Who is doing this study?
- Orsted is funding researchers from the Stony Brook University and Cornell Cooperative Extension to carry out a multi-year acoustic telemetry study for several species along the south coast of Long Island.

What species are being studied?
- Acoustic transmitters are being used to track several species including sandbar sharks, dusky sharks, sand tiger sharks, winter skates, smooth dogfish, lobsters, and horseshoe crabs. The movements of tagged animals will be tracked using a network of acoustic receivers.

Why is this study being done?
- This study will investigate the behavior, residence time, and movements tagged animals along the Sunrise Wind Export Cable route to understand if the installation and operation of the cable leads to changes in the behavior and distribution of marine organisms. This has been identified as a priority research topic by several groups, including RODA.

How does this tracking technology work?
- Transmitters emit a coded ping every couple of minutes that can be heard when a tagged animal is within about 3,000 feet of an acoustic receiver. The receivers record the date and time when they hear the pings from each tag. Information about fish presence and movements within study area can later be determined when data are downloaded from all of the receivers.

When will the receivers be put out, and how long will they be left out for?
- The acoustic receivers will be deployed in late July 2022. The receivers will remain in the water, year-round, until 2027. This long duration study is meant to collect data before, during, and after the installation of the Sunrise Wind Export Cable. The project team will retrieve and redeploy the receivers two or three times a year so the data can be downloaded and the batteries on the acoustic receivers can be changed.

How are the receivers moored to the bottom?
- The Innovasea receivers will be deployed using ropeless technology (acoustic release receivers) to minimize risks to marine mammals and other protected species. The receivers will be rigged in a pop-up canister that suspends about 6 feet off the bottom. The canister will be anchored in place with a 150-pound pyramid anchor (see picture on third page). At the end of the study, all gear (acoustic receivers and anchors) will be removed from the water completely.

Where will the receivers be located?
- The receivers will be located in shallow, nearshore locations along the route of the Sunrise Wind Export Cable (see the following chart). The research team is strategically placing these receivers in nearshore waters to avoid interaction with commercial fishing gear, particularly mobile gear fishing effort.

What outreach has been done for this project?
- Starting last summer, Orsted has met with several state and federal resource agencies to discuss the scope and duration of this monitoring study.
- Fisheries Liaisons from the Orsted Marine Affairs team have been meeting with members of the commercial fishing industry that fish in this area to gather feedback on the proposed locations of these receiver arrays. Based on the results of that outreach, significant changes to the layout of the receiver array were made to minimize the potential for conflicts with commercial fishing effort. In particular, we moved the inshore array closer to shore in shallower water and decided not to deploy the offshore receiver array that was initially proposed.
- Mariners Briefings will be distributed throughout the project to keep the public informed of the monitoring activities.

Who can I contact for more information?
- Bradley Peterson, Stony Brook University, bradley.peterson@stonybrook.edu, 631-632-5044
- Matthew Sclafani, Cornell University Cooperative Extension, ms332@cornell.edu
- Greg DeCelles, Orsted Fisheries Science Specialist, grede@orsted.com, 857-408-4497
- Julia Prince, Orsted Fisheries Liaison for New York, jupr@orsted.com, 857-348-3263
Proposed locations for the receiver array

The receivers will be placed at the above locations.
Diagram of an acoustic receiver with the pop-up buoy mooring

**Pop-up buoy (PUB) mooring**

- **Float collar with receiver dimensions:**
  - 21” High
  - 35” Wide
  - 12” Deep

- **Rope Canister:**
  - Contains 225-300 ft of 5/16” Dyneema rope

- **Tether:**
  - 3/8” dyneema rope
  - Length: 6.5 ft
  - Can be shortened to 5 ft

- **Anchor dimension:**
  - 14” High
  - 10” Wide
  - 10” Deep

- **Total weight:** 150 lbs

- **Height of pop-up buoy (top of receiver to bottom of shackle):**
  - 21”

- **Full width:** 35”

- **Total height is 9 ft**
  - Includes pop-up buoy, tether, and weight

- **Weight is assumed to sink into substrate as much as 3 ft**