

FACT SHEET

# Prioritizing Marine Mammal Protection During Construction

Understanding the Marine Mammal Protection Act and key aspects in ensuring protection of marine species



Take Action to Support Empire Wind

## What is the Marine Mammal Protection Act and “take”?

All marine mammal species found in U.S. waters are protected under the Marine Mammal Protection Act (MMPA). The MMPA generally prohibits the “take” of marine mammals. “Take” under the MMPA includes harassment, hunting, capturing, or killing a marine mammal. This includes any feeding or attempting to feed a marine mammal in the wild.

Under the MMPA, applicants like Empire Wind may request authorization from NOAA for “incidental take” of marine mammals that may occur from an activity. Incidental take is accidental, but not unexpected.

## Takes proposed for authorization of the Empire Wind project

**No death or serious injury** of marine mammals is expected from Empire Wind’s activities, nor proposed for authorization by National Oceanic & Atmospheric Administration (NOAA). The only form of “take” anticipated from Empire Wind’s activities—and proposed for authorization by NOAA—is “harassment,” the vast majority of which is Level B harassment.

**Level B Harassment:** has the potential to disturb (but not injure) a marine mammal.

- This can include **an animal diverting course** to avoid a sound that it finds disturbing.

**Level A Harassment:** has the potential to injure a marine mammal.

- For Empire Wind, NOAA has proposed to authorize a total of **EIGHT** Level A harassment takes over 5 years. Empire Wind will implement several protective measures in an effort to avoid these instances of “Level A harassment” from occurring. If these did occur, they would be reductions or changes in hearing sensitivity (not deafness).

## Common sources of marine mammal “takes”

- Scientific research
- Commercial fishing
- Military training and testing
- Nearshore construction
- Oil and gas exploration

## How are the number of “takes” estimated?

A very cautious approach is used to estimate the number of “takes” by planning for the potential maximums of construction activities using the best available science to consider and model:

1. The **LOWEST** sound levels at which marine mammal “harassment” could occur, based on NOAA guidance
2. The **LARGEST** area predicted to experience these sound levels
3. The **HIGHEST** potential number of marine mammals estimated within these areas
4. The **LONGEST** time period that construction activities could take place

Modeling these considerations together gives regulators and the project a sense of the maximum number of marine mammals that construction activities could potentially impact in a given day, and over the duration of the project.

## Protecting marine mammals during construction

Empire Wind has proposed several protective measures to reduce potential impacts of the project on marine mammals:

### 1. SOFT START

All pile driving for Empire Wind will begin at reduced energy—known as a “soft-start,” this gives marine mammals the opportunity to move away from underwater noise before the full force of the pile driver is used.

### 2. NOISE-REDUCING BUBBLE CURTAIN

Bubble curtains soften the sound of construction. Noise reduction is up to 90%.

### 3. PROTECTED SPECIES OBSERVERS

Empire Wind looks for marine mammals before starting construction.

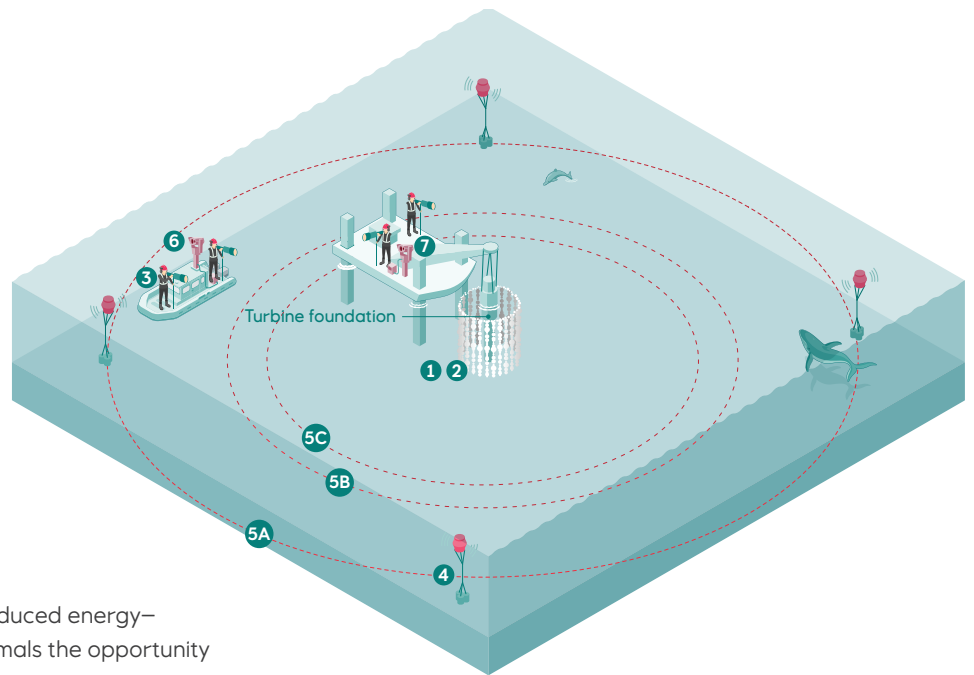
Empire Wind uses the latest marine mammal detection technology, along with independent, trained, NOAA-approved Protected Species Observers (PSOs), to make sure we detect marine mammals near the construction area.

A minimum of 4 PSOs with binoculars will actively observe for marine mammals before, during, and after pile driving. At least 2 PSOs will be on the installation vessel.

### 4. ACOUSTIC MONITORING

Real-time passive acoustic monitoring detects marine mammals before they enter exclusion zones.

Four Passive Acoustic Monitoring (PAM) buoys will be deployed in a square grid along the 5 km clearance zone. The PAM buoys will especially target the North Atlantic right whale. No pile driving can start until this zone (5 km) is cleared using PAM and protected species observers.



### 5. CLEARANCE & SHUTDOWN ZONES TO PROTECT MARINE MAMMALS

Independent and NOAA-approved PSOs monitor and document marine mammals and enforce clearance zones.

Clearance zones ensure no marine mammals are in the area before pile driving begins – if marine mammals are observed in the zone, pile driving is delayed until they leave the area.

In addition to the 5 km acoustic monitoring clearance zone (5A), there is a 2 km clearance zone (5B) where no pile driving can start unless the zone is visible to PSOs and cleared of whales 30 minutes prior to starting pile driving.

There is also a 1.5 km shutdown zone (5C) within which pile driving is stopped when feasible if a whale enters during construction.

Finally, if a North Atlantic right whale is detected visually at any distance pile driving must stop until the animal has cleared the area.

### 6. INFRARED CAMERAS

Infrared cameras with image recognition software will automatically detect and count whales using state-of-the-art technology.

### 7. SEASONAL PILE DRIVING CLOSURE

No pile driving will occur from January to April. This is a voluntary seasonal pile driving closure that will limit pile driving to months when North Atlantic right whales are least likely to be present.

Have a question about Empire Wind?

Contact [empirewind@equinor.com](mailto:empirewind@equinor.com)

To sign up for project updates, visit [www.empirewind.com](http://www.empirewind.com)



Stay informed and engaged with the Empire Energizer Newsletter

*Empire Wind is a 50/50 partnership between Equinor and bp. Equinor will be the operator through the development, construction, and operations phases of the project.*