USACE INVOLVEMENT IN OFFSHORE WIND ENERGY PERMITTING

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Offshore Wind Electric Service Platform (Substation)

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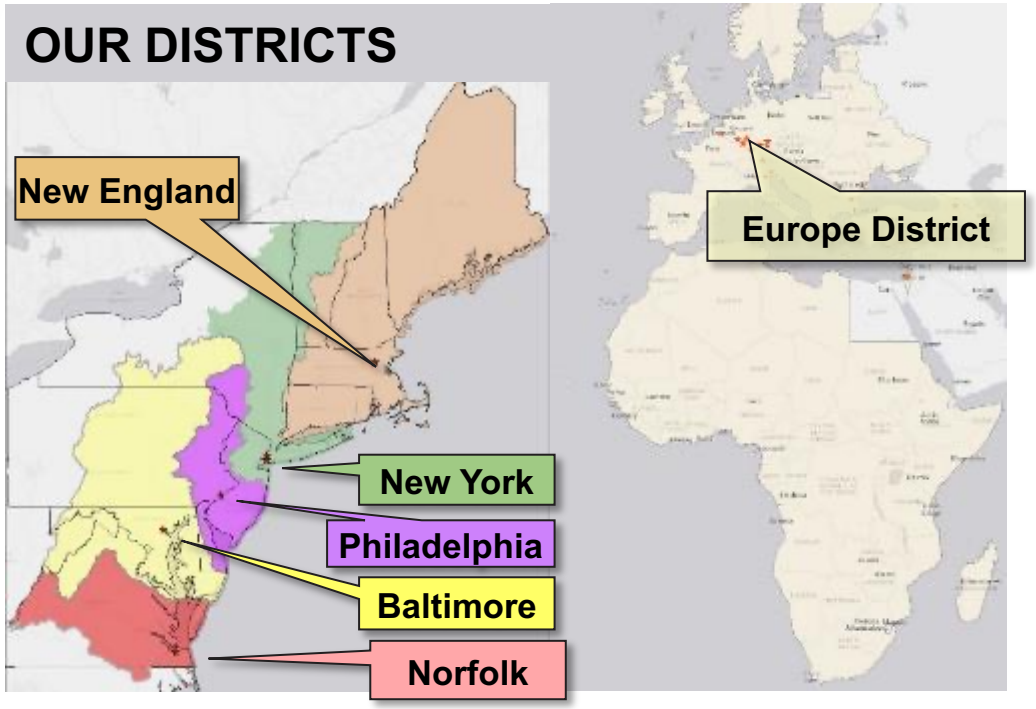
US Army Corps of Engineers®

USACE NORTH ATLANTIC DIVISION – WHO WE ARE

WHO WE ARE

- One of nine **major subordinate commands**, consisting of 6 districts that plan, design, build, operate and maintain military and civil works projects and facilities within the Northeast U.S. region, Europe and Africa
- Projects address the environmental, infrastructure, and water-resource challenges within the region

OUR DISTRICTS



By the Numbers

- 23% of U.S. population (72 million)
- 25.6% of U.S. coastal tonnage
- 3,500 employees
- 50 Army, 13 USAF installations
- 2,685 miles of navigation channels
- 260 miles of levees
- 8 major ports and Port Authorities
- 3 hurricane barriers and 8 high-level bridges
- 55 dams; 4 canals; 4 locks
- Supports: 4 CCMDs, 3 FEMA Regions, and 3 EPA Regions
- Aligned w/ Regional U.S. Fish & Wildlife Service
- 10 million annual visitors at recreations sites
- 132,000 acres of stewardship lands

WHAT WE DO

- Master Planning, Sustainability
- Construction Management
- Engineering, Design, Inspection
- Dredging, Operations & Maintenance
- Regulatory Functions
- Regulatory and Legislative Monitoring
- Disaster Response & Recovery
- Environmental Services
- Real Estate Services
- Estimating, Value Engineering
- Coastal Storm Risk Management
- Modeling
- Independent External Peer Review
- Reach-back Capability

Vision: A World Class Engineering organization, renowned for its **professional workforce, reputation staked on program delivery,** and **reliable partnerships**.

USACE ROLE/AUTHORITIES FOR OFFSHORE WIND REGULATORY REVIEWS

Why is USACE involved in Offshore Wind?

