

Photo courtesy Deepwater Wind

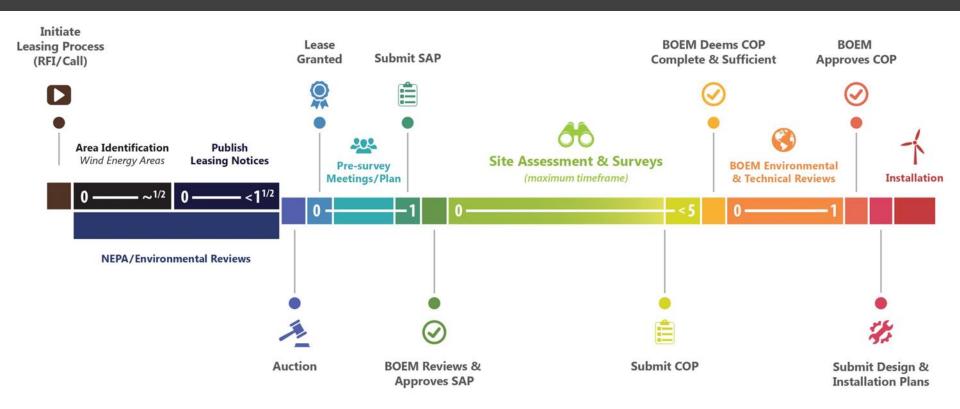
#### **Darryl François**

Chief, Engineering and Technical Review, Office of Renewable Energy Programs

BOEM's Offshore Wind and Maritime Industry Knowledge Exchange

March 5-6, 2018

## BOEM Leasing Process | Timeline



# BOEM Development Process: What's in a COP

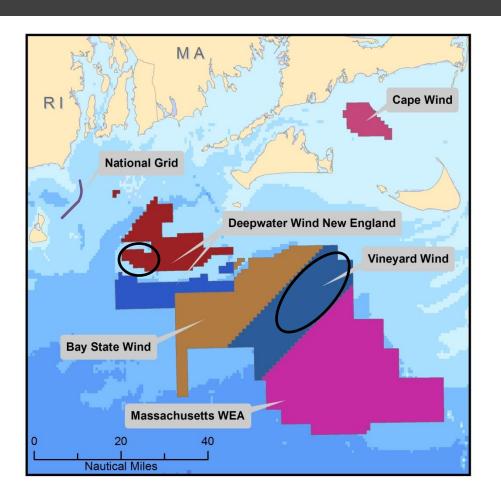
- Construction and Operations Plan (COP) Includes
  - Project Description (i.e. size, layout, technical details) sufficient to conduct NEPA analysis
  - Navigation Safety Risk Assessment
  - Nomination of Certified Verification Agent
  - Preliminary safety management systems, oil spill response measures, decommissioning process
- Once approved developer can proceed to final engineering designs and plans for installation

## BOEM Development Process | What's in a COP?

- Lease areas may support more than one project
  - 2017 Study: "Phased Approaches to Offshore Wind Developments and the Use of the Project Design Envelope"

 2018 Draft Guidance: "Use of a Project Design Envelope in a Construction and Operations Plan" (www.boem.gov/Draft-Design-Envelope-Guidance/)

# BOEM Activities | Project Scale

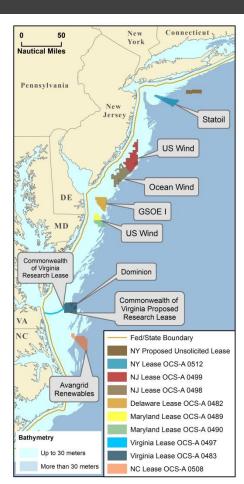


# BOEM Development Process| Lighting and Marking



- Draft Lighting and Marking Guidelines -Spring 2018
  - Based on interagency review
  - Stakeholder outreach before finalization
- Will address both vessel and aircraft navigation.

#### BOEM Activities | Atlantic OCS



#### Leasing

- Since 2009, BOEM has issued 13 commercial wind energy leases in the Atlantic
- Upcoming Lease Sales in MA & NY

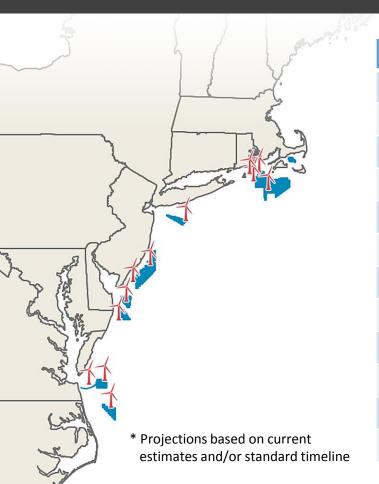
#### **Site Assessment Plans (SAP)**

- 3 approved (MA, RI, VA)
- 3 processing (MD, MA, NJ)

#### **Construction and Operations Plans (COP)**

- 1 approved (Cape Wind)
- 1 processing (Vineyard Wind)

