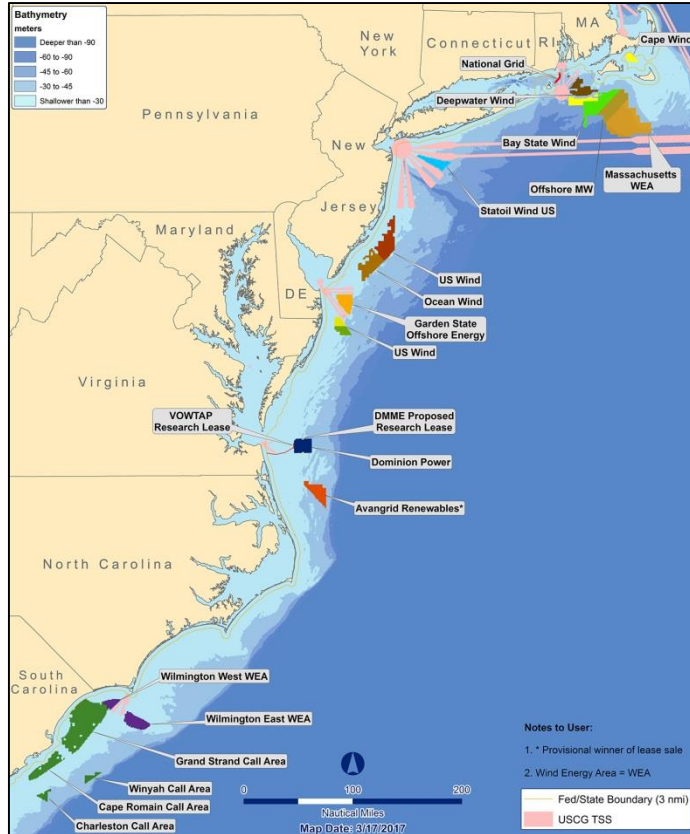




# BOEM Leasing and Environmental Studies Update

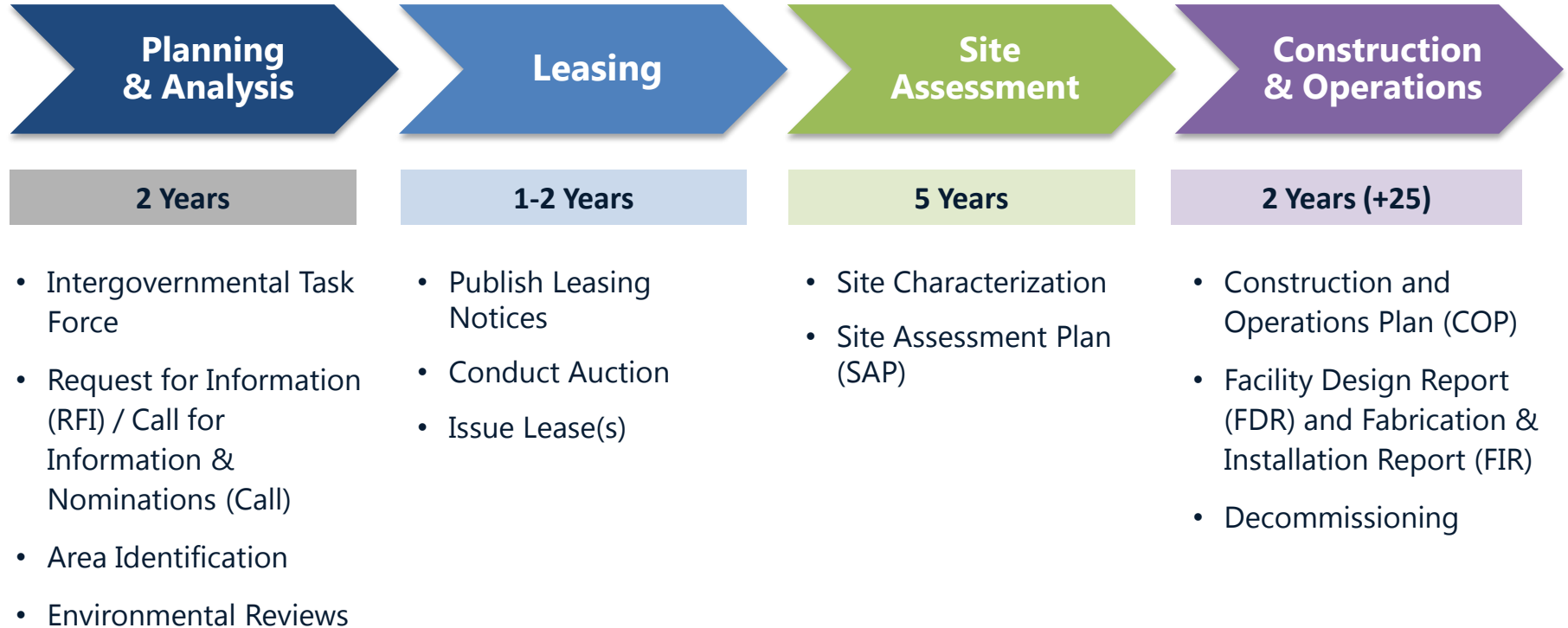
**Brian Hooker**, Marine Biologist

# Atlantic OCS Renewable Energy Leases



- Seven competitive lease sales, 12 (soon to be 13) leases
- Generated >\$68 million in high bids
- 1.4 million acres in federal waters
- 15 GW capacity or 5 million homes powered
- Leases from Cape Cod to Cape Hatteras

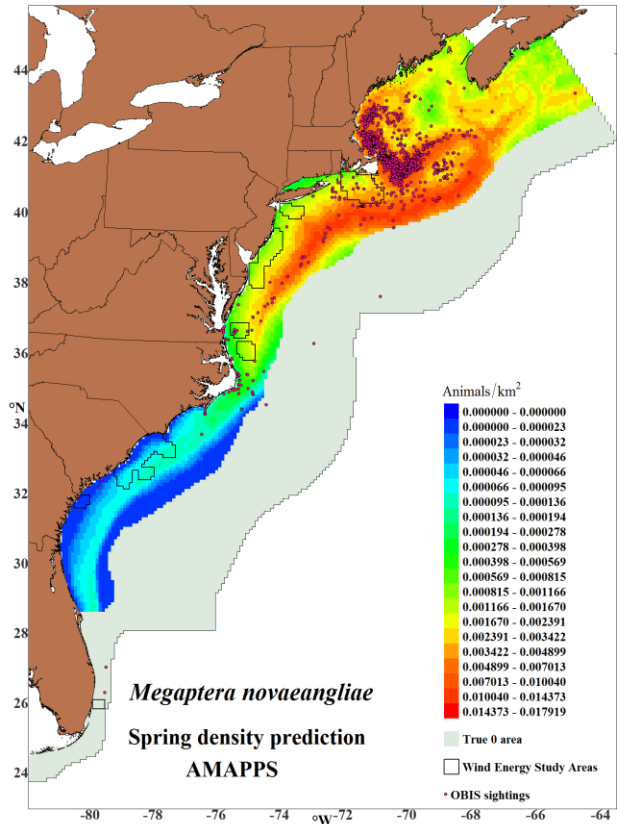
