

OFFICE OF RENEWABLE ENERGY PROGRAMS: Ongoing Studies

Region: Atlantic Region

Planning Area(s): North Atlantic

Title: Collaborative Baseline Survey Offshore Massachusetts: A Prototype for Partnership in Sound Science

BOEM Cost: \$400,000

Period of Performance: FY2012-2013

Conducting Organization(s):

- Bureau of Ocean Energy Management – Offshore Renewable Energy Programs
- United States Geological Survey – Woods Hole Coastal & Marine Geology Science Center (Geophysics; Interagency Agreement M12PG00031)
- National Park Service – Submerged Resources Center (Archaeology; Interagency Agreement M12PG00032)
- University of Rhode Island (Paleogeology; Cooperative Agreement M12AC00022)
- Cardinal Point Captains (Crew Support; M12PS00046)
- Jasco Applied Sciences (Acoustics; M10PC00055)

BOEM Contact: [Brandi Carrier Jones](#)

Description:

Background: On November 23, 2010, Secretary of the Interior Ken Salazar announced the “Smart from the Start” Atlantic wind energy initiative to accelerate the responsible development of wind energy on the Atlantic Outer Continental Shelf (OCS). The initiative calls for the identification of areas on the Atlantic OCS that appear most suitable for commercial wind energy activities, and the opening of these areas for leasing and detailed site assessment activities. As a result of that initiative, BOEM is preparing to issue commercial wind energy leases offshore Massachusetts within the Massachusetts (MA) WEA. The lack of data in the MA WEA has been an issue of stakeholder concern at multiple renewable energy state task force meetings. BOEM and the task force members would like to collect baseline data within the MA WEA to make sound decisions about how to minimize impacts, to form post-construction comparisons during monitoring of environmental changes that might be discernible later, and to meet its responsibilities under Sections 106 and 110(a)(2)(A), (B), (C), and (E) and 110(b) of the National Historic Preservation Act (NHPA).

The northern boundary of the MA WEA begins approximately 12 nautical miles (nm) south of Martha’s Vineyard and 13 nm southwest of Nantucket. From its northern boundary, the WEA extends roughly 33 nm south. The WEA has an east/west extent of approximately 47 nm. The northern boundary of the WEA is at an approximately 30-meter (m) ocean depth and extends to approximately the 60 m bathymetric contour along the southern boundary. The entire area is 877 square nm (742,974 acres; 300,670 hectares).

BOEM needs to independently verify the accuracy and effectiveness of its own and others’ recommendations for conducting surveys for geological, geophysical, hazards, benthic habitats, and archaeological information. BOEM’s [Guidelines for Providing Geological and Geophysical, Hazards, and Archaeological Information Pursuant to 30 CFR Part 585](#) (Guidelines) are well-

founded but one of the suggestions received by the National Ocean Partnership Program (NOPP) recommended that the agency should require either side scan sonar and multibeam bathymetry surveys or interferometric sonar surveys. Additionally, consultations have resulted in the recommendation that BOEM add paleolandscape reconstructions to its requirements for reporting archaeological resources. Testing the recommendation for including interferometric sonar surveys in further revision of the *Guidelines* and understanding the acoustic effects of our surveys on certain species, such as acoustically-sensitive marine mammals, are needed. All data collected during the collaborative baseline survey, aside from specific sensitive site location information (such as the locations of shipwrecks), will be shared with partners, developers, and the public.

To meet these needs, BOEM has invited a number of federal, state, and tribal partners to collaborate on a baseline survey within the MA WEA. These agencies will provide scientific and technical advice, share resources, and assist BOEM with conducting and analyzing the resulting data. Future collaborative research programs of the type discussed herein within other wind energy areas may be pursued by BOEM.

Objectives: This project will achieve the following objectives:

- provide data to consider the accuracy, effectiveness, and efficiency of various aspects of the guidelines and recommendations for conducting surveys, including the use of interferometric sonar and paleolandscape reconstructions;
- obtain limited baseline geophysical, archaeological, and acoustic data within selected portions of the MA WEA and serve as a prototype for future data-gathering efforts, as time permits; and
- leverage partnerships with federal, state, and tribal governments to share project-related resources such as scientific staff, survey equipment, and ship time.

Importance to BOEM: BOEM is preparing to issue leases within the MA WEA and is refining guidelines for archaeological surveys on the OCS that will provide guidance to potential applicants and others. The Collaborative Baseline Survey offshore Massachusetts will provide needed data to support decision-making for BOEM, potential lessees, the public, and other federal, state, local, and tribal partners.

Current Status: Cooperative and Interagency Agreements and commercial contracts awarded in July and August 2012. Survey activities conducted between August and September 2012. Data are being analysed and draft technical reports and paleolandscape reconstructions will be prepared winter 2012-2013.

Final Report Due: August 2013

Publications: None

Affiliated Web Sites: None

Revised Date: September 10, 2012