

## EMPIRE WIND

# Supporting Local Fisheries

## Marine Health, Maritime Safety, and Commercial Fishing

We collaborate closely with fishing communities on Long Island, and from Massachusetts to New Jersey to ensure:

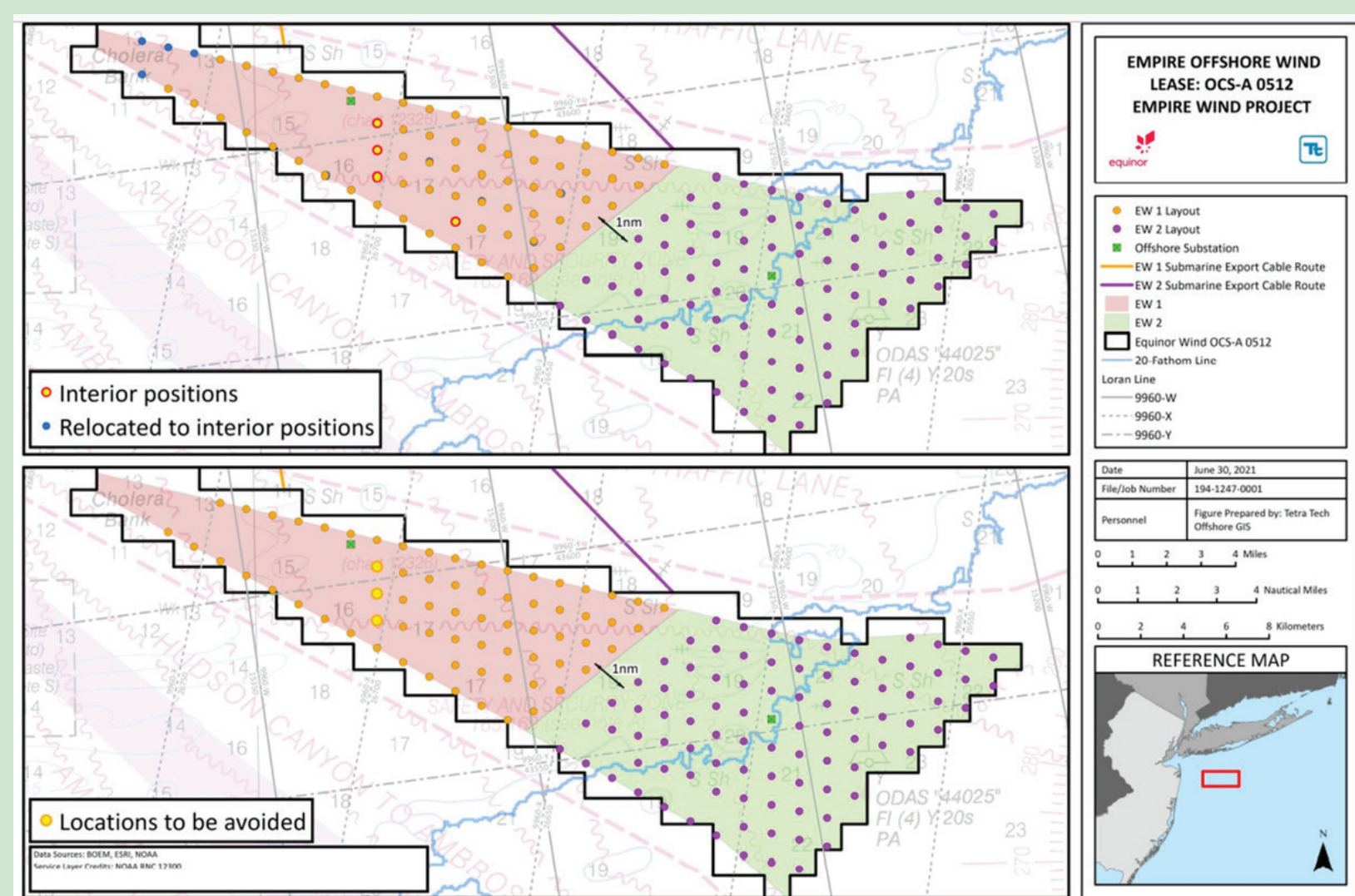


- Minimal potential impact to wildlife and local communities
- Minimal potential impacts to fishing areas and activities
- Open dialogue with the Bureau of Ocean Energy Management (BOEM) and the Department of Defense (DOD) to mitigate any potential interference with coastal defense and radar

## Our Commitments to Fishing Communities:

1. A dedication to facility improvements, job creation, and health and welfare.
2. An agreement for safe navigation and fishing, monthly port hours, and modifications to survey schedules to avoid areas with active seasonal fishing.
3. Early spatial planning and adaptive management to avoid high-use, high-value, and high-sensitivity fisheries areas.
4. Funding studies/developing partnerships.
5. Utilizing Scout Boats and contracting with local fishermen to facilitate offshore work.
6. Actively monitoring lease areas.
7. Consistent engagement through updates, social media, one-on-one calls, webinars, and virtual meetings.

## Local fishermen shaped the layout of Empire Wind:



An iterative Fisheries Mitigation Plan was created in 2018 to engage with and solicit input from regional fishermen.

The grid formation of the turbines was designed based on this feedback from fishermen to allow for safe boat navigation and fishing in the project area.

