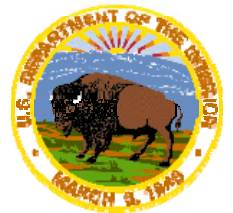


Outer Continental Shelf Programs



James Bennett, Chief, Office of Renewable Energy Programs

North Carolina Coastal Conference
NC State University
Raleigh, North Carolina
April 14, 2015



*“(T)he outer Continental Shelf is a **vital national resource reserve held by the Federal Government for the public**, which should be made available for **expeditious and orderly development**, subject to **environmental safeguards**, in a manner which is consistent with the maintenance of competition and other national needs”*

Outer Continental Shelf Lands Act (OCSLA)

Sec 3(3)

“...may grant a lease [for] energy from sources other than oil and gas...in a manner that provides for safety and protection of the environment.”

Energy Policy Act of 2005 Sec. 388



Oil and Gas Program

BOEM manages the nation's offshore resources to ensure that exploration and development activities are conducted in a safe and environmentally sound manner.

Renewables Program

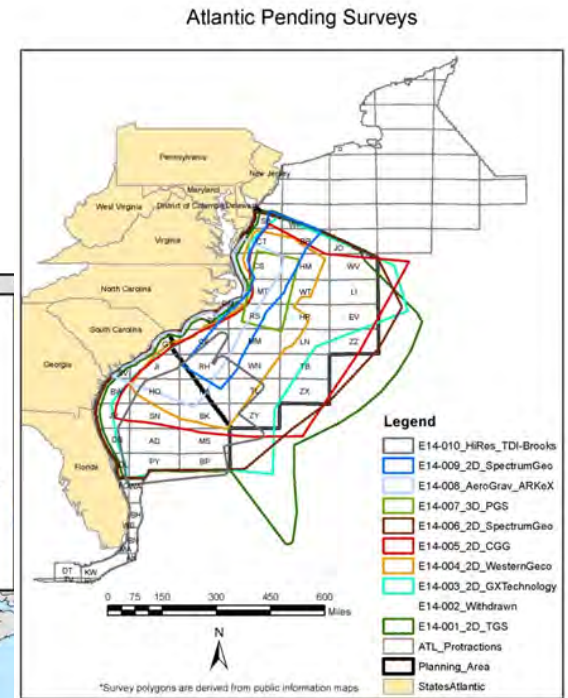
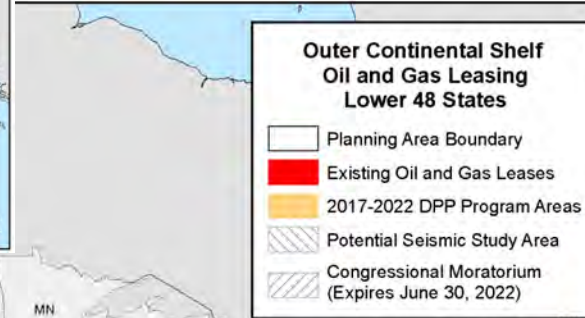
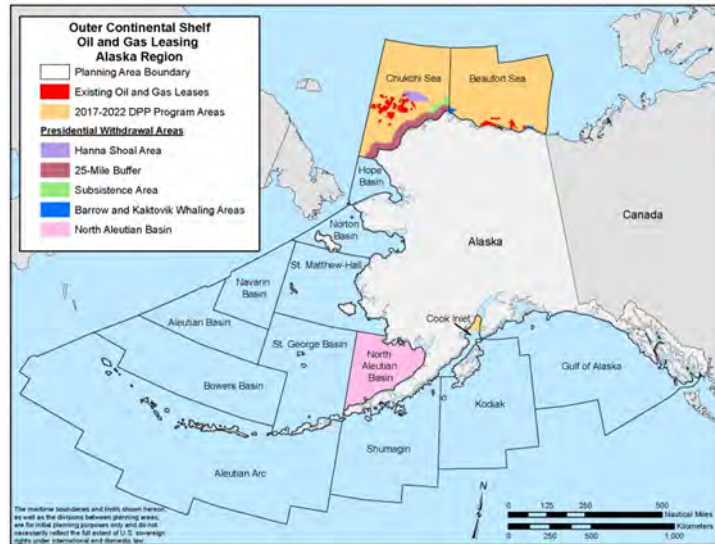
BOEM is responsible for offshore renewable energy development in Federal waters and anticipates future development on the OCS from three general sources: offshore wind energy, ocean wave energy, and current wave energy.

Marine Minerals Program

BOEM is responsible for managing non-energy minerals (primarily sand and gravel) on the OCS. Marine minerals are used primarily in coastal restoration projects, including beach nourishment and coastal habitat restoration, with increased attention to building resilience to deal with future storms and rising sea levels.



Outer Continental Shelf Planning Areas



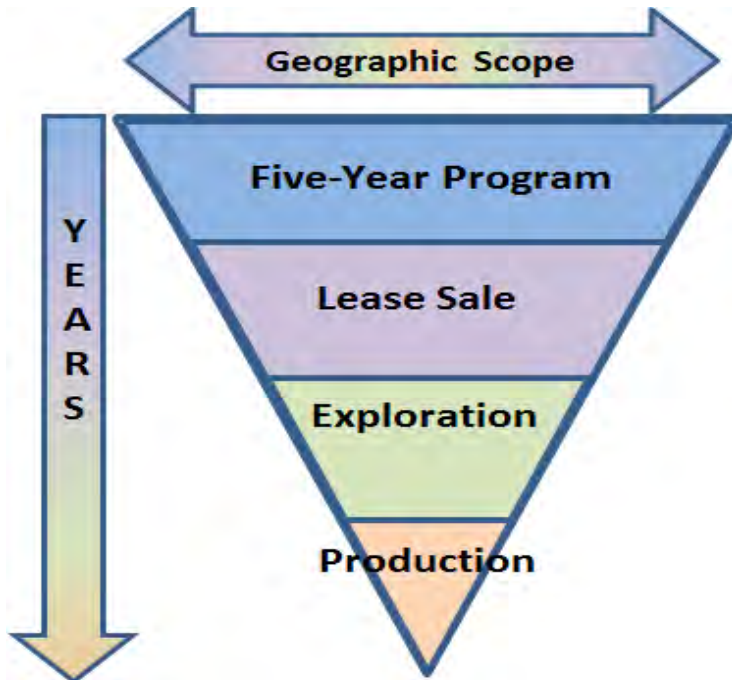
Responsibilities include:

- Identifying and calculating appropriate boundaries and legal descriptions;
- Identifying, inventorying, and assessing the Nation's offshore energy and mineral endowment;
- Developing a transparent, systematic, and comprehensive schedule for OCS oil and gas resource offerings; and
- Developing appropriate financial terms to ensure the Nation receives fair market value for its OCS resources.