# OCS Renewable Energy Authorization Process



BOEM's Environmental Studies Program is informed largely by public comments and statutory consultations (e.g., NHPA, ESA, MSA/EFH) which fall into the following categories:

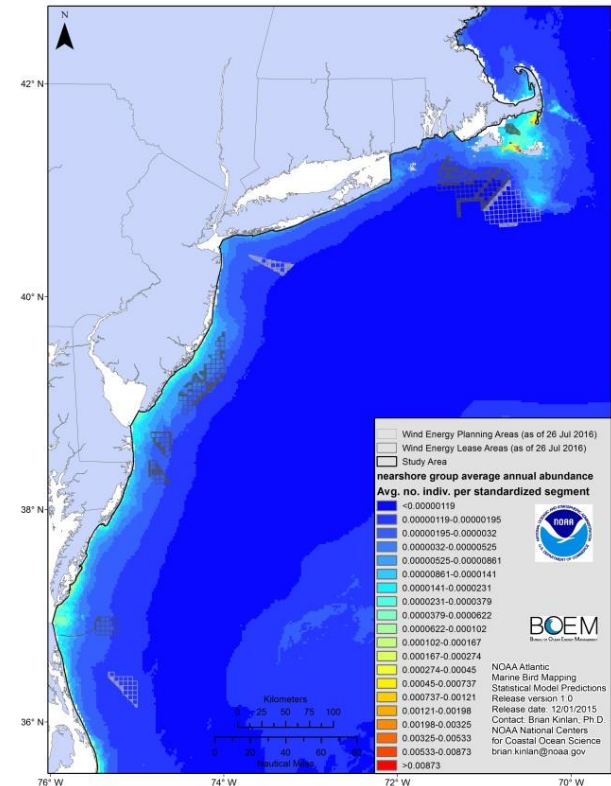
- Marine Mammals and other Protected Species
- Birds and Bats
- Social Science
- Fish and Fisheries
- Physical Environment
- Environmental Monitoring
- Cultural and Archaeological Resources

