# Environmental Studies Program: Studies Development Plan | FY 2022–2023

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| Title | Ecological Baseline Study of the U.S. Outer Continental Shelf Off Maine (AT-22-12) |
| Administered by | Office of Renewable Energy Programs |
| BOEM Contact(s) | David Bigger (David.bigger@boem.gov) |
| Procurement Type(s) | Existing IDIQ Contract for AT 15-05 |
| Conducting Organization(s) | TBD |
| Total BOEM Cost | TBD |
| Performance Period | FY 2022–2024 |
| Final Report Due | TBD |
| Date Revised | April 16, 2021 |
| PICOC Summary | |
| *Problem* | Despite previous efforts in the Gulf of Maine (e.g., Atlantic Marine Assessment Program for Protected Species [AMAPPS]), spatial and temporal gaps in survey effort exist near an area identified by the state of Maine for floating offshore wind energy development on the OCS. Collection of these data are essential to understand the potential effects of floating offshore wind activities on wildlife species in the Gulf of Maine. |
| *Intervention* | Conduct aerial surveys using high-resolution cameras and/or boat-based wildlife surveys. |
| *Comparison* | These data will help form a baseline for future comparisons (e.g., pre-construction vs. post-construction). |
| *Outcome* | Baseline data to estimate density and distribution of wildlife (marine mammals, sea turtles, and seabirds) adjacent to and within the area identified by the state of Maine for research floating offshore wind energy research on the OCS. |
| *Context* | OCS off Maine in the North Atlantic Plan Area |

**BOEM Information Need(s):** Baseline information is needed on the distribution and abundance of marine mammal, bird, and sea turtle species in the Gulf of Maine to assist in the environmental review of impacts from floating offshore wind energy development. The State of Maine identified a research area for floating offshore wind development on the OCS. The data collected from this effort will be used to inform BOEM's planning processes, NEPA analyses (including cumulative effects), region specific environmental assessments, review of applications for permits, and ESA consultations.

**Background:** There is interest in a regional approach to develop floating offshore wind energy in the Gulf of Maine. In December 2019, an Intergovernmental Renewable Energy Task Force for the Gulf of Maine was convened to facilitate coordination and consultation among Federal, state, local, and tribal governments. The state of Maine has announced its intention to apply for the country's first offshore floating wind research array in the Gulf of Maine. BOEM has funded several regional efforts (e.g., AMAPPS, GoMMAPPS , South Atlantic Baseline) that are critical to improving our understanding of seabird, marine mammal, and turtle distributions on the OCS.

For this effort, seasonal High-Resolution Aerial and/or Boat-based Wildlife Surveys will be conducted for two years to cover the near and in the area identified by the state of Maine for research array and implement those surveys to obtain spatially explicit density and abundance estimates. The approach will be consistent with BOEM's Survey Guidelines (http://www.boem.gov/Survey-Guidelines/).

**Objectives:** The objective of this study is to obtain contractor support to design and conduct multi-season boat-based and/or aerial-digital marine wildlife surveys and to establish an ecological baseline describing the distribution and abundance of marine seabirds, mammals, and sea turtles on the US OCS off Maine.

**Methods:** The surveys will cover approximately 5,000 km$^2$ starting from Federal-state boundary (3 nautical miles) and will include the area identified by the state of Maine for research array. The area has been surveyed sporadically, and there are large spatial gaps in relative bird distribution and abundance, particularly in winter and spring (NROC 2009).

The effort will coordinate with USFWS and others that may be surveying in the Gulf of Maine. The data collected from these baseline surveys will be added into databases like the Compendium of Avian Occurrence Information database and the Ocean Biogeographic Information System Spatial Ecological Analysis of Megavertebrate Populations (OBIS-SEAMAP). Ultimately, the baseline data could then be used to update avian and other wildlife distributional maps like those developed through BOEM's interagency agreement with NOAA (Winship et al. 2018) and distributed to the regional planning bodies (e.g., http://midatlanticocean.org/ and http://devel.northeastoceandata.org/) and http://marinecadastre.gov/).

**Specific Research Question(s):** What is the abundance and distribution of wildlife species using the OCS off Maine?

**Current Status:** N/A

**Publications Completed:** N/A

**Affiliated WWW Sites:** N/A

**References:**

NROC (Northeast Regional Ocean Council). 2009. Northeast Ocean Data Portal, www.northeastoceandata.org. Date accessed: 04/16/2021.

Winship AJ, Kinlan BP, White TP, Leirness JB, Christensen J. 2018. *Modeling At-Sea Density of Marine Birds to Support Atlantic Marine Renewable Energy Planning: Final Report.* U.S. Department of the Interior, Bureau of Ocean Energy Management, Office of Renewable Energy Programs, Sterling, VA. OCS Study BOEM 2018-010. x+67 pp.