Multi-Year/Multi-Phase Process

- Collaborative effort among Government, industry, tribal, and public stakeholders
- Multiple steps, decision points, and opportunities for public input during each phase



The following eight factors are considered in determining the timing and location of leasing:

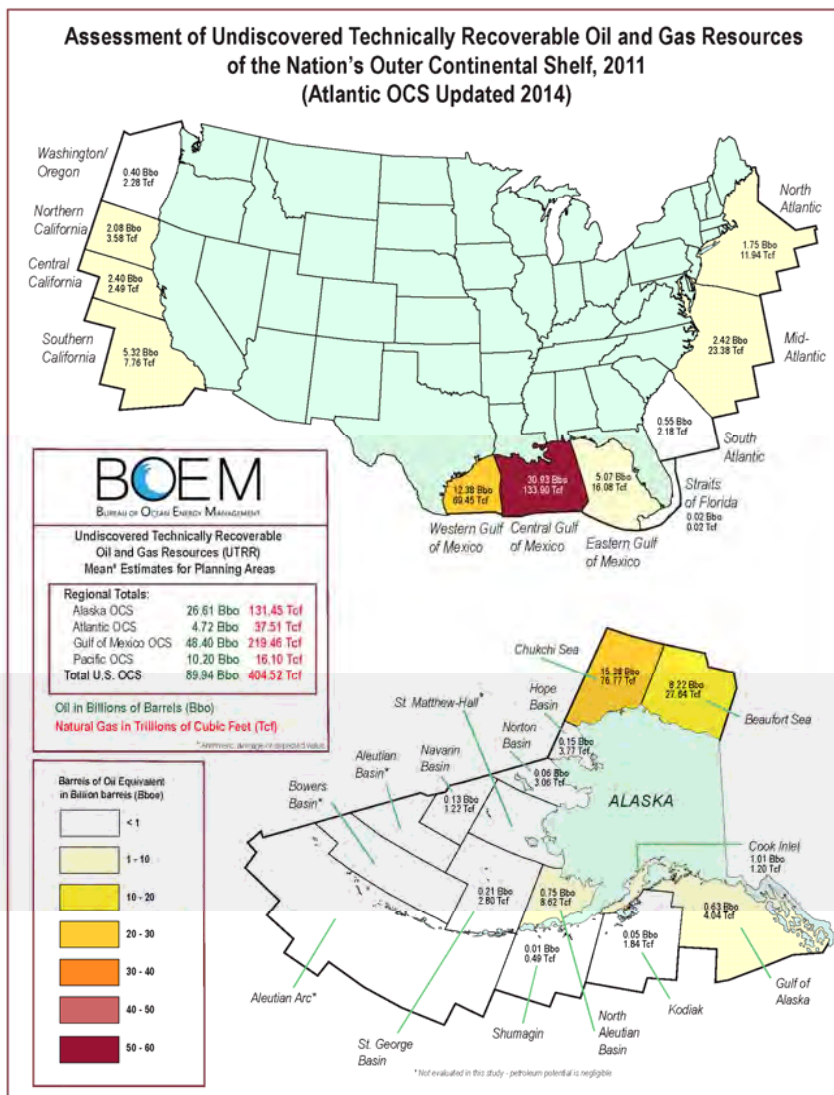
- Geographical, geological, and ecological characteristics
- Equitable sharing of developmental benefits and environmental risks
- Location with respect to regional and national energy markets and needs
- Location with respect to other uses of the sea and seabed
- Interest of potential oil and gas producers
- Laws, goals, and policies of affected states
- Environmental sensitivity and marine productivity
- Environmental and predictive information



OCS Report
BOEM 2014-656

Outer Continental Shelf

Estimated Oil and Gas Reserves Gulf of Mexico OCS Region December 31, 2011



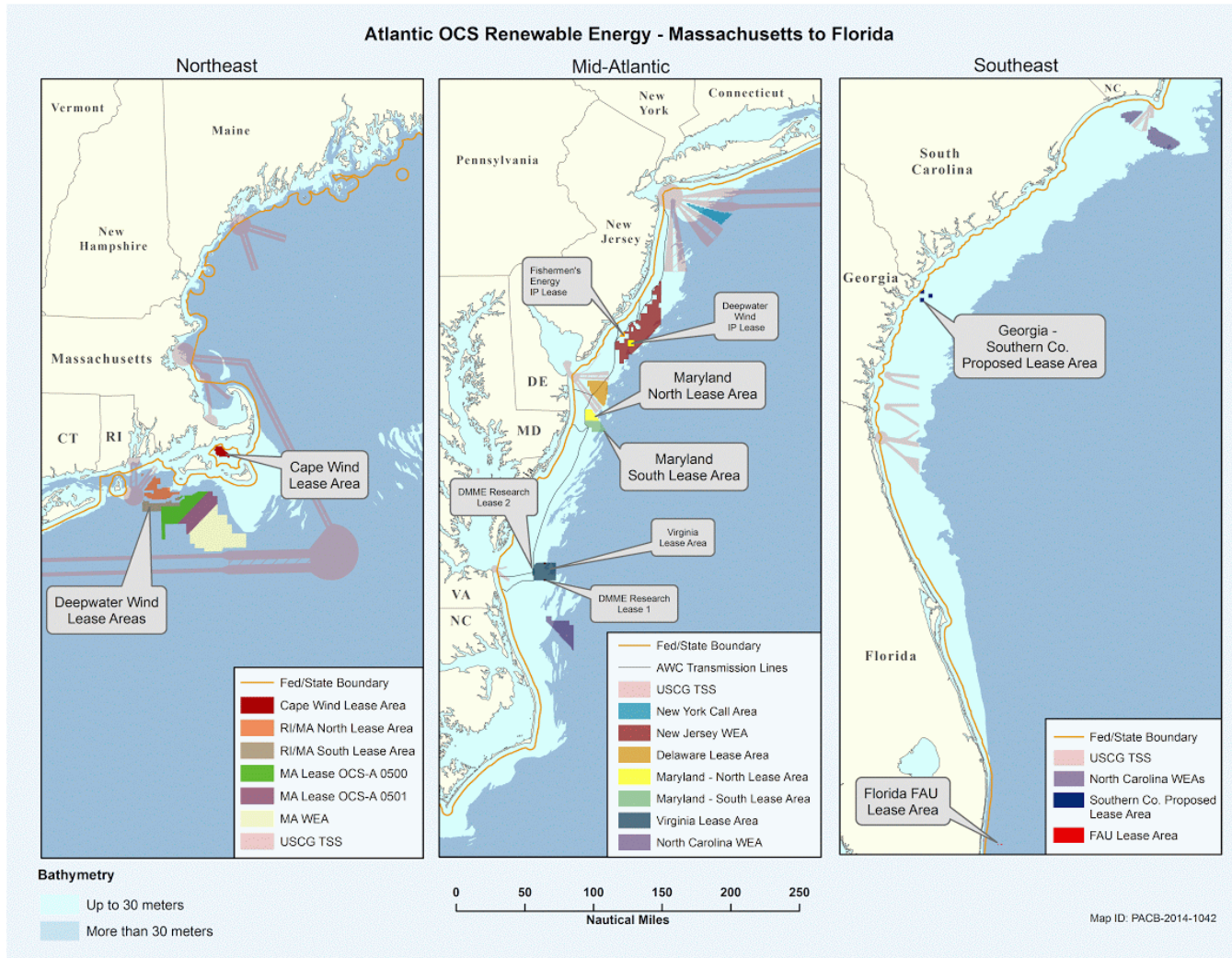
Office of Renewable Energy Programs (OREP)

The mission of the Bureau of Ocean Energy Management's Office of Renewable Energy Programs (OREP) is to regulate environmentally-responsible offshore renewable energy development activities.

- Offshore Wind Farms
- Hydrokinetics – Oregon & Florida
- Determining and evaluating the effects on natural, historical, and human resources



Renewables Program: Status of State Activities



Renewables Program: Wind Energy Development Process

Planning and Analysis

The top map displays a detailed site plan with various colored zones and a legend. The bottom map shows '2010 Tug and Tow Tracks with Density Plot of All Vessels' with a color-coded density scale.