- Three main authorities which give us jurisdiction:

Section 10 Rivers and Harbors Act:
Covers structures/work/dredging

- **From Mean High Water to 3 nautical miles and then to limits of outer continental shelf (OCS):**
  - Anchors
  - Turbine Foundations/Armoring
  - Cables
  - AC/DC Platforms
- Focus on Navigation Safety and National Security

Section 404 Clean Water Act:
Covers discharge of dredged or fill material

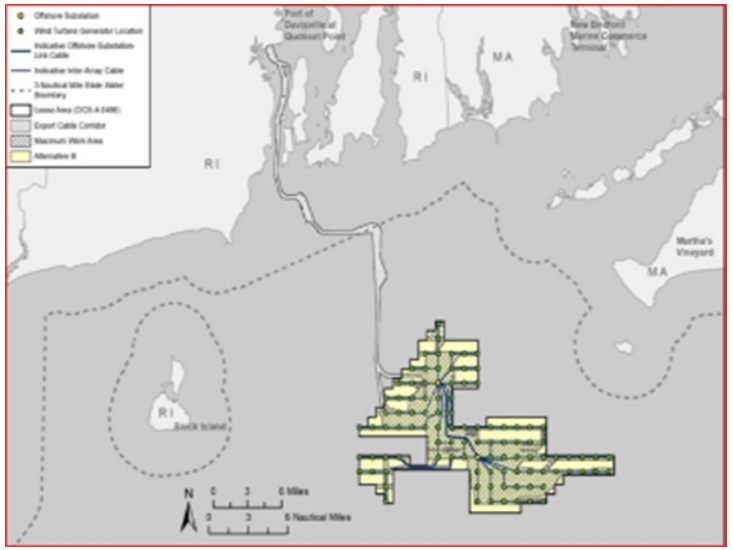
- **From High Tide Line to 3 nautical miles:**
  - Burying cable if results in discharge
  - Depends on equipment, substrate
  - AC/DC Platforms

Onshore (wetlands, streams)

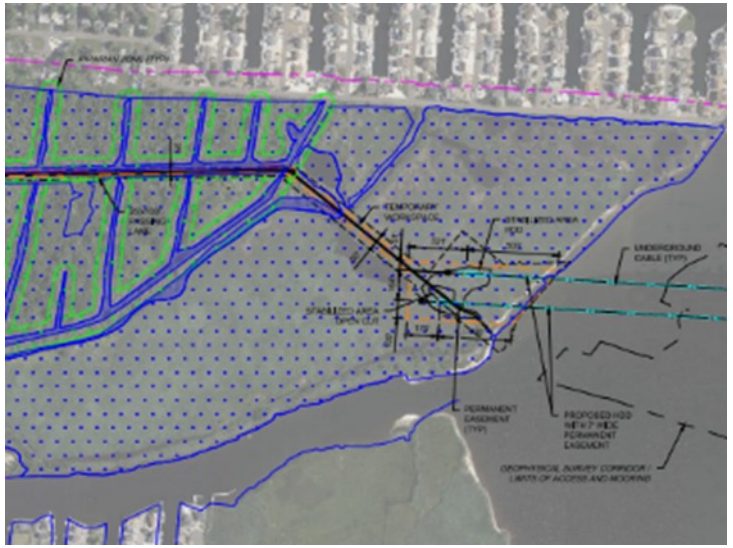
- Facilities
- Transmission lines
- Port upgrades (separate action)

Section 14 Rivers and Harbors Act (Section 408):
Review of Modification of CW Projects

- Cables crossing navigation channels/other federal projects, e.g. Coastal Storm Risk Management Projects
- Other ancillary features
- Port upgrades/shipping



REV Wind: Turbine locations and cable routing



Ocean Wind: Cable routing drawing

USACE ROLE IN OFFSHORE WIND: EXAMPLE: NEW BEDFORD HURRICANE BARRIER

Evaluating Risks to USACE operated projects under Section 408:

- USACE operates and maintains the New Bedford Hurricane Barrier, which is designed to protect critical infrastructure, businesses, and residences from storm surge or extreme tidal flooding.
- On 06 SEP, the first of 62 outbound shipments successfully passed through the New Bedford Hurricane Barrier (NBHB). Turbine components arrive from overseas, pass through the NBHB, are assembled at a 30-acre terminal inside New Bedford Harbor, then pass back through the NBHB enroute to installation offshore. The barge has a 100' beam and the barrier gates open to a width of 150'.
- There is little room for error when passing one of these large vessels through the barrier – these were evaluated and the proposal to pass these vessels through the barrier was authorized.