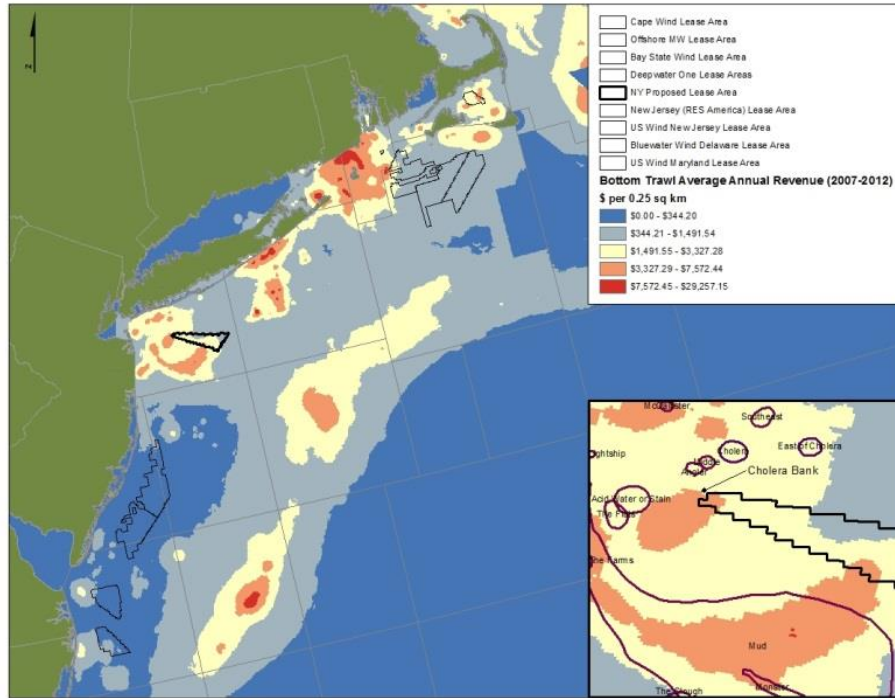
# BOEM Studies | Marine Mammals and Protected Species



- Atlantic Marine Assessment Program for Protected Species (AMAPPS)
- Northeast Large Pelagic Survey (Parts 1 and 2)
- Atlantic Sturgeon Telemetry

- Modeling At-Sea Occurrence of Marine Birds
- Tracking Movements of Roseate Terns, Piping Plovers, and Red Knots
- SeaScribe





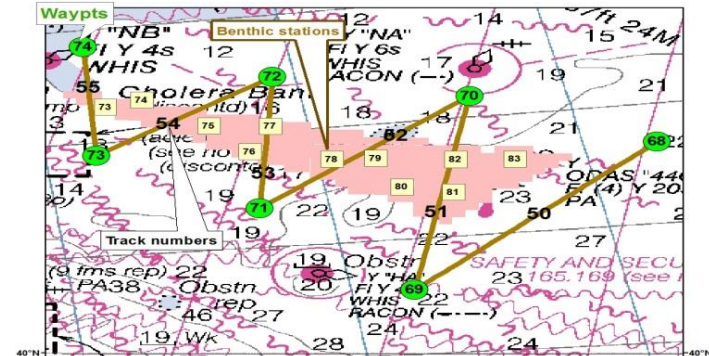
- Port Modification Study
- Socioeconomic Impact of Offshore Energy Development on Fisheries

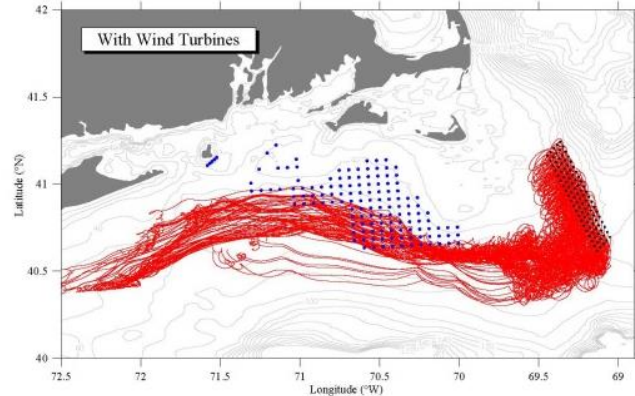
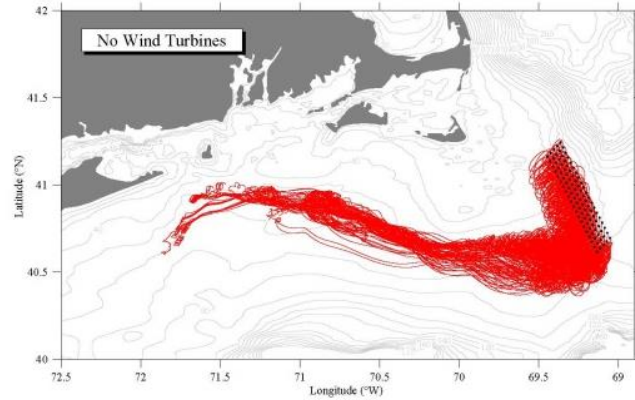
- BOEM has invested in several studies to look specifically at questions raised by commercial and recreational fishermen.
  - Fisheries Impacts from Electromagnetic Fields
  - Environmental Baseline Studies
  - Impacts of Structures on Fish/Larval Transport
  - Impact of Offshore Wind Development to Commercial and Recreational Fishermen (including BMPs)