Leasing

The top image shows a 'LEASE AGREEMENT' document. The bottom image shows a wooden gavel with a red 'ONLINE AUCTION SOLD' tag.

Site Assessment

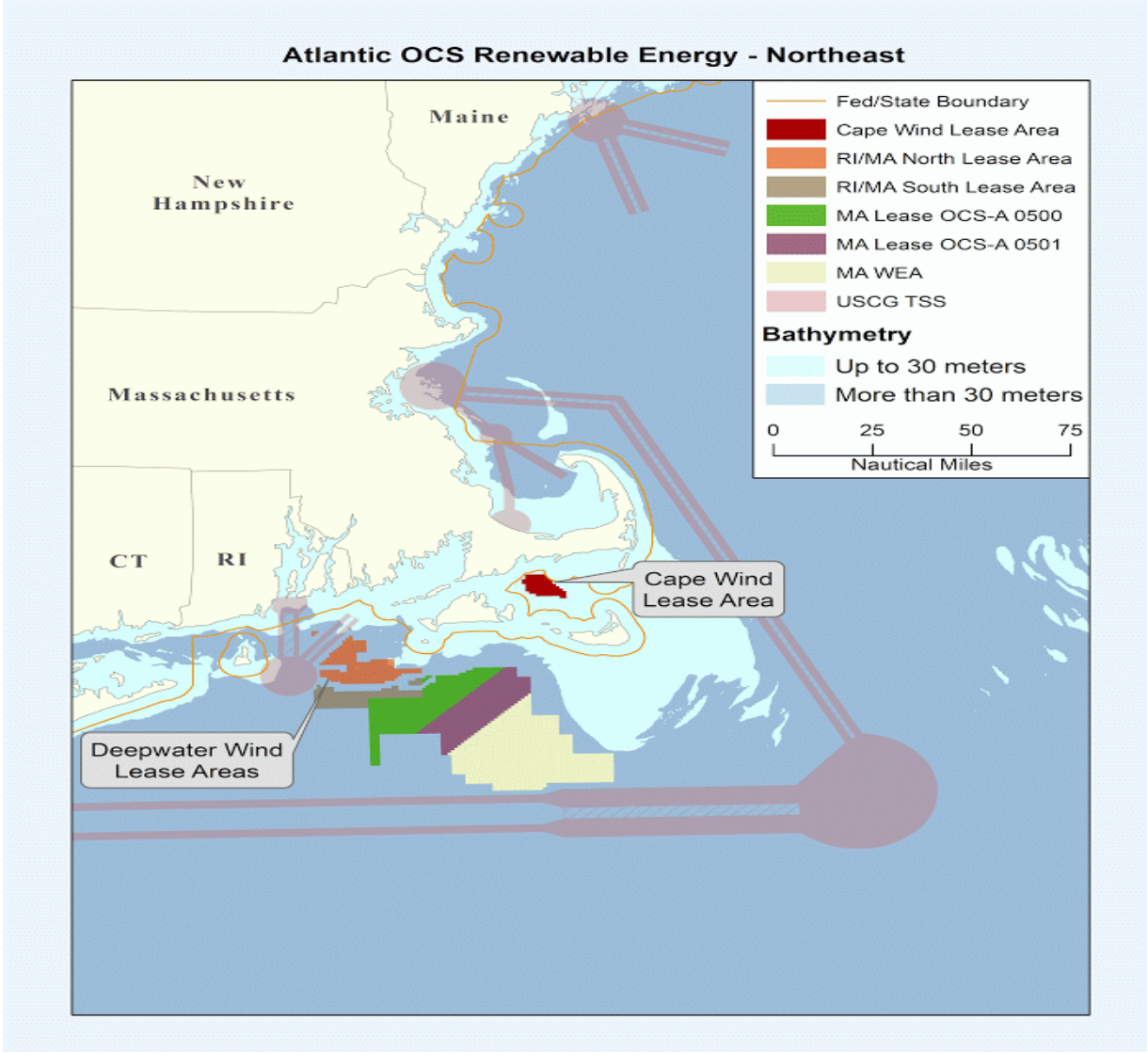
The top image shows a tall offshore structure on the ocean. The bottom image shows a yellow tugboat on the water.

