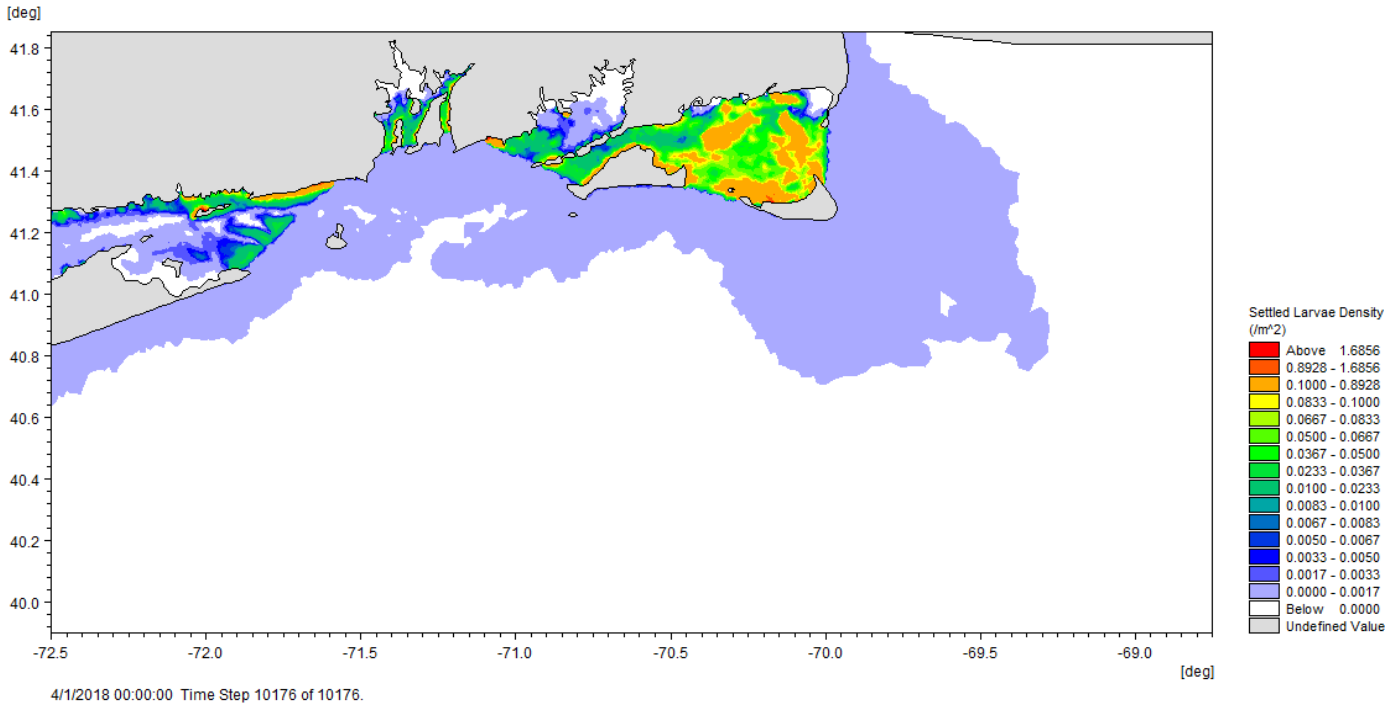
Environmental Studies Program

- BOEM concluded solicitation for 2022 study ideas last winter
- Study ideas are reviewed by the Standing Committee on Offshore Science and Assessment (COSA) convened under the National Academy of Sciences (summer)
- Results of studies are incorporated into BOEM environmental assessment and decision-making process



Hydrodynamic Modelling

- **Project was awarded to DHI and CSA, tasks included:**
  - Desktop Review
  - Hydrodynamic model development
  - Particle tracking/agent-based model development
  - Model scenarios
    - 3 “particles”
      - Atlantic sea scallops
      - Silver hake
      - Summer flounder
    - 4 OWF scenarios
  - Final Report: Imminent



Settlement of summer flounder: baseline project area

Other Ongoing Fisheries Studies Updates

- **Movement Patterns of Fish in Southern New England**
- **Fish acoustic effects**
  - BSB & Squid Part 1
  - BSB & Squid Part 2
- **Surfclam economic impact model**
- **NMFS Bottom Trawl Survey - Observation System Simulation Experiment (OSSE)**

