

## **BOEMRE ENVIRONMENTAL STUDIES PROGRAM: ONGOING STUDIES**

**Region:** Atlantic

**Planning Area(s):** North Atlantic

**Title:** Developing Environmental Protocols and Modeling Tools to Support Ocean Renewable Energy and Stewardship (AT-10-x16)

**Total Cost:** \$745,000 (\$230K BOEMRE, \$250K DOE, \$300K NOAA)

**Period of Performance:** FY 2010-2012

**Conducting Organization:** University of Rhode Island

**BOEMRE Contact:** Algene Byrum

### **Description:**

Background: This study builds upon 35 years of world renowned expertise in applying coastal and marine spatial planning tools towards ecosystem based management and ocean renewable energy site evaluation and management, most recently demonstrated through the Rhode Island Ocean Special Area Management initiative (Ocean SAMP). Rhode Island is well-positioned to be the first state in the nation to have a wind farm operating in its coastal waters in 2012. Representing the largest single investment in research in Rhode Island coastal waters in at least three decades, the Ocean Special Area Management Plan has catapulted Rhode Island to a national leadership position in terms of siting offshore renewable energy resources projects.

This effort will build upon the recently approved Rhode Island Ocean SAMP, which allowed Rhode Island to better manage its offshore waters and to proactively determine where and under what conditions offshore renewable energy activities should be allowed. The Ocean SAMP will serve as a federally recognized coastal management and regulatory tool that, using the best available science, will promote a balance and comprehensive ecosystem-based adaptive management approach to the development and protection of Rhode Island's ocean-based resources, including the siting of offshore renewable energy.

### Objectives:

- To develop and test standardize protocols for baseline studies and monitoring for the collection and comparison of scientifically valid and comparable data for specific offshore renewable energy issues that are developed in coordination with and ultimately supported by scientists, regulators, and industry.
- To develop a conceptual framework and approach for cumulative environmental impact evaluation of offshore renewable energy development, as part of a larger framework for a site evaluation tool for decision makers.

Methods: These protocols and monitoring procedures will be integrated and tested through both the Ocean SAMP monitoring and evaluation process and through the modeling tools. In order to ensure approval and adoption of final products, avoid duplication, and leverage other initiatives, the project team will engage major stakeholders (regulators, scientists, industry) in the implementation of all project objectives and task.

Importance to BOEMRE: In order for BOEMRE to effectively manage offshore wind, wave, and hydrokinetic energy projects, a significant amount of environmental data needs to be collected in baseline and pre-construction studies, and in operational monitoring. Currently, no standards exist to ensure that data collection methodologies produce scientifically valid and comparable data. In order to ensure that these protocols are accepted by both regulatory agencies and developers alike, and to reduce potential conflicts, it is important that these protocols be developed in a fashion that takes into account input from scientist, regulators, environmental NGOs, and industry.

**Current Status:** Awarded 9/10/10 and ongoing.

**Final Report Due:** September 30, 2012

**Publications:**

**Affiliated WWW Site:**

**Revised Date:** December 16, 2010