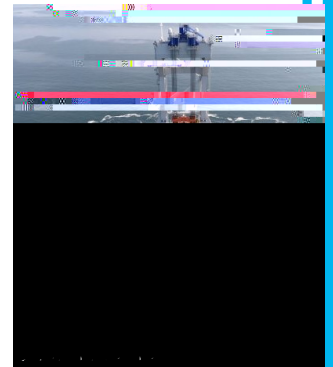


Read how **offshore wind energy is committed to protecting marine life** throughout project development and operations.

## Key Takeaways

- **Offshore wind is one of the most regulated maritime industries in the U.S.** Offshore wind projects are subject to a complex regulatory process, including review by the U.S. Coast Guard, U.S. Environmental Protection Agency, U.S. Navy, and U.S. Fish and Wildlife Service, among others.
- **When issuing “incidental take” authorizations, government agencies do not authorize offshore wind developers to cause serious injury or mortality to marine mammals** such as whales.
- **There is no scientific evidence linking whale strandings to offshore wind activities.** While there is ongoing research into potential impacts, current data does not support a link between offshore wind and whale strandings.



## Background

Offshore wind energy is a rapidly growing sector in the United States, with significant potential to reduce greenhouse gas emissions. However, the industry is also subject to strict regulations to protect marine life, particularly whales. This document outlines the key takeaways and background information regarding offshore wind development and marine life protection.

## Offshore Wind Development Process & Marine Life Protection

Offshore wind development involves several phases, each with its own corresponding monitoring and mitigation measures to protect whales and other marine life:

### Site Characterization

Site characterization is the first phase of offshore wind development, involving the collection of data on the proposed site. This includes conducting surveys to identify potential impacts on marine life, such as whale strandings. The data collected during this phase is used to inform the design and construction of the wind farm.

Phase	Monitoring and Mitigation Measures
Site Characterization	Conduct surveys to identify potential impacts on marine life, such as whale strandings.
Design and Construction	Implement measures to minimize noise and vibration during construction, and avoid sensitive areas.
Operation and Maintenance	Implement measures to minimize noise and vibration during operation, and avoid sensitive areas.

## Construction

The majority of underwater sound associated with offshore wind construction is from pile driving and vessel sound.

- **Use of Noise Mitigation Systems (NMS):** NMS are used to reduce the sound level of pile driving operations. They can be used in a variety of ways, including:• Bubbles: Bubbles are released from the pile driving rig to create a water column that absorbs sound. This can reduce the sound level by up to 10 dB.
- **Protected Species Observers (PSOs):** PSOs are trained individuals who monitor the area around the pile driving rig for the presence of protected species. If a protected species is observed, the pile driving operations are suspended until the species has moved away.
- **Clearance and Exclusion Zones:** Clearance and exclusion zones are established around the pile driving rig to ensure that protected species are not present during pile driving operations.