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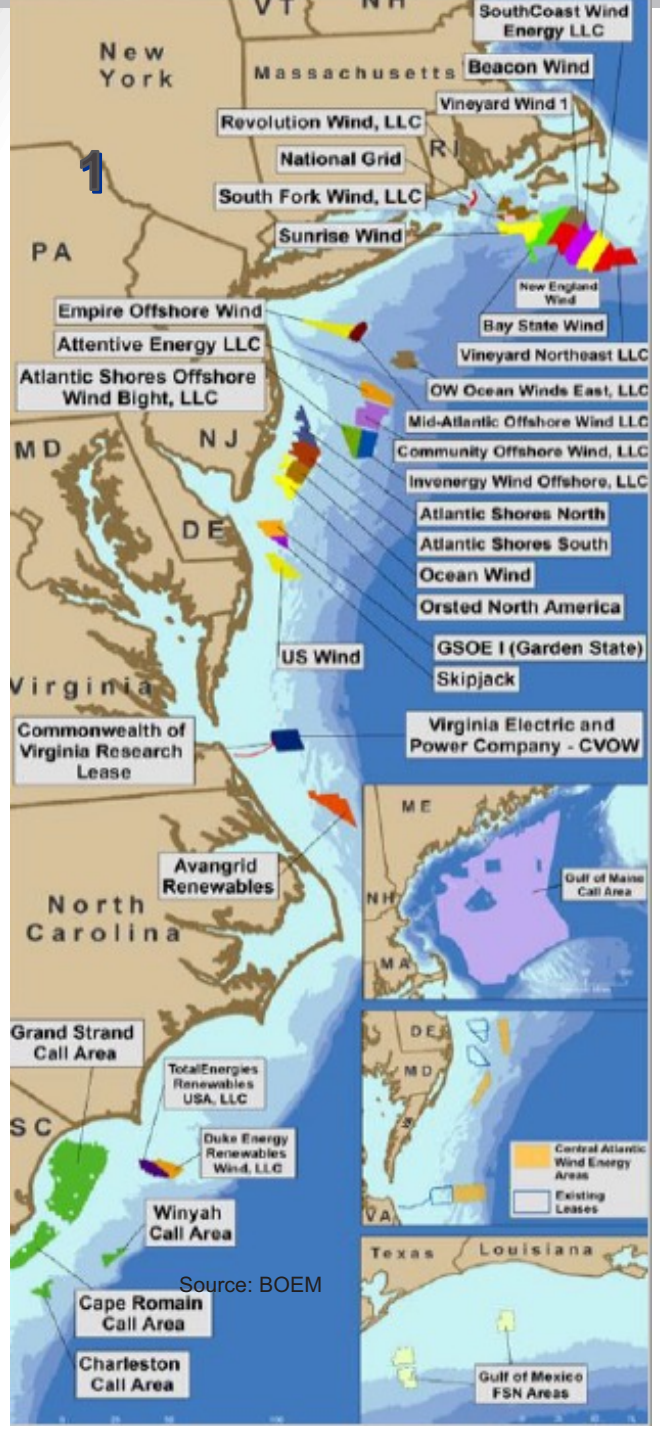
OFFSHORE WIND PROJECTS IN NORTH ATLANTIC DIVISION REGION – HOW DO WE WORK WITH OTHER FEDERAL AGENCIES



Source: BOEM

Source: Vineyard Wind

- The map is the overview of all Offshore Wind projects in the NAD AOR.
- The photo is from Vineyard Wind Turbine Foundation Installation.

- BOEM is the Lead Federal Agency under NEPA, USACE is a Cooperating Agency – there may be a Single EIS, separate ROD or Joint ROD.
- USACE, along with the other Federal Agencies, NOAA, USEPA, USFWS, USCG, and Tribes, works with BOEM to ensure early coordination on proposed features, project plans, and NEPA input which leads to enhanced interagency coordination. NEPA and the Fast-41 processes ensures the project is fully coordinated amongst the Agencies.
- As the epicenter for OSW, USACE-NAD ensures that the best practices developed through interagency coordination and the experiences working on review of OSW projects are shared throughout the Region.

WHAT DO WE THINK ABOUT DURING OUR REVIEWS AND HOW DO WE COORDINATE WITH LOCAL STAKEHOLDERS?

How do we coordinate Regulatory Permit Applications with the public, stakeholders and the maritime community?

- BOEM and USACE Districts issue Public Notices, requesting review and comments on the proposed action.
- BOEM holds Public Hearings in which USACE attends to obtain public comments
- New York District will provide information at the Harbor Operations Committee meetings about these applications, to ensure the maritime community is apprised of these actions.
- Local coordination occurs through the State permit review processes, which are incorporated into the USACE permit decision.

What are some of the potential impacts we consider during Regulatory Permit Application Reviews for Offshore Wind Proposals?

- Borrow areas
- Burial depth requirements
- **USACE Civil Works Projects (Section 408)**
  - **Note: certain projects require separate 408 Action Item on Permitting Dashboard**
- Commercial and recreational fishing
- Construction schedule/interference with shipping
- Endangered Fish and Wildlife Species
- Environmental Justice Communities
- Marine Mammals
- Military and National Security
- Navigation
- Noise
- Safety
- Tribal treaty rights
- Vessel traffic (O&M)
- Wetlands

THE NY BIGHT IS BUSY!

