

RENEWABLE ENERGY PROGRAM: Ongoing Studies

Region: Atlantic

Planning Area(s): North Atlantic

Title: Field Surveys and Marine Resource Characterization for Offshore Wind Energy Planning in the Massachusetts Wind Energy Area

BOEM Cost: \$1,345,614

Period of Performance: FY 2013-2016

Conducting Organization(s): Massachusetts Clean Energy Center

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Description:

Background: BOEM oversees the exploration and development of oil, natural gas, and other minerals and renewable energy on the nations' Outer Continental Shelf (OCS). The program not only supports decisions made within the Department of the Interior, but also provides coastal states, tribes and local governments with the information necessary to ensure that all stages of offshore energy and mineral activities are conducted in a manner to protect both human and natural environments.

BOEM partnered with the Commonwealth of Massachusetts via a Cooperative Agreement for a continuation of protected species field surveys in the wind energy area located off of Massachusetts's coast. BOEM and the Commonwealth have contracted with the New England Aquarium, Cornell, and the College of Staten Island to conduct a second and third year of surveys of marine mammals, sea turtles, and birds. The surveys cover the Massachusetts Wind Energy Area identified by BOEM through the Renewable Energy Intergovernmental Task Force process. The study is a continuation of an ongoing survey effort and would involve the same principle investigators and sampling methodologies. BOEM will provide technical expertise and review the products. In addition, this 2nd and 3rd year of surveys will be expanded to cover an adjacent Wind Energy Area off both Rhode Island and Massachusetts.

Objectives: Develop a baseline understanding of the distributions and abundances of avifauna, North Atlantic Right Whales and other large whales, and sea turtles in the Massachusetts Wind Energy Area. This research will help further characterize species' usage of the MA Offshore Wind Energy Area in order to assist the Commonwealth of Massachusetts and the Federal government in assessing the location and configuration of future offshore wind energy development.

Major tasks:

1. Observer sightings for density and abundance estimates of seabirds, large whales (with a focus on right, fin and minke whales) and turtles in an area of outer continental shelf federal waters off Massachusetts – an area proposed for offshore wind energy development.
2. Opportunistic observer sightings of other cetaceans, seals, sharks, and fish.
3. Automated vertical photography to capture smaller, cryptic species likely to be missed by observers scanning out to 2 nm. Distribution and abundance estimates of species sighted. Opportunistic vertical photography detection of mammals, sharks, fish and fixed fishing gear.
4. Acoustic detections showing hourly presence of right, fin and minke whales.
5. Acoustic detections showing daily presence of humpback and blue whales opportunistically.

Importance to BOEM: This information will facilitate the review of construction and operation plans by BOEM and the Commonwealth.

Current Status: Final surveys for this project were completed in the winter of 2015. The final report for the marine mammal and turtle surveys is available on the BOEM website. The avian report will be available in Fall 2016.

Final Report Due: December 2016

Publications: None.

Affiliated Web Sites: <http://www.masscec.com/content/field-studies-whales-and-sea-turtles-offshore-alternative-energy-planning>

Revised Date: July 28, 2016

ESPIS: Environmental Studies Program Information System

All *completed* ESP studies can be found here:

http://www.data.boem.gov/homepg/data_center/other/espis/espisfront.asp

Year 1 Report (not financially supported by BOEM):

<http://www.masscec.com/content/field-studies-whales-and-sea-turtles-offshore-alternative-energy-planning>