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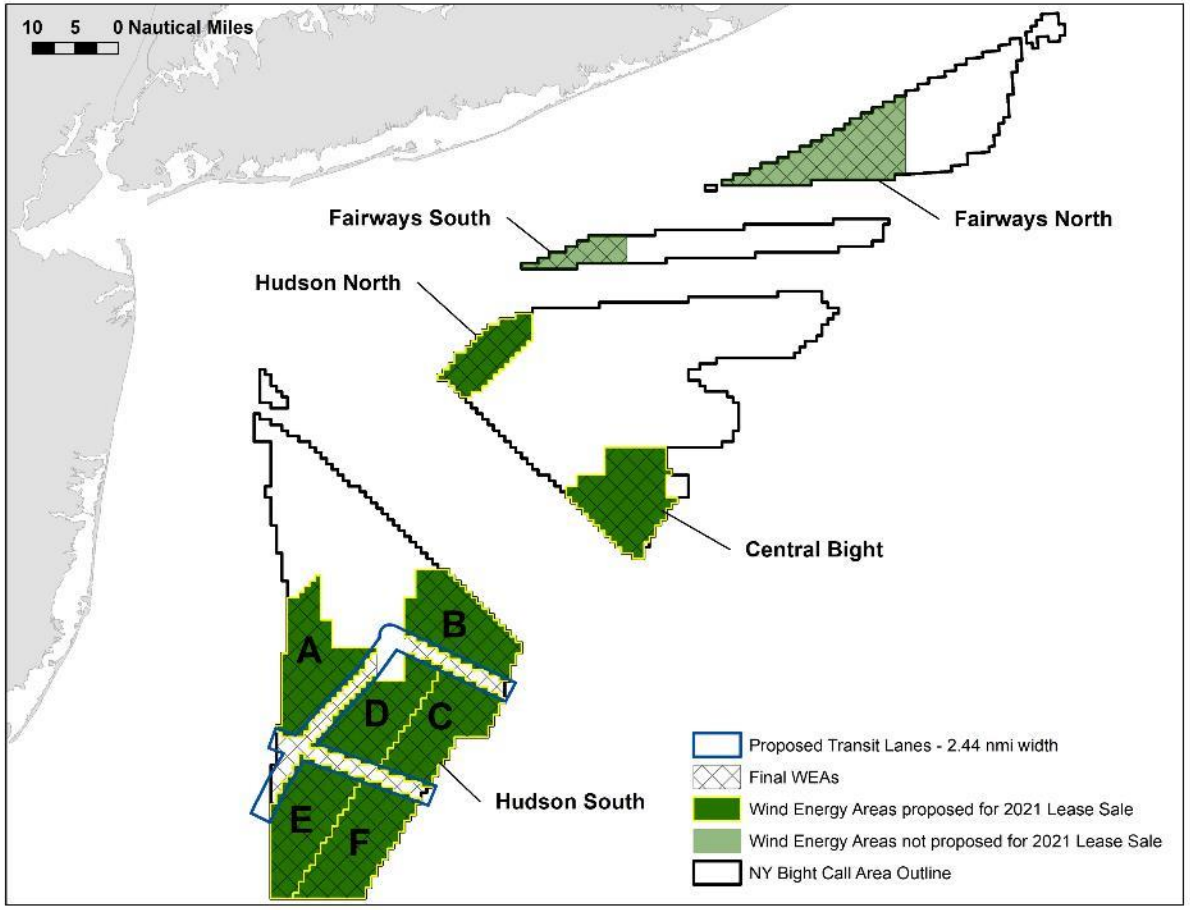
Proposed Lease Areas: By the Numbers



Lease Area	Acres	Installation Capacity (MW)[1]	Homes powered[2]	Power Production (MWh/yr)[3]
Central Bight	84,688	1,028	359,857	3,602,678
Hudson North	43,056	523	182,954	1,831,628
HS-A	85,755	1,041	182,954	3,648,088
HS-B	84,332	1,024	358,344	3,587,533
HS-C	80,062	972	340,200	3,405,885
HS-D	76,504	929	325,081	3,254,525
HS-E	85,044	1,032	361,369	3,617,822
HS-F	87,890	1,067	373,462	3,738,893
Total	*627,331*	*7,616*	*2,665,659*	*26,687,052*

[1] Megawatts (MW) based upon 3MW/sqkm. Note this energy density conversion ratio is conservative, BOEM is reviewing COPs for projects with twice the energy density used here.
[2] Based upon 350 homes per MW
[3] Megawatt hours per year (MWh/yr) Formula = Capacity (MW) * 8760 (hrs/yr) * 0.4 (capacity factor)