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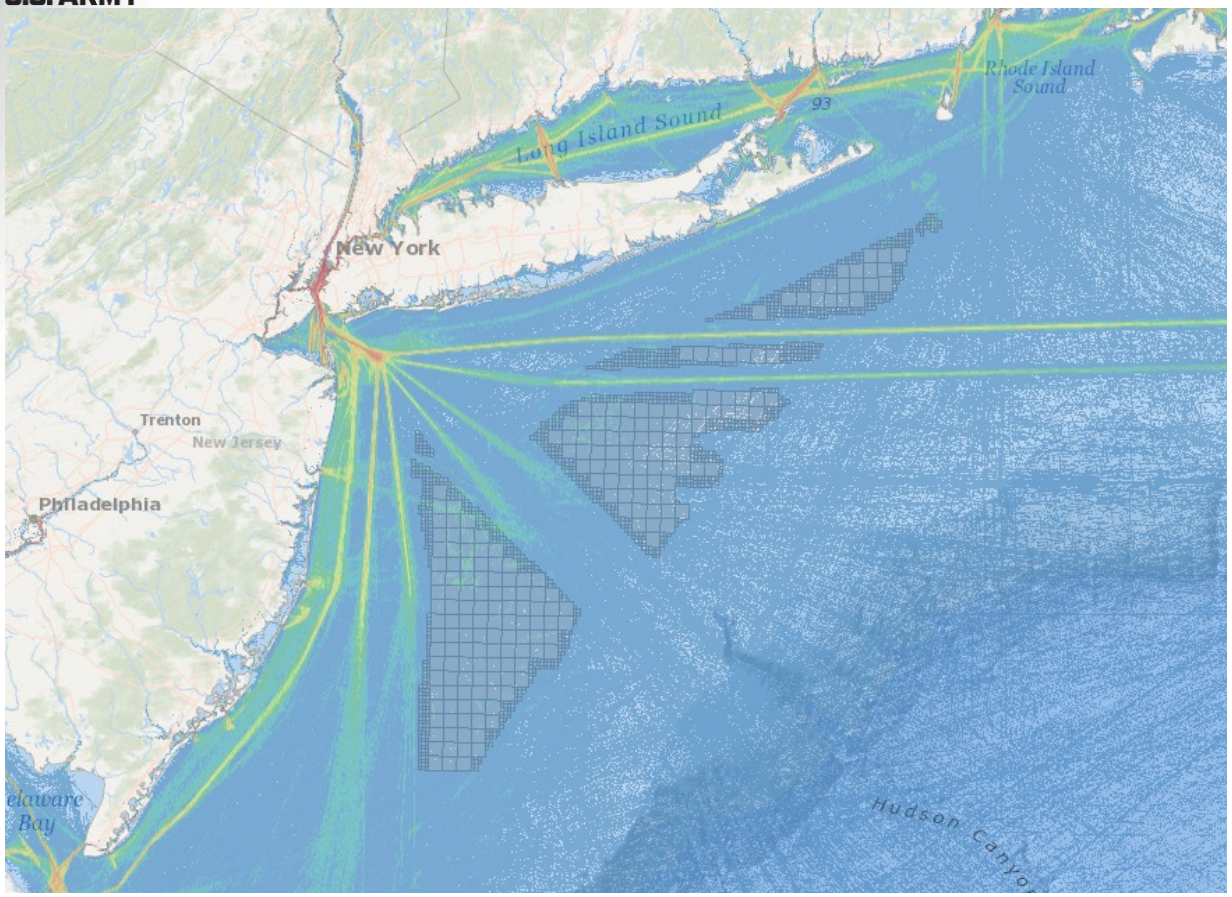
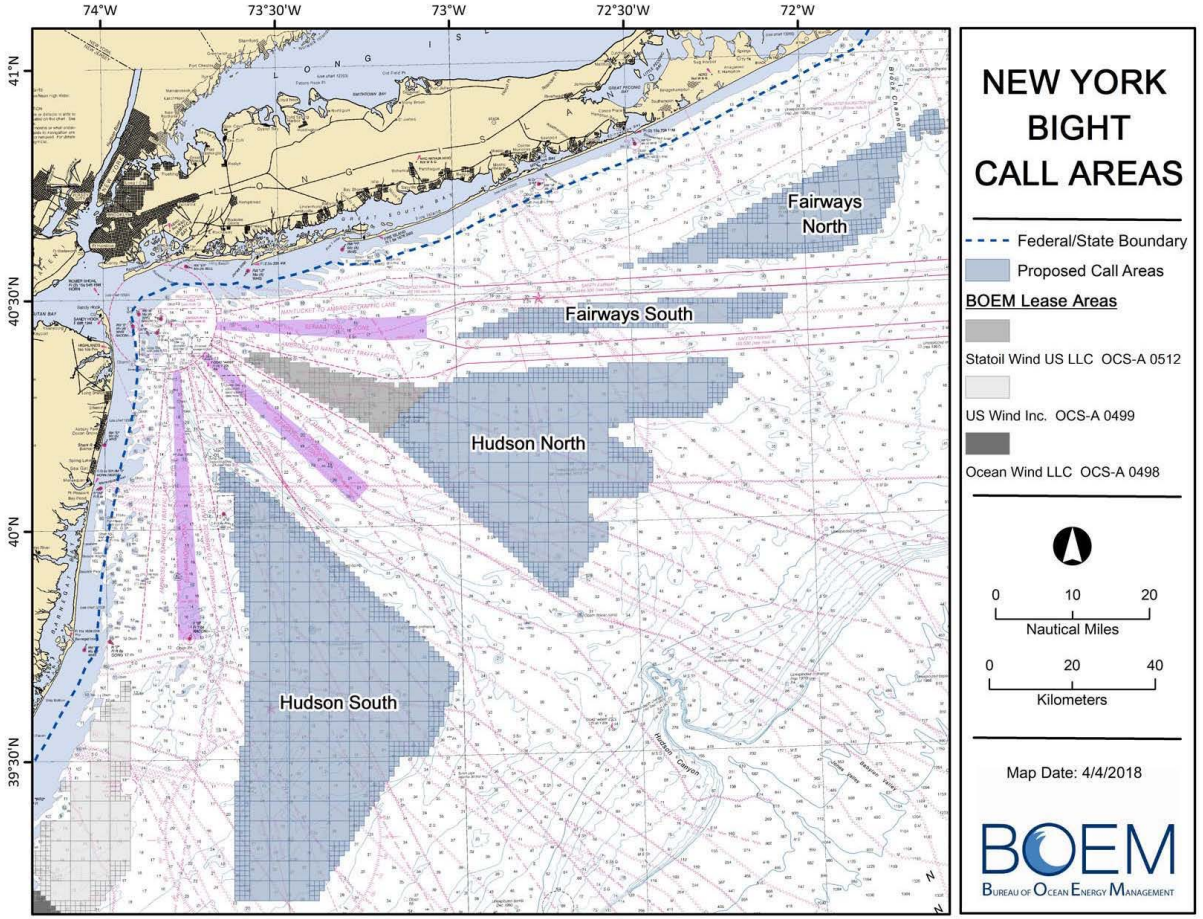


Picture of NY Bight lease call areas overlaid with vessel tracks from AIS data. Image from workboat.com and Mid-Atlantic Regional Ocean Council.



Map of NY Bight lease call areas, with Navigation fairways, cables, danger areas, etc. Image from BOEM.

USACE considers all of the uses of the waterways in our decision-making. This includes cable burial depths, navigation safety, and the ability for the Corps to perform our maintenance dredging projects. We perform a cumulative impact analysis as part of our decision-making on all Regulatory reviews.

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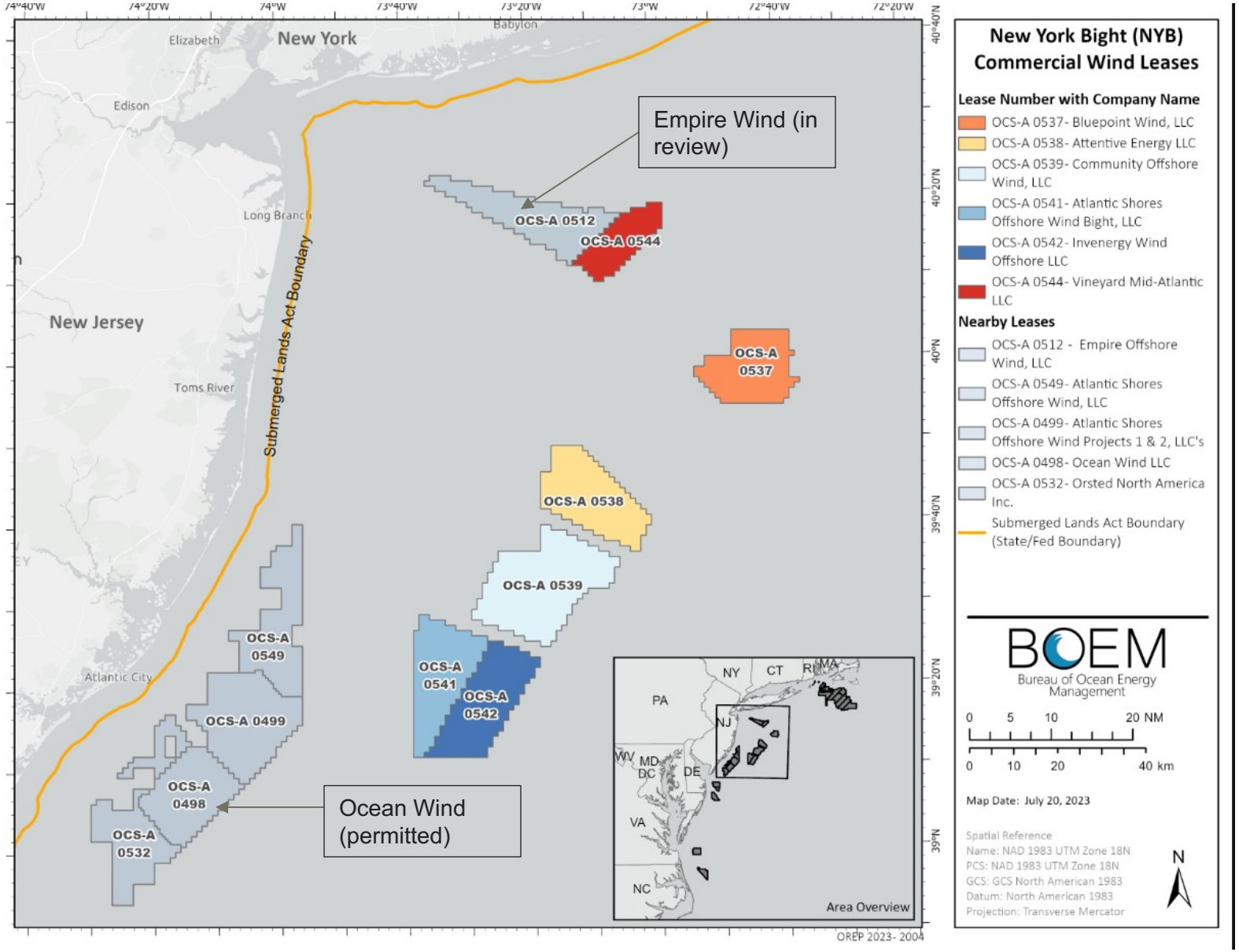
NY BIGHT OFFSHORE WIND ENERGY PROJECTS



