



## Habitat Mapping and Assessment of Northeast Wind Energy Areas

**Conducted by:** National Oceanic and Atmospheric Administration Northeast Fisheries Science Center, in collaboration with the Woods Hole Oceanographic Institution and the University of Massachusetts – Dartmouth School for Marine Science and Technology

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This study developed a comprehensive multi-scale benthic assessment and comprehensive database of eight Atlantic Outer Continental Shelf Wind Energy Areas (WEA). Each area is described through the geologic setting, physical oceanographic conditions, and species present. The assessments add to our knowledge of the benthic structure, function, and valued resources within the Atlantic WEA network, prior to development. The WEAs range from Massachusetts to North Carolina and encompass over 7,000 km<sup>2</sup> of seafloor for offshore renewable energy development.

### FINDINGS

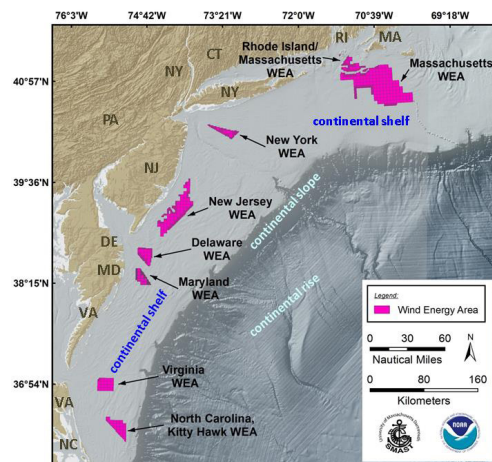
- All of the WEAs have relatively flat topography with overall slopes never exceeding one degree and local slopes only rarely reaching four degrees
- Sediments in all WEAs are primarily sand or sand-dominated
- All WEAs are subject to small ranges of salinities and large annual ranges in water temperature
- The species of concern in this area are ones that are immobile, or nearly so during at least one life stage, and are unable to escape from habitats disturbed by human activity

#### How BOEM will use this information:

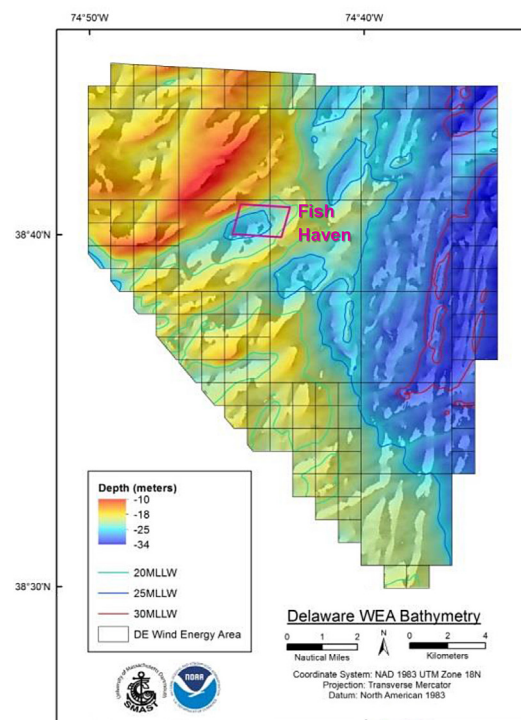
- Identify areas within WEAs that are most suitable for development
- Identify essential fish habitat in accordance with the Magnuson-Stevens Fishery Conservation and Management Act

#### Additional information:

Final report: [www.boem.gov/espis/5/5647.pdf](http://www.boem.gov/espis/5/5647.pdf)



Wind Energy Areas assessed.



Delaware WEA bathymetry.