Environmental Studies Program: Studies Development Plan | FY 2023–2024

Field	Study Information
Title	Baseline Tourism and Recreation Along the Gulf of Maine (AT-23-04)
Administered by	Office of Renewable Energy Programs
BOEM Contact(s)	David Bigger (david.bigger@boem.gov)
Procurement Type(s)	Cooperative Agreement
Performance Period	FY 2024–2027
Final Report Due	TBD
Date Revised	September 15, 2023
Problem	The availability and quality of tourism and recreations activities and the revenues of tourism- and recreation-dependent businesses may be reduced due to the presence of offshore wind farms.
Intervention	Determine if offshore wind development negatively affects recreation and tourism and quantify the results.
Comparison	The study will document necessary baseline (i.e., before) tourism/rec data so that any changes after an offshore wind farm is installed can be measured and compared to determine if tourism and recreation opportunities, quality, and/or associated revenues are reduced.
Outcome	Baseline tourism and recreation information before offshore wind farm construction to facilitate future comparison after wind farm construction.
Context	Gulf of Maine, which is in the early stages of planning for a lease sale with only one task force meeting held thus far.

BOEM Information Need(s): The National Environmental Policy Act requires BOEM to consider the environmental impacts of proposed actions before making decisions, which includes understanding impacts on the Human Environment, such as "aesthetic, historic, cultural, economic, social, or health" impacts (40 CFR 1508.8). This study will provide empirical data regarding the impacts or non-impacts (e.g., recreation, employment, small businesses, property values, heritage tourism) from offshore wind development in the Gulf of Maine including Maine, New Hampshire, and Massachusetts. This information will also be critical when responding to the concerns of state and local governments, citizens, and various stakeholder groups (e.g., property owners, small business owners, boaters).

Background: Potential impacts to tourism and recreation are a concern expressed by coastal communities. Evaluation of the potential impacts requires baseline information about the recreation use in an area as well as post construction information to determine the impacts. BOEM collected some baseline information about tourism and recreation to provide baseline information (ICF Incorporated, LLC. 2012), but this did not include the Gulf of Maine. The 2018 BOEM report, *Methodology for Analyzing the Effects of Block Island Wind Farm (BIWF) on Rhode Island Recreation and Tourism Activities* (Smythe et al. 2018), identifies an extensive list of potential indicators of tourism and recreation impacts and notes the importance of establishing baseline data prior to development. BOEM held the first task force meeting for the Gulf of Maine in December of 2019 and anticipates offshore

wind development to occur within the next decade in the area. Since BOEM is in the early stages of planning, this provides an opportunity to apply the methodology developed in the BOEM report.

Objectives: The objective of this study is to enhance our understanding of impacts on the human environment through a longitudinal study of the areas surrounding the Gulf of Maine. Methods: This research will enable observation, and documentation of the human environment in the Gulf of Maine pre-development, during construction and for several years after operations. These observations will establish baseline conditions and will characterize conditions of the human environment over multiple years, allowing BOEM to capture trends and gauge change through time.

This study would be organized into three phrases: study design, data collection & analysis, and closeout. The 'study design' phase would include a body of integrated and iterative activity, namely: site selection; stakeholder engagement; indicator identification, refinement, and testing; and development of a sensitivity assessment (vetting the accuracy and reliability measurement). The 'data collection and analysis' phase would include the following: collection of primary and secondary data capturing baseline conditions (pre-construction); conditions during construction and operations; and analysis—along with simultaneous sensitivity testing. The 'closeout' phase would include final analysis, synthesis, and report writing.

Specific methods include:

- Identify and circumscribe the area/population of study that captures the area of impacts
 from two wind farm sites, and a representative control site, to ensure the predevelopment observations are applicable to two or more of the upcoming projects in the
 development pipeline.
- Conduct stakeholder engagement to ground, vet, and refine indicators produced from the Block Island Study (Smythe et al. 2018), and to ensure that local and regional concerns are identified in the study, and to consider additional indicators if needed. The specific approach to engage could include an advisory committee, focus groups, or outreach meetings.
- The anticipated domains or impact areas of study would include: recreation (fishing, diving, boating, sailing, beach going), visitation, property values/rental rates, wind farm specific commerce (*i.e.*, merchandise, tours, employment), and cultural/historic sites.
- Collect secondary (e.g., local property values, rental rates, visitation rates, proprietary industry data) and primary data (i.e., direct observation and participant observation of historic sites, recreation areas) over four observation periods, covering pre-construction, construction, and operations.

Specific Research Question(s):

- 1. How does the construction and operation of a large Outer Continental Shelf wind farm impact the human environment?
- 2. What is the nature of the impact (e.g., significance, persistence, qualitative change)?
- 3. Are the indicators valid (*i.e.*, do they measure what they are intended to measure)? Are some indicators more sensitive than other indicators to development and/or operations activity?
- 4. Is there regional variation? Do impacts or relationships appear to be patterned? Does

socioeconomic (*i.e.*, social, cultural, historic, economic) context play a discernible role in the impacts?

Current Status: N/A

Publications Completed: N/A

Affiliated WWW Sites: N/A

References:

- ICF Incorporated, LLC. 2012. Atlantic Region wind energy development: recreation and tourism economic baseline development. Herndon (VA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 35 p. Report No.: OCS Study BOEM 2012-085.
- Industrial Economics, Inc. 2012. Identification of Outer Continental Shelf renewable energy spaceuse conflicts and analysis of potential mitigation measures. Herndon (VA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 414 p. Report No.: OCS Study BOEM 2012-083.
- Parsons G, Firestone J. 2018. Atlantic offshore wind energy development: values and implications for recreation and tourism. Sterling (VA): U.S. Department of the Interior, Bureau of Ocean Energy Management. 52 p. Report No.: OCS Study BOEM 2018-013.
- Smythe T, Smith H, Moore A, Bidwell D, McCann J. 2018. Analysis of the effects of Block Island Wind Farm (BIWF) on Rhode Island recreation and tourism activities. Sterling (VA): U.S. Department of Interior, Bureau of Ocean Energy Management. 88 p. Report No.: OCS Study BOEM 2018-068.