



November 2024

Offshore Wind Development Sounds and Marine Life

What sounds will be made?

There are many different sounds related to offshore wind development activity, including the intentional transmission of sound waves for characterizing the environment including using geophysical sonars, incidental transmission of sounds from vessels, construction activities, and operational sounds generated by the wind turbines. Some sounds will only be present during certain stages over the life of an offshore wind facility.

What natural and man-made sounds are in the project area?

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

Environmental impact analyses are conducted to understand the effect that offshore wind development will have on marine resources, including protected species. These analyses may include:

- Technical information on sound sources
- Underwater sound propagation models
- Animal movement models to assess realistic exposure
- The seasonal occurrence of protected species in and around the lease area
- Information on animal responses to sound
- National Marine Fisheries Service (NMFS) guidance on assessing the effects of sound on marine mammals
- Essential Fish Habitat consultations with NMFS
- Biological Assessment for Endangered and Threatened Species with NMFS



The population of humpback whales is of concern, and are therefore a species of particular interest along the west coast with any offshore wind development. [Picture by Dave Pereksta]

What types of sound mitigation can be found in the California Draft PEIS?

Project-specific mitigation may include*:

- Following the most current International Maritime Organization's (IMO) Guidelines for the reduction of underwater radiated noise, including propulsion noise and machinery noise.
- Complying with the vessel speed restrictions during all vessel operations.
- Identifying, avoiding, and monitoring changes to affected marine biological species in the project area.
- Developing a Low Visibility Monitoring Plan (LVMP) or Alternative Monitoring Plan (AMP) requiring marine mammal and sea turtle monitoring during the night and during other low-visibility conditions.

** Potential mitigation measures are listed in Appendix E.*

To learn more about the California Offshore Wind Programmatic Environmental Impact Statement, scan here:

