



# NJDEP Research and Monitoring Initiative: Project Fact Sheet



## Expanding NOAA Aerial Surveys for Large Cetaceans in New Jersey Waters

### Research Motivation

- The primary objective of this project is to expand the geographical area surveyed by NOAA Fisheries and the Northeast Fisheries Science Center (NEFSC) to fill a survey gap off coastal northern NJ to provide coverage of an important whale high-use area.
- This expanded area of survey coverage will contribute to species density maps for the eastern seaboard and improve understanding of whale distribution before, during, and after construction for wind energy development. It will also aid in identifying risks associated with shipping and fishing.

### Principal Investigators and Institutions

- Tim Cole, Research Fishery Biologist for the NOAA Northeast Fisheries Science Center
- Danielle Cholewiak, Ph.D., Senior Bioacoustician and Chief of the Whale Ecology Branch for the NOAA Northeast Fisheries Science Center

### RMI Research Priorities Addresses

- (10) Estimate the seasonal habitat use, abundance, and distribution of whales in the area.
- (11) Evaluate the threat of mortality whales face from vessel strikes.

### Geographic Scope

- Focused on the Mid-Atlantic Bight (MAB) region, expanding into the coastal and mid-shelf waters of Great Bay to Sandy Hook, NJ. While NOAA surveys the whole MAB, this project will support surveys of the NONJ area so that all NJ waters are covered.

### Methods or Approaches Used

- Using expanded transect lines, aircraft carrying human observers will be flown at 1000 feet and 100 knots. Aerial GPS data will be recorded every 8 seconds.

### Expected Outcomes or Deliverables

- Survey condition descriptions and sea states will be delivered through flight reports. There will be a tally of all whale species observed.
- Reports will be made of individual North Atlantic Right Whale sightings, including feeding behavior, location, time, entanglement in fishing gear, and calf presence.
- This survey is for all large cetaceans, but sightings of interesting events, such as a sighting of a killer whale, leatherback turtle, or other large groups of animals may be recorded.

### Regional Coordination / Collaboration / Data Sharing

- This project involves collaboration between the NJDEP and NOAA Fisheries. The expansion will build upon ongoing NOAA efforts to conduct aerial surveys for large cetaceans, with an emphasis on the North Atlantic Right Whale.
- Effort and sighting data along with a flight report will be available on WhaleMap within 24 hours of a survey.
- A final report will be made available through the North Atlantic Right Whale Consortium (NARWC) Identification Database. Photographic sightings will be submitted into the Digital Image Gathering and Information Tracking System (DIGITS).

**Project Completion Date: January 2025**

**Total Project Budget: \$47,383.64**