



Atlantic Shores Offshore Wind South Project

Offshore Construction Sounds and Marine Life

What sounds will be made?

There are many different sounds related to offshore construction activity, including the intentional transmission of sounds for characterizing the environment such as geophysical sonars, and the inadvertent transmission of sounds such as from vessel engines and pile-driving activity. Some sounds will only be present during certain stages over the life of an offshore wind facility.



Studies in European waters show that harbor porpoises may leave an area and feed less when pile driving begins but generally return within weeks after pile-driving activities end.

What natural and human-made sounds are in the Project area?

- Commercial and recreational boats
- Scientific surveys
- Fishing and navigational sonars
- Animal vocalizations
- Wave action, storms

What are the possible impacts on marine mammals and sea turtles from pile driving?

Hearing Impacts

- Temporary hearing loss
- Permanent hearing loss

Behavioral Impacts

- Avoidance of the area
- Changes in feeding, resting, communication, or migratory behavior
- Disrupted communication
- Increased stress



The population of North Atlantic right whales is declining, and they are therefore a species of particular interest along the east coast with any offshore development. Photo taken under NMFS permit number 19674.

What information informed the analysis?

- Technical information on sound sources
- Underwater sound propagation models
- Animal movement models to assess realistic exposure
- The seasonal occurrence of protected species in the Lease Area
- Information on animal responses to sound
- National Marine Fisheries Service guidance on assessing the effects of sound on marine mammals

What is BOEM doing to mitigate potential effects of sound on marine life?

Project-specific mitigation is required, such as:

- Using sound mitigation around loud activities, e.g., bubble curtains
- Using time of year restrictions on certain activities when large numbers of marine mammals are likely to be present in the Project area
- Using human observers to monitor for marine mammals in the Project area during construction
- Deploying real-time passive acoustic monitoring devices to detect vocalizations of marine mammals



For more information, please visit:
<https://www.boem.gov/center-marine-acoustics>