HOW CAN THE MARITIME INDUSTRIES CONTRIBUTE?

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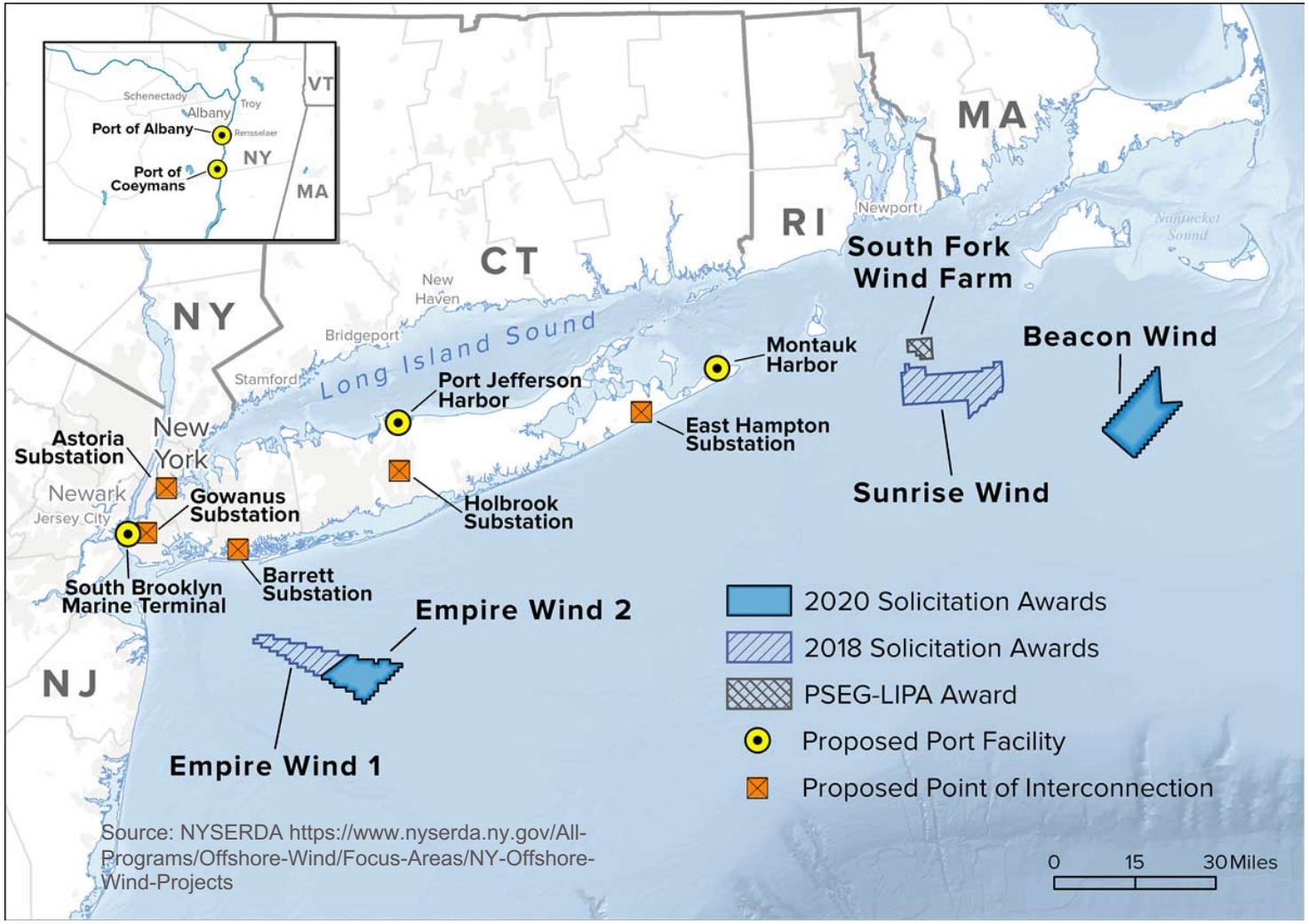
The map below shows the planned New York Offshore Wind Energy Projects. USACE strongly recommends that comments regarding these proposals be provided through the Regulatory public notices, Public Hearings, and Harbor Operations Committee meetings.