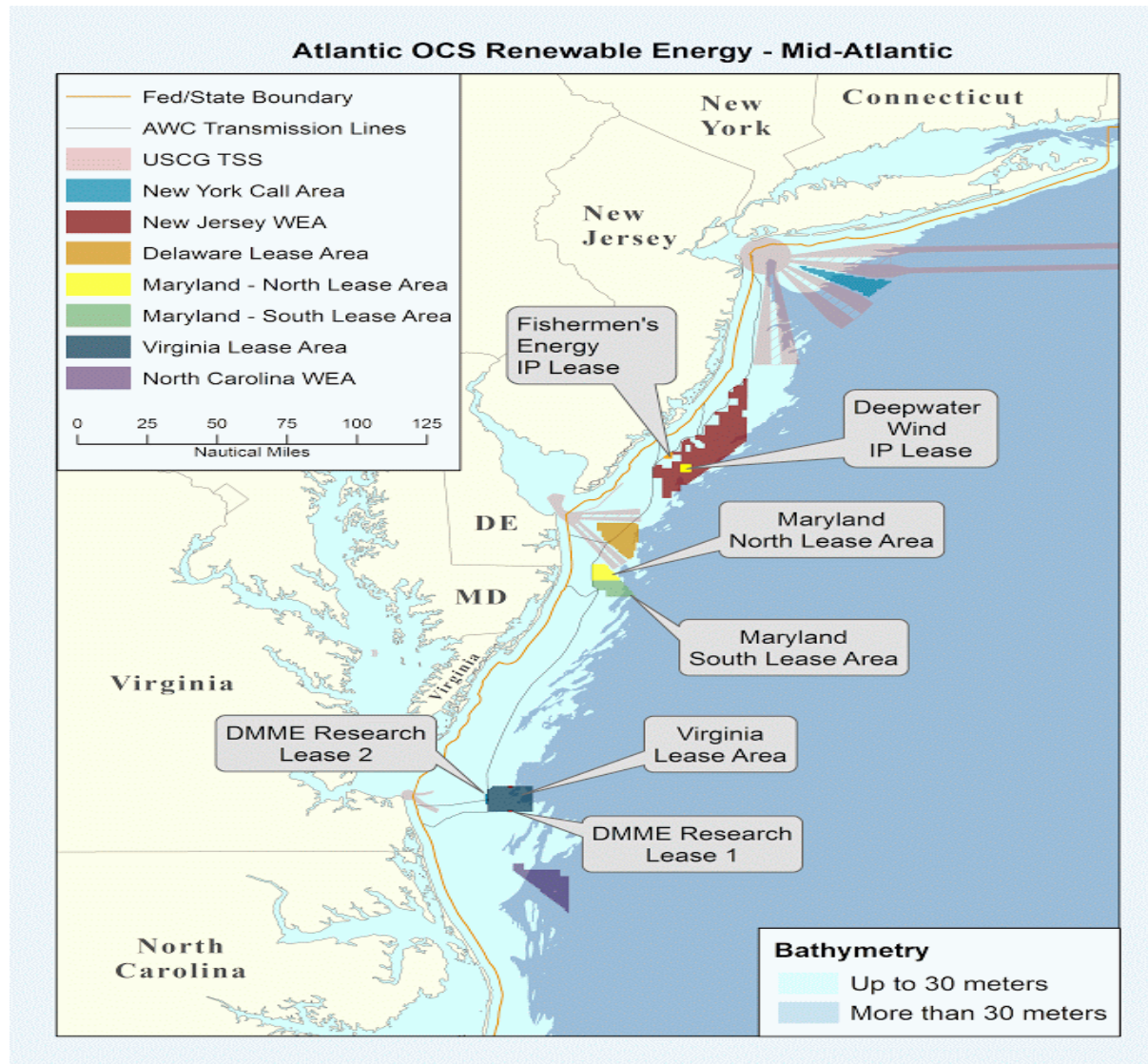
Construction and Operations

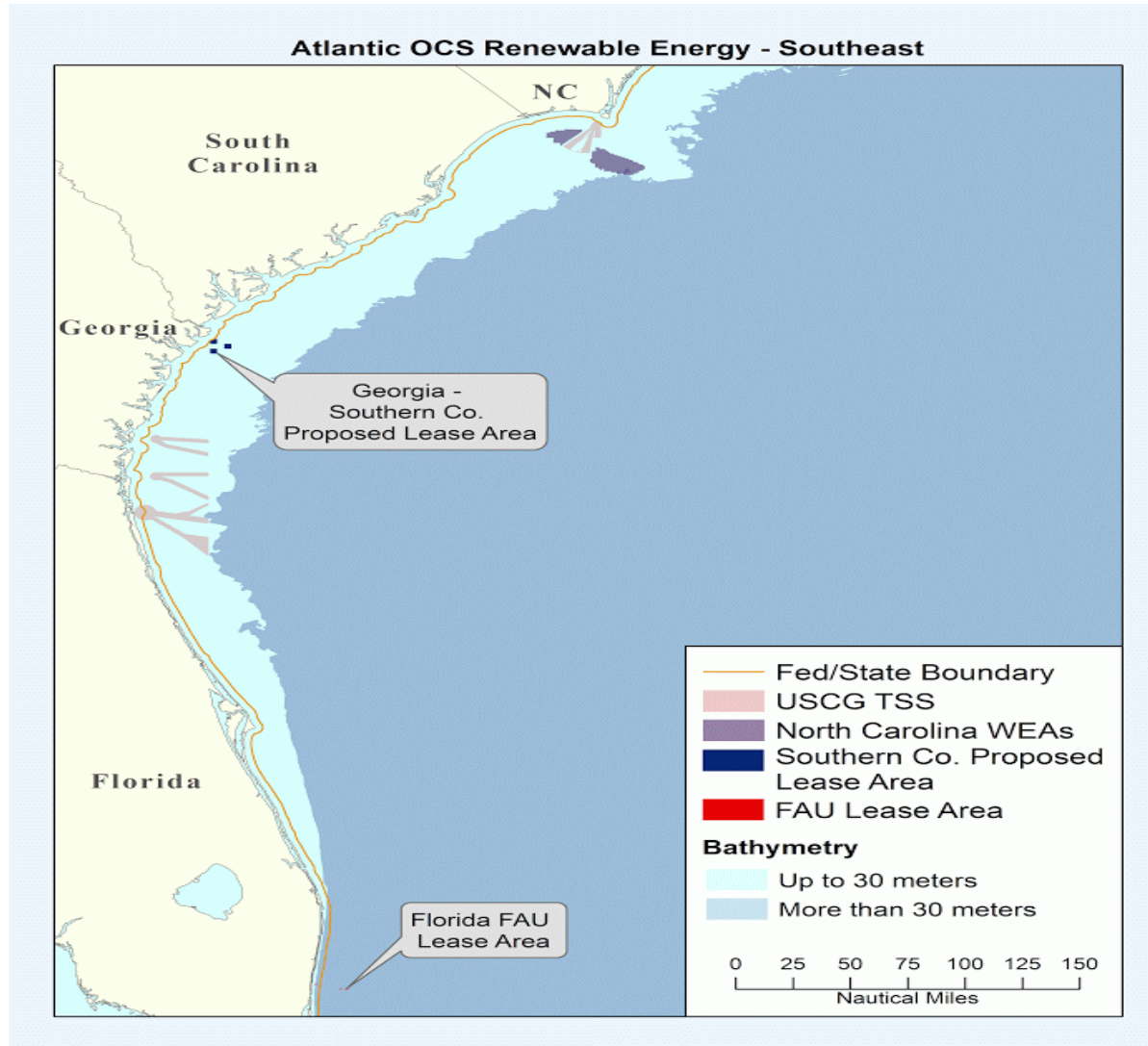
The top image shows a wind turbine in the foreground. The bottom image shows a wind turbine in the background.

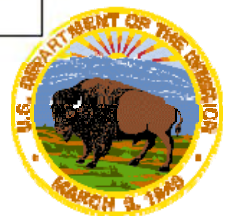


Renewables Program: Status of State Activities Northeast

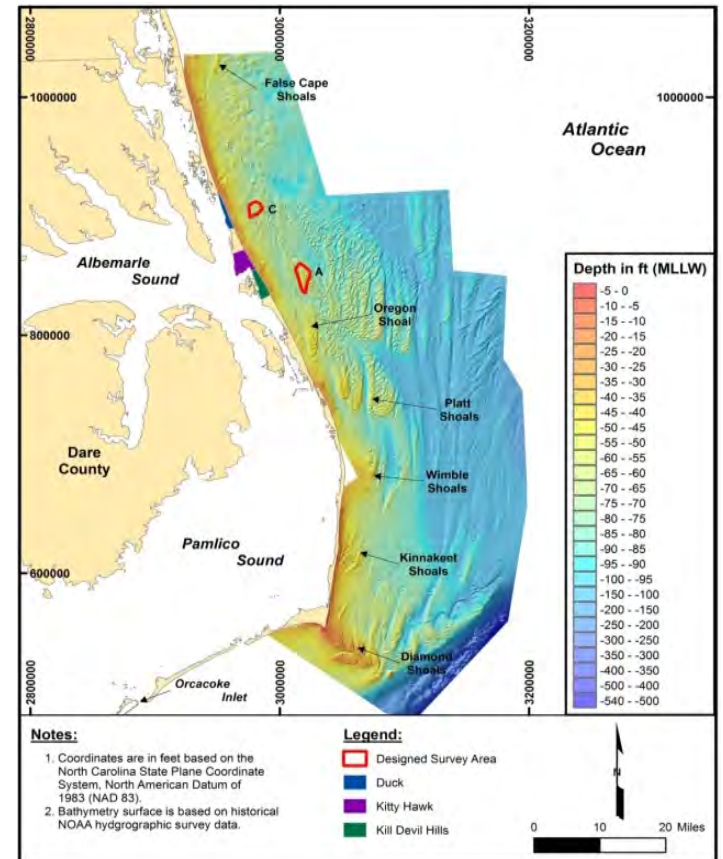








- **Dare County**
 - Duck, Kitty Hawk, Kill Devil Hills
- **Carteret County**
 - **Post-Irene Renourishment Project (2013)**
 - Bogue Banks Storm Damage Reduction Project
 - Bogue Banks Master Beach Renourishment Plan
- **Pender and Onslow Counties**
 - Surf City and North Topsail Beach
 - West Onslow Beach and New River Inlet
- **Brunswick County Beaches**
- **Atlantic Sand Inventory Project**



- **Air Quality**
- **Water Quality**
- **Marine Mammals**
- **Sea Turtles**
- **Marine and Coastal Birds**
- **Bats**
- **Seafloor Habitats**



- **Physical Oceanography**
- **Coastal Habitats**
- **Socioeconomics**
- **Cultural Resources**
- **Fisheries**
- **Multiple Use Conflicts**



Office of Environmental Programs

The OCS Lands Act requires BOEM, in coordination with (BSEE), to provide effective environmental safeguards for Outer Continental Shelf (OCS) exploration and production of oil and natural gas; renewable energy sources such as offshore wind, wave and currents; and non-energy minerals including sand and gravel.

