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Advancing Marine Life Research and Protection

November 13-17, 2023

Upcoming Acoustic Telemetry Studies for Empire Wind 2

The Empire Wind project, in collaboration with Monmouth University and INSPIRE Environmental, is advancing a new study to better understand local marine life. During the week of November 13th, the research team will deploy 15 acoustic telemetry receivers along the Empire Wind 2 export cable route as part of a larger initiative to install 48 receivers covering the Empire Wind lease area and cable routes.

This research is being conducted to better understand the movements and behaviors of several local species of marine life, particularly those of commercial and recreational importance which include Black Sea Bass, Striped Bass, Winter Flounder and Summer Flounder. Additionally, researchers will closely track the federally endangered Atlantic sturgeon, to contribute to its protection and preservation.

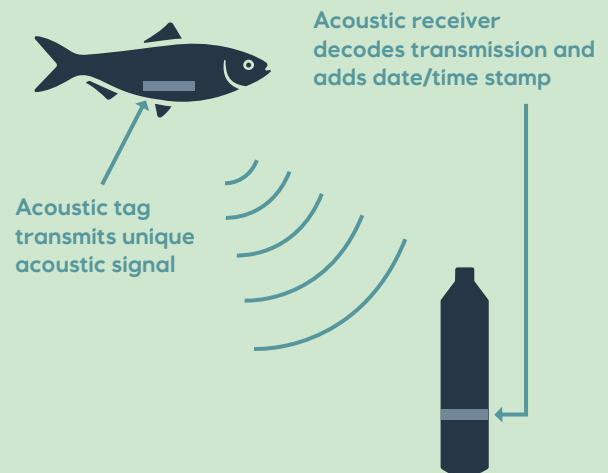
What is Acoustic Telemetry?

Since the 1960s, acoustic telemetry has played a crucial role in ecological and conservation studies. Today, it is used around the world to monitor the migrations of various species, from sharks and sea turtles to marine mammals and fish. It involves using specialized acoustic tags (transmitters) attached to these animals and a series of underwater receivers placed in the area of study. When a tagged animal passes near a receiver, a record is taken to track its movements. You can think of it like passing through a toll booth with an EZ-Pass.

Acoustic Telemetry is a very important and common technology that has played an important role in conservation, environmental impact assessment, fisheries management, and scientific research for decades. In fact, between 1969 and 2019, more than 1,800 scientific studies using acoustic telemetry were published.¹