# BOEM Studies | Fish and Fisheries

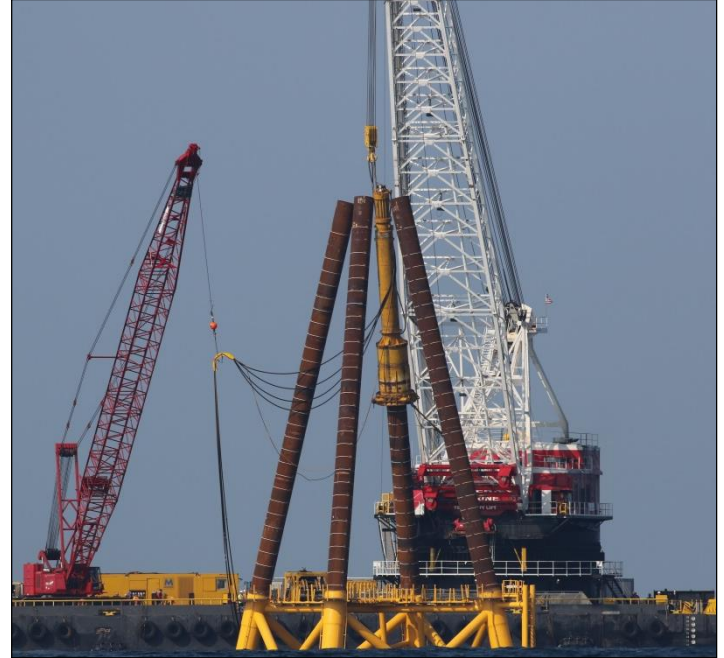
- Spatial and Temporal Distribution of Lobsters and Crabs Around Cox Ledge
- Benthic Habitat Mapping
- Fish Telemetry
- Electromagnetic Field effects on Lobster, Skates, Crabs
- Behavioral Effects of Construction Noise on Black Sea Bass and Longfin Squid





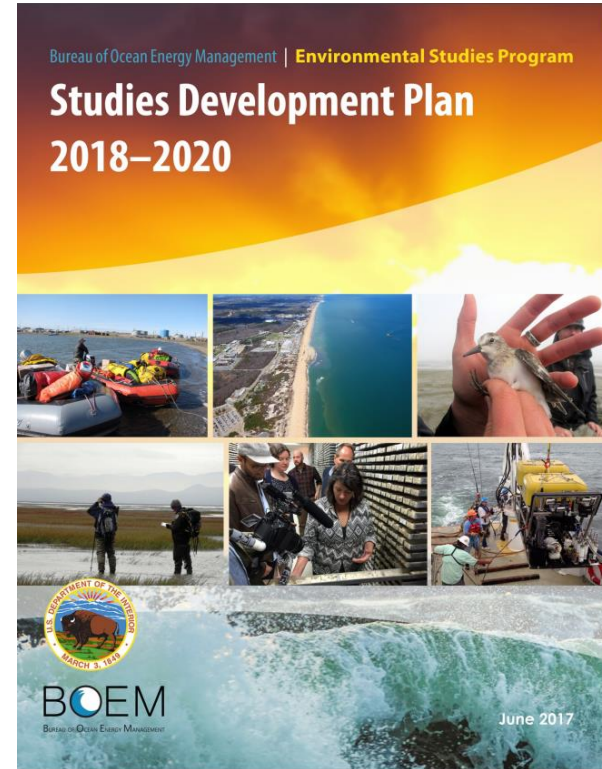
- Hydrodynamic Modelling of Offshore Wind Facilities

- Real-time Opportunity for Development Environmental Observations
  - Pile driving acoustic monitoring (particle motion)
  - Sediment suspension from cable laying
  - Benthic monitoring of foundations



# Studies Summary

- Stay informed on study updates by subscribing to BOEM Notes to Stakeholders
- BOEM solicits study ideas from public every fall, usually November
- 2018-2022 Study Development Plan now posted on [www.boem.gov](http://www.boem.gov)
- Check out the revamped studies webpage!





Questions?

**Brian Hooker**

[www.boem.gov/Renewable-Energy-Environmental-Studies](http://www.boem.gov/Renewable-Energy-Environmental-Studies)