The Office of Environmental Programs is comprised of two Programs:

- **Environmental Assessment**
 - NEPA
 - Protected Species
- **Environmental Studies**
 - Environmental Studies Program Information System (ESPIS)
 - Oil Spill Modeling

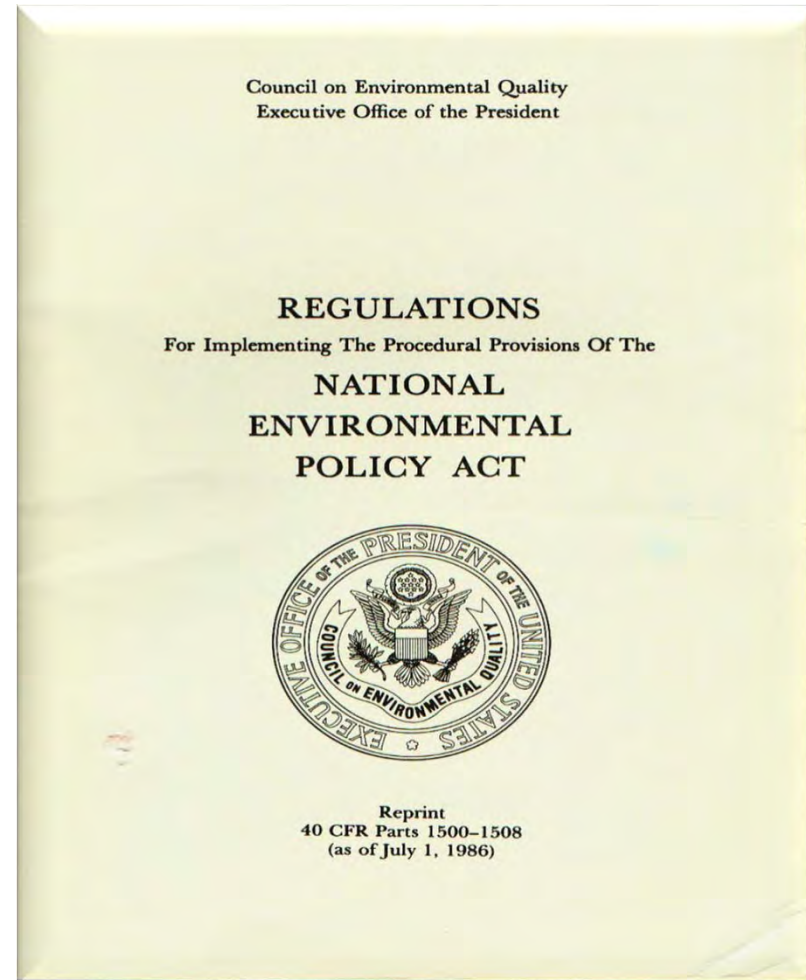


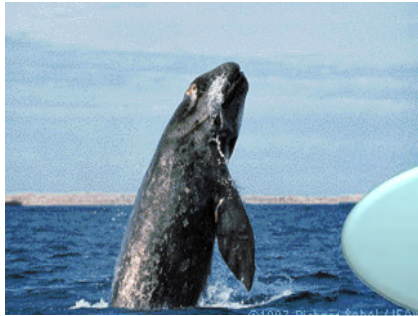
- **In 1969, the Congress of the United States of America passed the National Environmental Policy Act (NEPA)**
- **In 1978, the Council of Environmental Quality (CEQ) issued guidelines for the preparation of environmental impact statement (EIS's) under Executive Order 11514**



Better Decisions Through:

- Public Disclosure
- Alternatives
- Mitigation
- Integrated Analyses
- Public Involvement





Marine Mammal Protection Act

Federal Water Pollution Control Act



National Historic Preservation Act

Migratory Bird Treaty Act

NEPA PROCESS

Clean Air Act

Coastal Zone Management Act

Magnuson-Stevens Act



E.O. 12898: Environmental Justice

Endangered Species Act





- **U.S. Coast Guard** -- oil-spill response, port and vessel security, and inspection



- **Environmental Protection Agency** -- air and water quality
- **Fish and Wildlife Service** -- marine mammals/endangered species



- **National Marine Fisheries Service** -- fish and essential fish habitat

- **Army Corps of Engineers** -- sand and gravel program



- **Federal Aviation Administration** -- radar interference from wind turbines



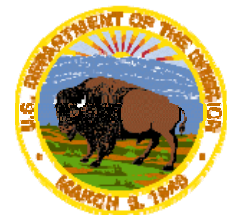
- **U.S. Geological Survey** -- resource evaluation

- **NOAA Fisheries** -- marine mammals/endangered species



- **Department of Commerce** -- coastal program

- **Department of Defense** -- military installations and wetlands





- Archaeological Resource Protection Studies
- Biological Studies
- Fates and Effects Studies
- Meteorology and Air Quality Studies
- Physical Species Studies
- Protected Species Studies
- Social Sciences and Economic Studies

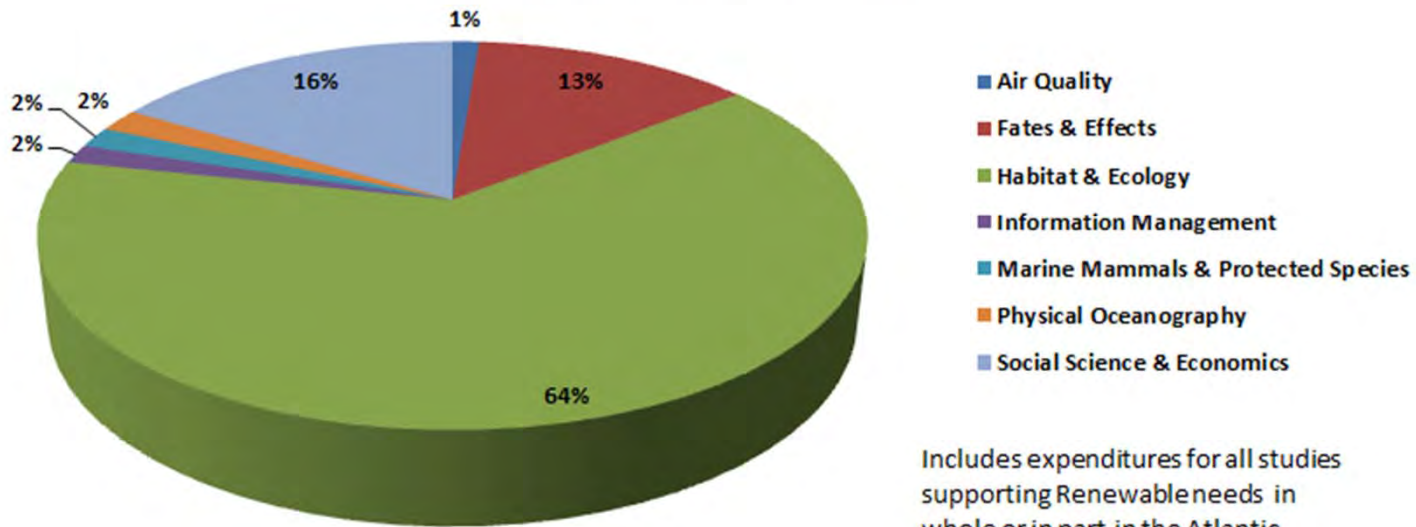


- Competitive Contracted Studies
- Cooperative Agreements
- Cooperative Agreements through Coastal Marine Institutes (CMI)



~ \$26M with the following distribution:

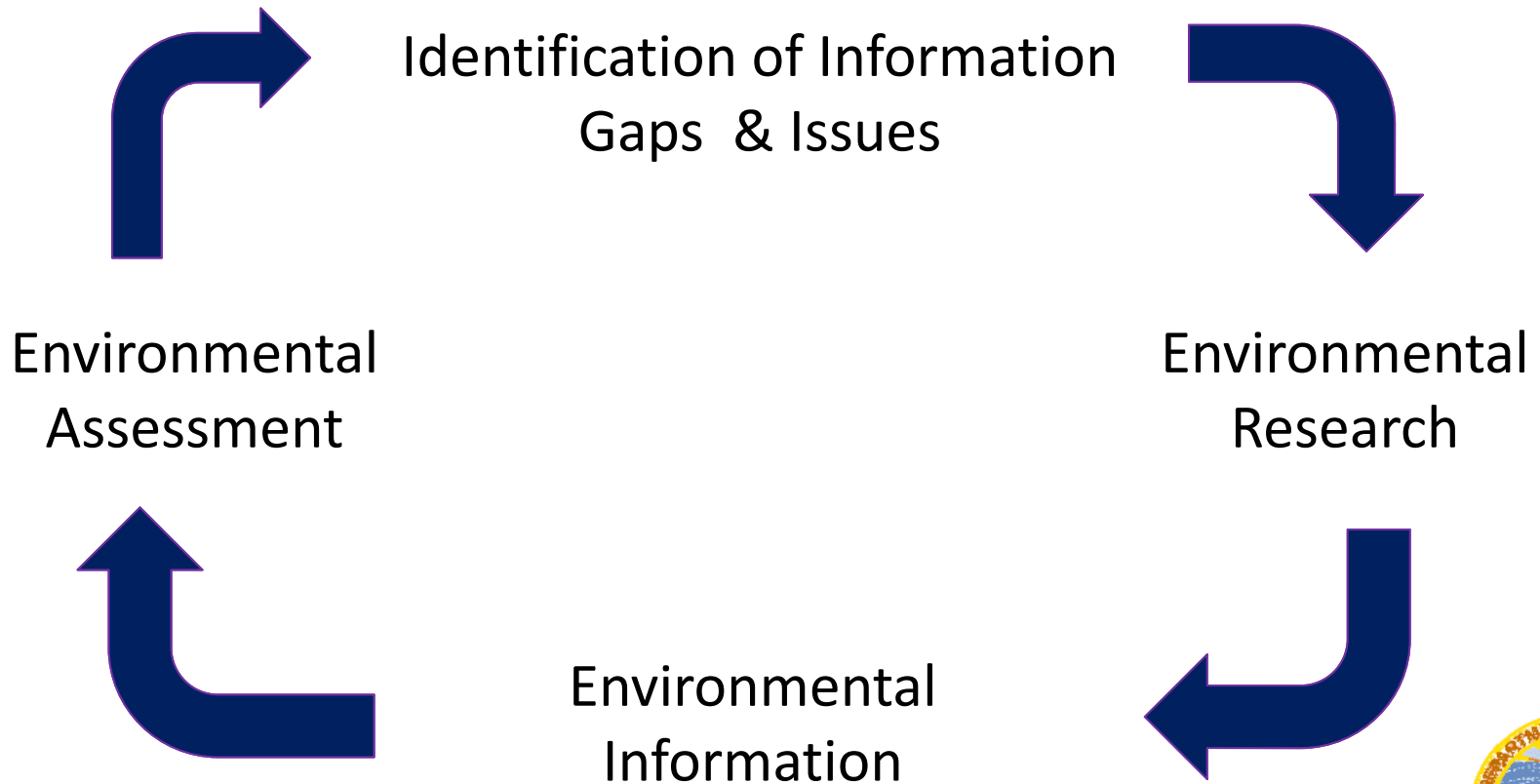
Atlantic Coast Renewable Funds by Discipline
FY 2010-2014 Cumulative



Includes expenditures for all studies supporting Renewable needs in whole or in part in the Atlantic