## We are proud of our cross-industry collaboration with:

- Long Island Sound Lobstermen Association
- Responsible Offshore Science Alliance
- Responsible Offshore Development Alliance
- New York Fishing Technical Working Group
- Massachusetts Fisheries Working Group

## Ways to keep in touch:

- Visit our monthly port hours and/or open houses
- Follow the Empire Wind & Beacon Wind Fisheries News Group on Facebook
- Call our hotline: (833) 699-1965
- Attend our webinars and/or meetings
- For dedicated fisheries updates, connect with Equinor's Fisheries Liaison: Elizabeth Marchetti (emarc@equinor.com)



## EMPIRE WIND

# Respecting and Protecting Marine Wildlife

## To better understand and preserve this unique ecosystem, Empire Wind:

- Collected significant baseline information on the distribution of marine wildlife, including marine mammals, in the lease area and export cable route corridors, much of which is publicly available in Empire Wind's Construction and Operations Plan.<sup>1</sup>
- Works closely with Protected Species Observers (PSOs) to monitor marine mammals and other protected species during survey activities.
- Trains all crew members responsible for navigation duties on protected species sighting/reporting and vessel strike avoidance measures.

**The offshore wind industry adheres to more stringent marine mammal mitigation measures than any other marine industry on the Atlantic Ocean coastline.<sup>2</sup>**

## How Empire Wind is reducing potential environmental impacts throughout all phases of the project:



### PROTECTING WHALES

- BOEM considered whale migration patterns when selecting the lease area.
- Two years of Digital Aerial Wildlife Surveys were conducted to determine movement patterns.
- We partnered with the Wildlife Conservation Society and Woods Hole Oceanographic Institute to deploy long-term passive acoustic monitoring buoys in the lease area:

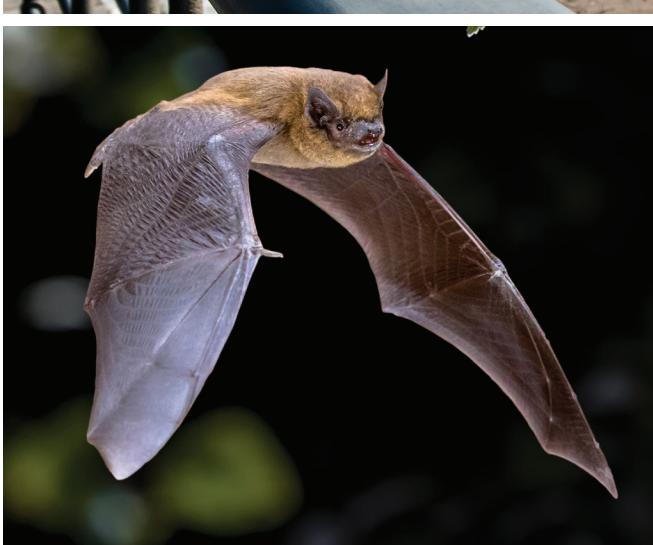


Follow this QR code to see real-time data that shows the percentage of detections by species over the past 24 hours.



### PROTECTING BIRDS

- Migratory bird flights occur at a mean elevation of 3,000 ft in the spring and 1,800 ft in the fall—well above the maximum 951 ft turbine height.
- Siting of the lease area was based on years of scientific research and environmental assessment conducted by BOEM with input from academic institutions and NGOs.
- Restrictions will be considered during seasonal breeding periods along with continued monitoring and data collection.
- Empire Wind is exploring best practices for the lease area like Aircraft Detention Lighting Systems.



### PROTECTING BATS

- Onshore and offshore facilities exist outside of typical bat-foraging habitats.
- Bats, like birds and marine mammals, will be monitored post-construction.



Learn more from  
our sources!



EMPIRE WIND

# Frequently Asked Questions

There is currently no evidence to support a link between recent whale mortalities and offshore wind development. Vessel strikes and entanglement in fishing gear are the greatest human threats to large whales, but:



## What's behind ship strikes?

Two facts are likely to create conditions that make ship strikes more common:

1. Since the pandemic, online shopping has created a surge in the frequency of cargo shipments and the larger, less maneuverable, vessels entering New York and New Jersey Ports.
2. After decades of environmental gains, the humpback whale population in the area has grown significantly. In addition, warmer oceans caused by climate change have altered the migration and feeding patterns of whales and their prey, often bringing whales closer to shore.

## How does Empire Wind work to protect marine mammals?

- **Geophysical survey equipment must be shut down** when marine mammals are observed approaching or within "Exclusion Zones" enforced by Independent and National Marine Fisheries Service-approved Protective Species Observers (PSOs).
- **Vessel speeds must be reduced** to 10 knots or less when mother/calf pairs, pods, or large assemblages of whales/dolphins are observed near the vessel.
- When marine mammals are observed while a vessel is underway, **the vessel must attempt to remain parallel** with the animal's course until the animal has left the area.
- If marine mammals are sighted within the separation distance, **the vessel must reduce speed, shift to neutral, and wait for animals to clear the area** before engaging engines.
- The offshore wind industry uses **smaller and lower energy survey equipment** than the seismic or sonar equipment used in other industries.

## What marine research and monitoring programs does Empire Wind invest and participate in?

- Equinor deploys sophisticated passive acoustic monitoring buoys in our Empire Wind lease area off the coast of New York to collect real-time data to detect the presence of marine mammals in partnership with scientists at the Wildlife Conservation Society and the Woods Hole Oceanographic Institution.
- Equinor is a partner in the New England Aquarium's tracking program of highly migratory marine species such as swordfish, tuna, and sharks.
- As part of its commitment to transparency, data from Equinor's monitoring efforts of marine species and aerial studies are available to the marine community and the public.



If you are interested in learning more, watch [Whale Tales and Whale Facts](#) featuring experts at the US Bureau of Ocean Energy Management, NYS Dept. of Environmental Conservation, and Atlantic Marine Conservation Society.



See NOAA FAQ's about Offshore Wind & Whales