NY HARBOR AND BIGHT EXISTING AND PROPOSED USES

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Legend

Boundaries

Exclusive Economic Zone

- US EEZ
- Int'l Maritime Boundary
- Int'l Maritime Boundary N' EEZ
- Eastern Special Area
- Territorial Sea
- Contiguous Zone
- Int'l Boundary
- Not used
- Invalid Rule

Ocean Uses

Atlantic Block Areas with Sand Resources

Offshore Wind Turbines

Offshore Wind Energy Leases

Offshore Wind - Export Cable Corridors (Proposed)

- 1st or only build option location
- 1st or only build option location
- 1st or only build option location
- 2nd build option location
- 3rd build option location
- 4th build option location
- 5th build option location

Offshore Infrastructure

Submarine Cable Areas

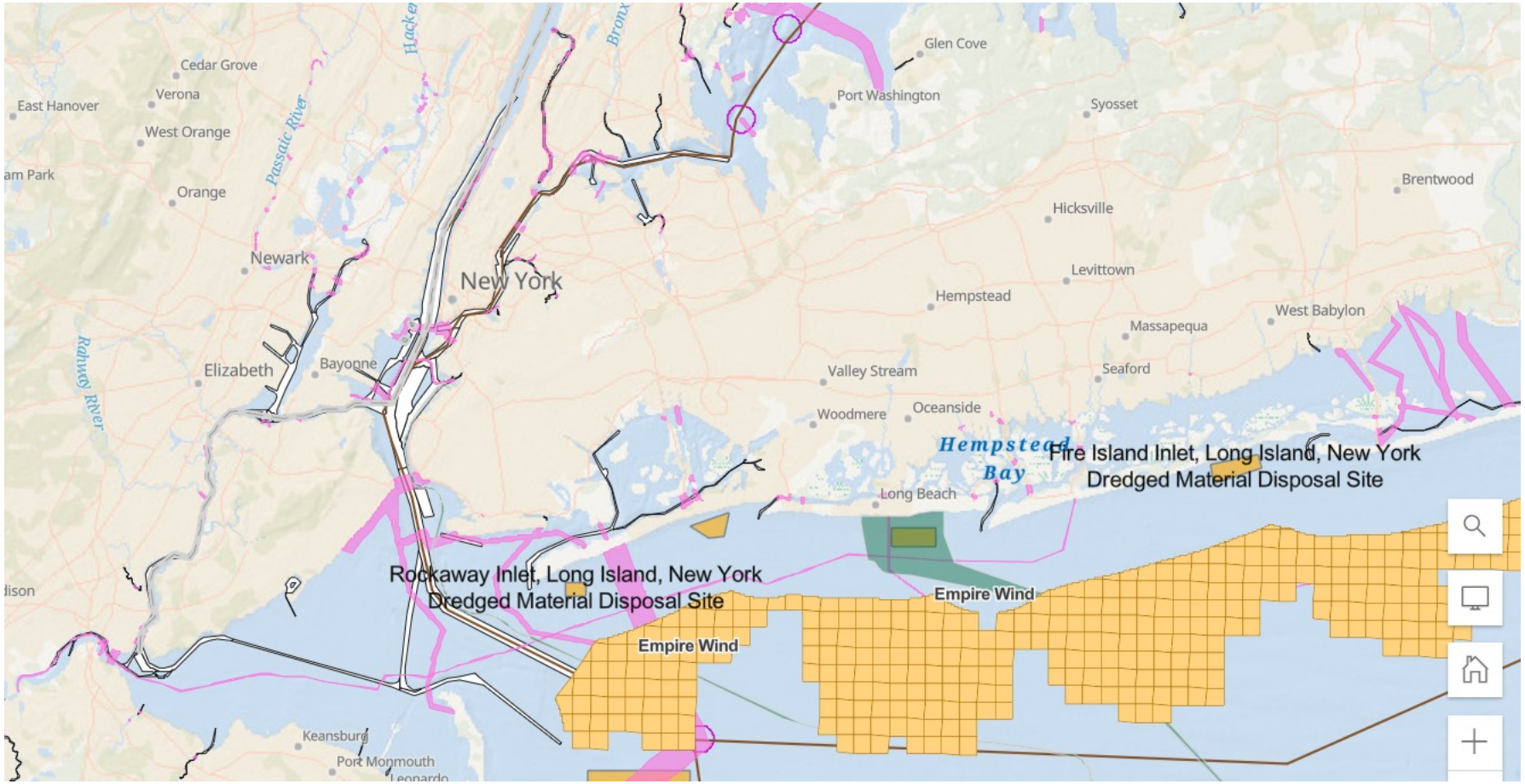
Designated Ocean Disposal Sites (MPRSA)

Marine Transportation

Marine Highways

Pilot Boarding Areas

Navigation Channels



Source: marinecadastre.gov

CHALLENGES: WHAT KEEPS YOU UP AT NIGHT? WHAT DO YOU NEED HELP WITH? WHAT NEW ISSUES/DEVELOPMENTS ARE YOU/YOUR OFFICE WORKING ON?