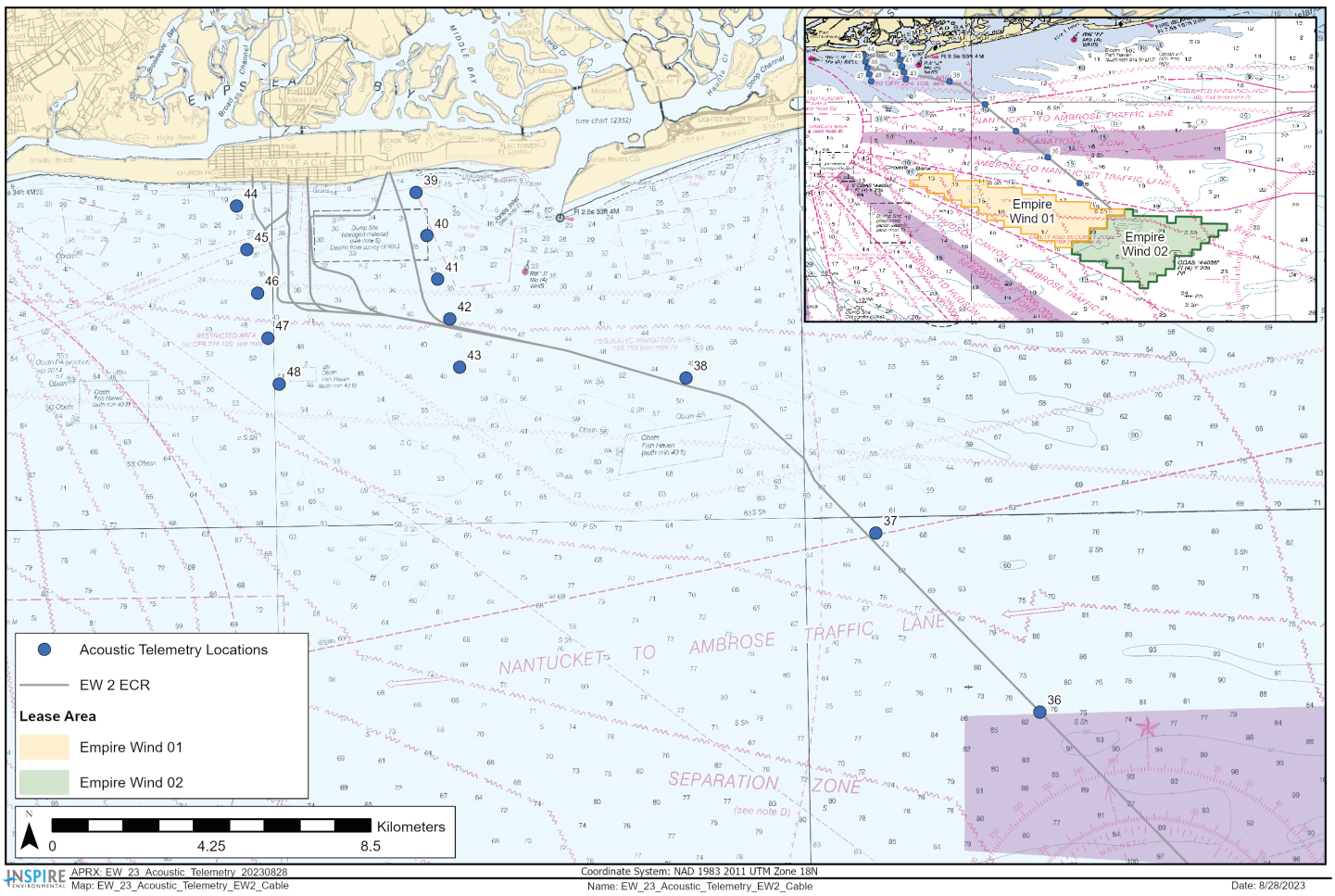
How Acoustic Telemetry Works

1. Scientists attach small, harmless tags to individual animals, which emit unique low-power sound signals imperceptible to humans and fish.
2. Receivers are placed in the study area that are designed to detect and record the signals emitted by the acoustic tags.
3. As tagged animals move around, their tags emit signals. When they pass near a receiver, the signal is detected. The receiver records a time stamp, and often location data, to document the animal's location.
4. Researchers use this data to track the movements, migration patterns and behaviors of tagged animals.



¹Global trends in aquatic animal tracking with acoustic telemetry, Trends in Ecology & Evolution, Volume 37, Issue 1, 2022, Pages 79-94, ISSN 0169-5347.

ACOUSTIC RECEIVER DEPLOYMENT LOCATIONS ALONG THE PROPOSED EMPIRE WIND 2 CABLE ROUTE



What Will Deployment Look Like?

The receivers will be deployed from the R/V Heidi Lynn Sculthorpe, a 49-foot research vessel from Monmouth University. During the week of November 13th, fifteen receivers will be placed in ten locations along the proposed Empire Wind 2 export cable route in state waters near Long Beach. Deployment of the receivers is expected to take only about two days. The receivers will then continuously gather data for the next 1-2 years. As part of the Empire Wind acoustic telemetry monitoring project Monmouth University will tag 325 animals per year over the next two years, with a specific focus on Atlantic Sturgeon, Black Sea Bass, Striped Bass, Winter Flounder, and Summer Flounder. These tagging efforts will be conducted on separate trips not associated with the acoustic telemetry receiver deployments.



The R/V Heidi Lynn Sculthorpe, a 49-foot research vessel from Monmouth University.

The Empire Wind team is excited about the contributions this initiative will make to the study and conservation of our local marine environment, in addition to the safe construction and operation of the project. Empire Wind is committed to ensuring the responsible development of offshore wind energy.

Have a question about Empire Wind?

Contact empirewind@equinor.com

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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.