**Linkage Between
Environmental Assessment and Environmental Sciences**

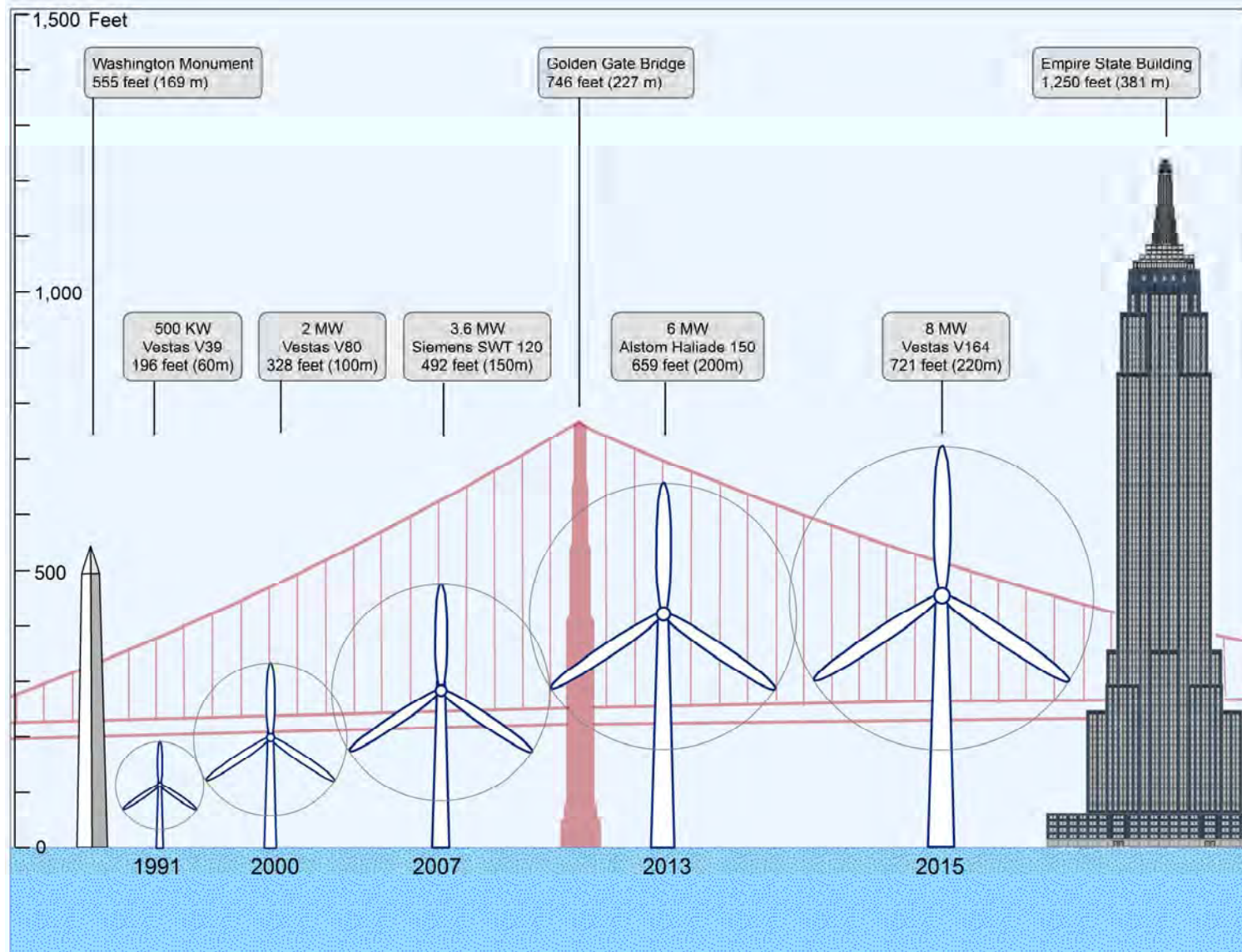




- **Air emissions**
- **Bottom disturbance**
- **Discharges and oil spills**
- **Lighting**
- **Noise**
- **Vessel traffic**
- **Visual and aesthetic interference**



Renewables Program: Turbine Size Comparison





For General Presentation Purposes Only
Not Representative of Any Proposed Project

T. J. Boyle Associates
landscape architecture • planning • construction
VISUALIZATION STUDY FOR OFFSHORE NORTH CAROLINA
016 Oak Island Simulation, Late Afternoon, Vestas V164-8.0 MW, 10 nm

Oak Island Simulation, Late Afternoon, Vestas V164-8.0 MW, 10 Nautical Miles





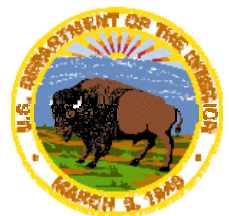
- **Scoping**
 - Notice of Intent
 - Public Comments/Scoping Meetings
 - Develop potential issues, alternatives, and impacts that will be addressed in a NEPA analysis
- **Public Comment Periods**
 - Notice of Intent
 - Draft EIS
 - Comments addressed in EIS
- **Notify Public of Final Decision**