- Offshore Borrow areas – USACE uses these for coastal storm risk management projects as a source of sand as we want to avoid conflicting uses.

- Geolocation of export cables in as-built condition surveys for mapping purposes.

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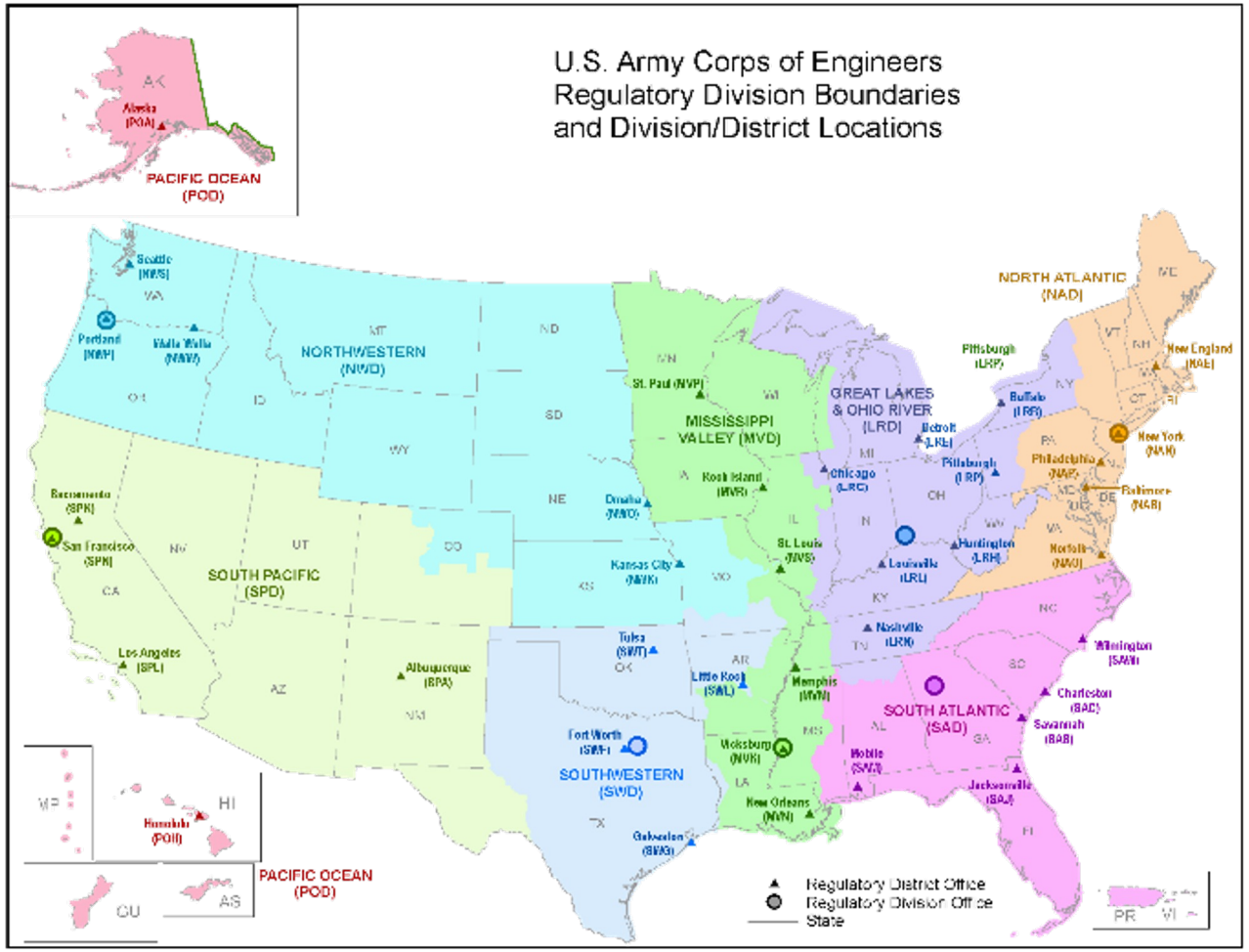
QUESTIONS?



HQ USACE Regulatory

- Chief, Deputy Chief, nine Program Managers
- Interface with OMB, CEQ, ASA(CW), Congress, and federal agencies
- Develop national budget, regulations, policy, and guidance
- **Provide national program oversight and engagements**

Divisions

- 8 Divisions
- Regulatory Program Manager, Appeal Review Officer
- Regional budget execution, analysis, and engagement
- **Regional program consistency, efficiency, and transparency**

Districts

- 38 Districts
- 1,300 Regulatory Staff in Districts (Chief, Project Mangers, Support)
- Execute Mission under direction of District Engineer
- Implement policy and guidance, train workforce, coordinate with stakeholders
- **Decision makers on permit applications and compliance/enforcement**