# Atlantic OCS | Projects in the Pipeline



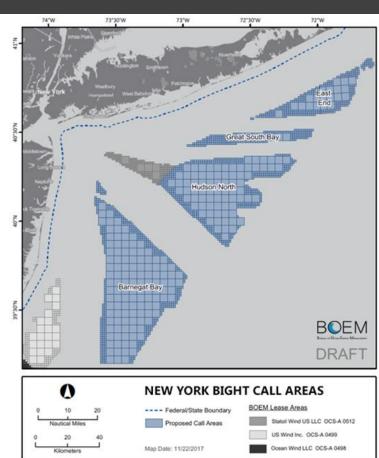
Year	Project	Company
2020	Coastal Virginia Offshore Wind (CVOW)	Omme Orsted
2021	Vineyard Wind	VINEYARD WIND
2022	South Fork	DEEPWATER WIND
2022	Ocean Wind	Orsted
2022	Bay State Wind	Bay State Wind An Chattal & Eversuarie Intitative
2022	U.S. Wind (MD)	US 🥯 Wind
2023	Revolution Wind	DEEPWATERWIND  More area 14 february
2023	Skipjack Windfarm	DEEPWATER VIND
2025	Dominion Commercial Lease	Dominion Energy
2026	U.S. Wind (NJ)	US 🥯 Wind
2027	Empire Wind	Statoil
2027	Kitty Hawk	AVANGRID

### BOEM Activities | New York Call

 New York Master Plan calls for 2.4 GW by 2030.

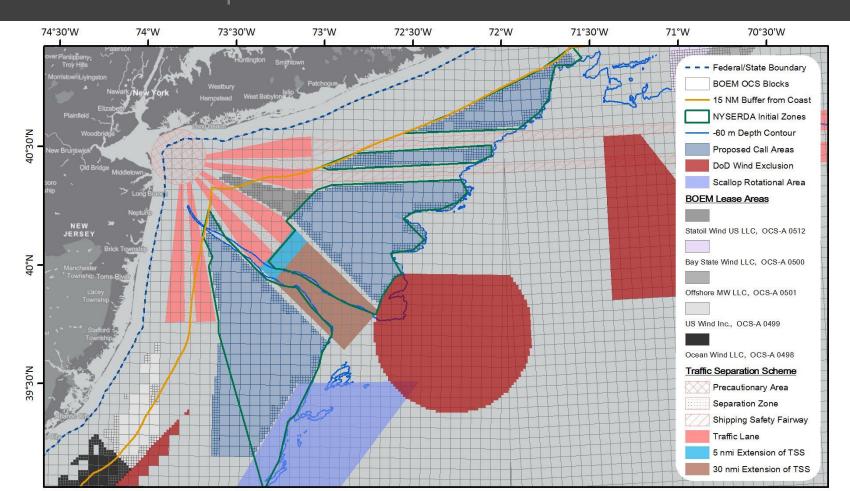
 BOEM is evaluating four areas for possible lease.

Balancing navigational concerns with New York's goals.

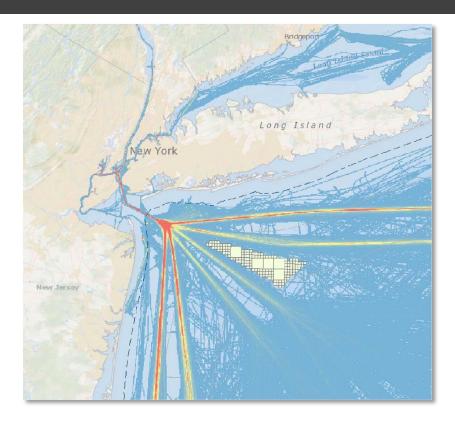




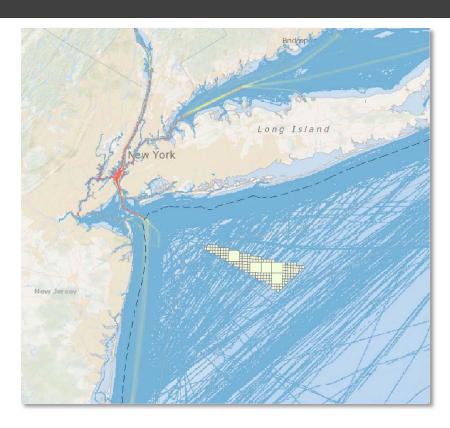
# BOEM Activities | New York Call



# Resources | GIS Tools- Marine Cadastre

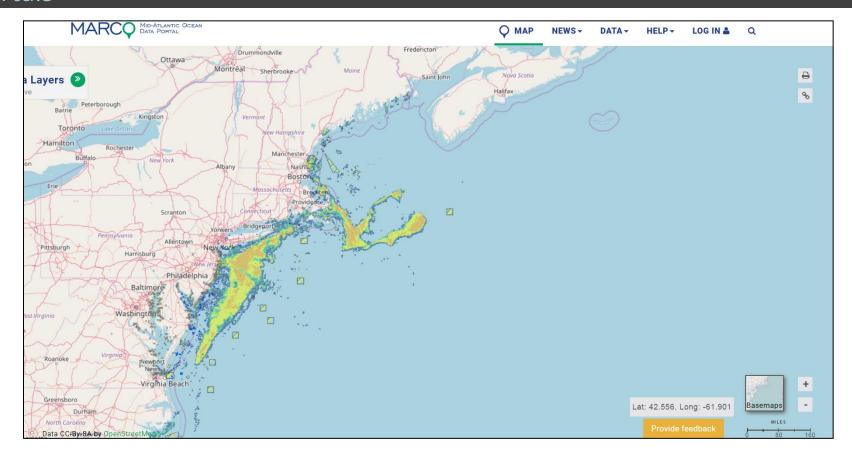


2013 Cargo and Tanker Traffic



2013 Tug and Towing Traffic

# Resources | GIS Tools - Northeast and Mid Atlantic Ocean Data Portals



# Resources | Traditional Knowledge