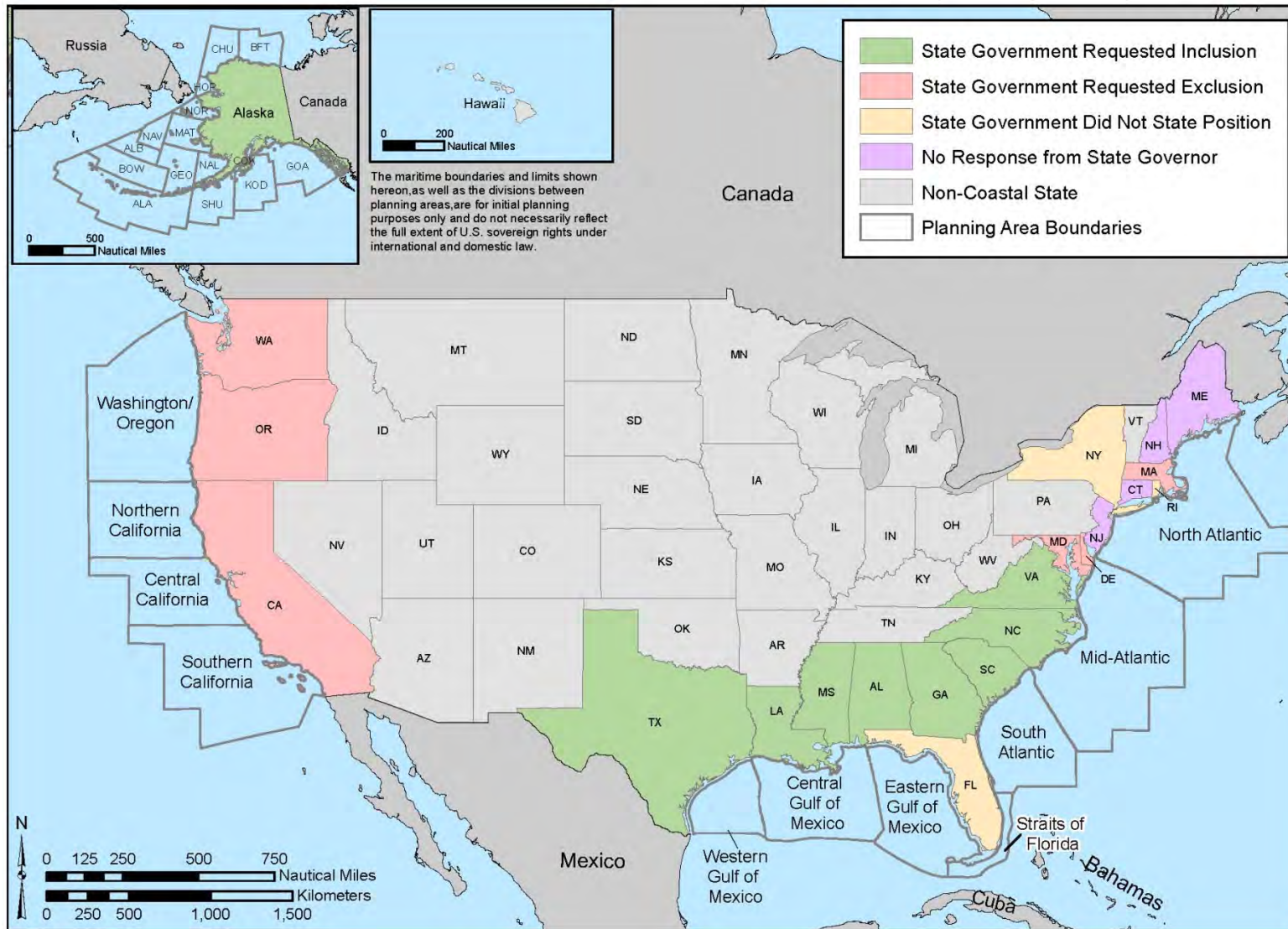


OCSLA



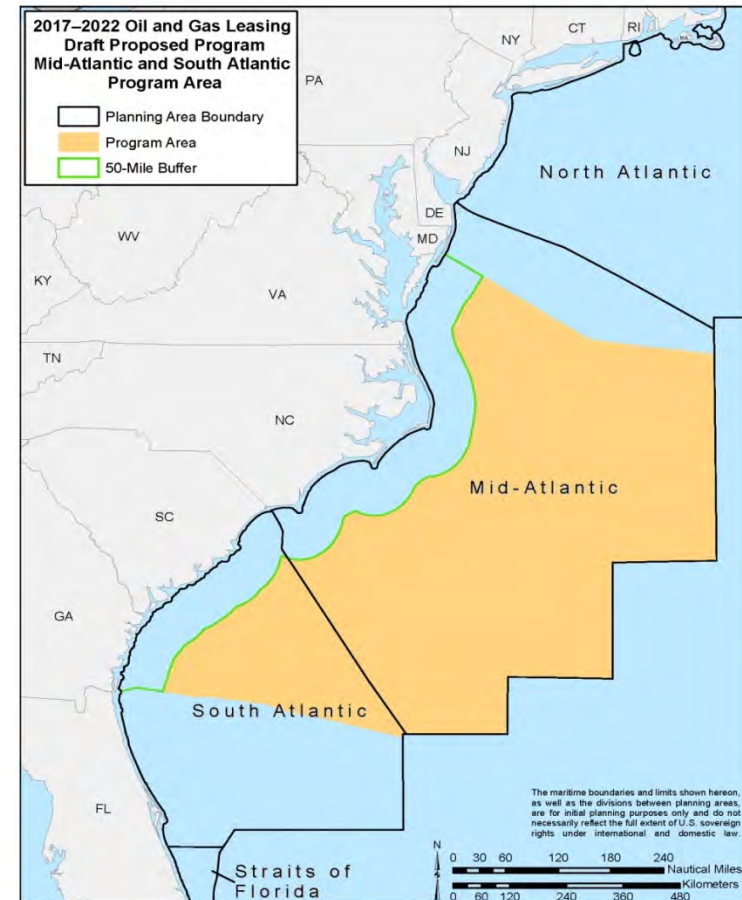
NEPA



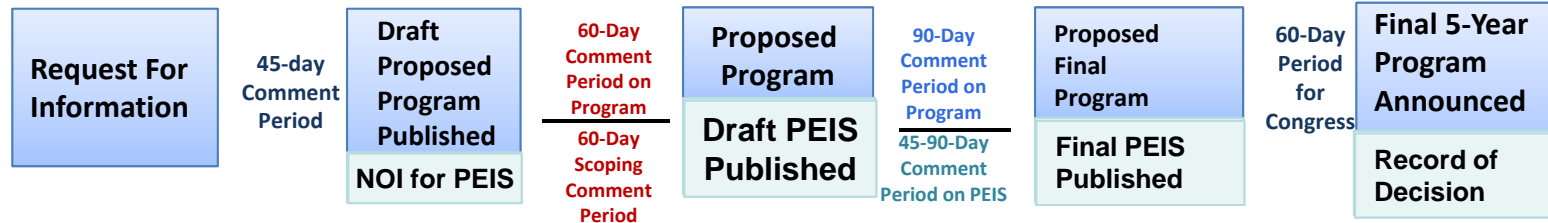


2017-2022 Proposed Atlantic Sale

- One sale in 2021 in a portion of the combined Mid-Atlantic and South Atlantic Planning Areas, offshore the Commonwealth of Virginia and the States of North Carolina, South Carolina, and Georgia, with a 50-statute-mile, no-leasing buffer from the coastline
- No sales in the North Atlantic or Straits of Florida Planning Areas



Development of a Five Year Program

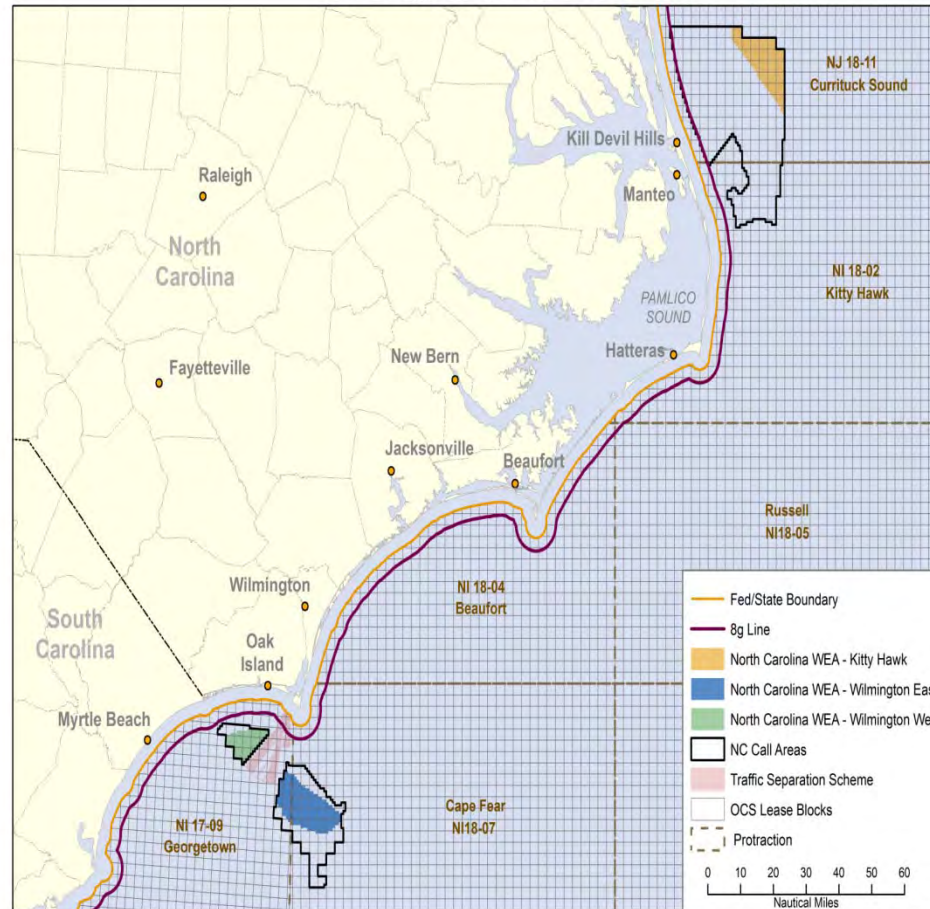


- DPP/NOI comment period ended on March 30, 2015.
 - Scoping meetings have been held in Wilmington (2/17) and Kill Devil Hills (3/16)
- Proposed Program and DEIS scheduled to publish early 2016 with comment and scoping period.
- Proposed Final Program and FEIS scheduled to publish late 2016.



North Carolina Wind Energy Areas (WEAs)

Wind Energy Areas (WEAs) - North Carolina



Map ID: PACB-2014-1060



Stage 1:
Planning & Analysis

Stage 2:
Leasing

North Carolina Task Force

- January 2011: Wilmington, NC
- May 2011: Raleigh, NC
- October 2011: Wilmington, NC
- August 2012: Nags Head, NC

You are here

Area Identification
• August 2014

- Proposed Sale Notice
- 60 – Day Comment Period
- Final Sale Notice
- Mock Auction
- Auction

Publish Call for Information and Nominations and NOI to Prepare an EA

- Published December 13, 2012
- Comment Period Ended March 7, 2013

Conduct Environmental Compliance Reviews

- Published NOA of EA Jan. 22, 2015
- Comment Period Closed Feb. 23.



Renewable Energy North Carolina Wind Energy Areas Environmental Assessment Public Meetings

February 9	Kitty Hawk
February 11	Wilmington, NC
February 12	Caroline Shore

Oil and Gas 2017-2022 Draft Proposed Program (DPP) Draft Environmental Impact Statement Scoping Meetings

February 9	Washington, DC
February 11	Norfolk, VA
February 17	Wilmington, NC
February 19	Jacksonville, FL
March 9	Annapolis, MD
March 11	Charleston, SC
March 16	Kill Devil Hills, NC
March 18	Atlantic City, NJ
March 24	Savannah, GA

Seismic Atlantic Geological and Geophysical Activities Public Meetings

March 31	Norfolk, VA
April 1	Annapolis, MD
April 2	Dover, DE
April 7	Wilmington, NC
April 8	Charleston, SC
April 9	Savannah, GA
April 27	Kill Devil Hills, NC
TBD	Jacksonville, FL



Renee Orr, Chief, Office of Strategic Resources

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James Bennett, Chief, Office of Renewable Energy

james.bennett@boem.gov

Additional Information:

<http://www.boem.gov/Oil-and-Gas-Energy-Program/>

<http://www.boem.gov/Renewable-Energy/>

QUESTIONS???

