



## Birds and Offshore Wind Development

*US Wind's plans to protect birds before, during, and after construction*

### Background

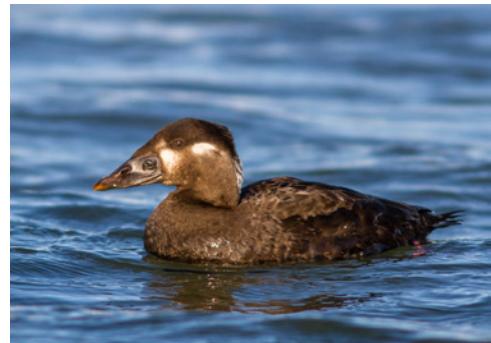
The U.S. Department of the Interior (DOI) took extreme caution to minimize negative impacts to birds from offshore wind development in the Maryland Lease area when it identified the area more than a decade ago. US Wind has made strong commitments to avoid, minimize and mitigate any risk offshore wind development in the Maryland Lease area could have on birds, including a heavy focus on additional avian research.

Once constructed, wind turbines in US Wind's Lease area will be about 11 to 29 miles from shore, outside of the area where most birds are present. For example, passerines, such as songbirds and sparrows, generally migrate within 10 miles of shore at very high altitudes off the Mid-Atlantic coast, well outside of the Lease area. However, pelagic and coastal species may be present off Maryland's coast. Research shows gannets, loons and sea ducks are the highest density species in the Lease area.

### Research

Between April 2012 and April 2014, the U.S. Department of Energy (DOE) and the state of Maryland funded 16 boat-based surveys and 15 aerial digital surveys to observe birds and marine species in the region, including the Lease area. These surveys, conducted in 2013, found nearly 30 species of marine birds in nine avian families in the Lease area.

Researchers evaluated collision risk, or how likely these birds would fly into operating wind turbines. The science concluded birds most likely to be in the wind farm—the pelagic bird species—generally do not fly within the rotor area, or “rotor swept area.” Therefore, collision risk is expected to be low. The highest density species in the Lease area — gannets, loons and sea ducks — tended to avoid the wind turbines. Moreover, the Lease area does not include critical habitat for these species.



*More than a decade of research shows Surf Scoters and other sea ducks are adept at avoiding offshore wind turbines.*

### Potential Impacts

Potential impacts to birds from construction and operation of the offshore wind farm fall into two main categories: (1) collision with the turbines and other above-water structures; and (2) displacement from the area caused by avoiding the turbines and any associated construction and maintenance traffic.

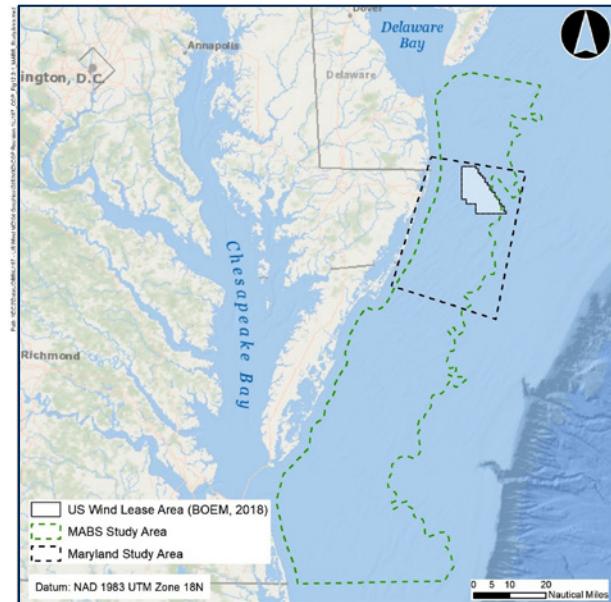
### Strong Commitments to Mitigation

US Wind commits to the following mitigation measures to protect birds in the Lease area:

- Pre- and post-construction aerial and digital surveys to monitor any bird displacement.
- Deployment of a Metocean Buoy, which includes equipment, such as NanoTag antennas and acoustic sensors, to detect birds.
- Measures that minimize lighting impacts on birds, which will be implemented where feasible, as approved by regulatory agencies.

- Anti-perching measures will be installed on the deck and access platform of the turbines where appropriate to discourage birds from resting on the structures.
- Cable landfalls and onshore facilities will be sited and timed to avoid impacts to nesting birds. Burying cables and using underground horizontal directional drilling for cable installation at landfall locations will avoid impacts to beaches and wetlands.
- Compilation and maintenance of a comprehensive wildlife survey and observation information database.

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US Wind's commitments are a strong starting point to avoid, minimize, and mitigate impacts to avian species. Additional measures may be implemented after continuing consultations with permitting agencies, environmental organizations, and the public.

### Additional Monitoring and Studies

US Wind is conducting an additional avian monitoring program to confirm earlier conclusions about risks and potential impacts. The avian monitoring program is comprised of data collection from sensors on the Metocean Buoy deployed by US Wind in May 2021, as well as pre- and post-construction aerial surveys over the Lease area, including a 10-kilometer buffer.

The complementary data collection methods are designed to capture information about the variety of potential birds – marine birds, coastal birds and small migrating songbirds – using shorebird nanotag detection, acoustic monitoring to record bird flight calls, and digital aerial surveys. The work will help fill data gaps for spring and fall migrant passersines, including warblers, grosbeaks, buntings and thrushes.

US Wind will house avian data and reports in its comprehensive database. Results will be shared with the public as well as government and non-government researchers.

### More information is available in US Wind's Construction and Operations Plan (COP):

- Volume II – Sections 6 (Coastal Habitat and Birds) and 12 (Marine Birds)
- Avian Risk Assessment – Appendix II-N1
- Avian Monitoring Plan – Appendix II-N2



*Passerines, like this Pine Warbler, generally migrate within 10 miles of Maryland's coast, well west of the Lease area.*