

Environmental Studies Program: Ongoing Study

Title	Support for Regional Wildlife Science Collaborative Ocean Portal Products and Services (AT-23-07)
Administered by	Office of Renewable Energy Programs
BOEM Contact(s)	Kyle Baker (kyle.baker@boem.gov)
Procurement Type(s)	Contract
Conducting Organization(s)	Regional Wildlife Science Collaborative
Total BOEM Cost	\$450,000
Performance Period	FY 2023–2026
Final Report Due	August 2026
Date Revised	August 21, 2023
PICOC Summary	-
<i><u>Problem</u></i>	Regional wildlife science collaboration does not have the necessary planning, collaboration, and visualization tools to cooperate on past, current, and future studies occurring in offshore wind energy areas.
<i><u>Intervention</u></i>	Provide support to the Regional Wildlife Science Collaborative (RWSC) to develop products and maintenance of products in the Ocean Data Portals
<i><u>Comparison</u></i>	The portal products will be compared to RWSC compilations of Atlantic research efforts and planned research efforts developed through experts on the RWSC taxa subcommittees.
<i><u>Outcome</u></i>	The study will improve regional wildlife science collaboration to better address regional ocean science goals.
<i><u>Context</u></i>	North- and Mid-Atlantic Wind Energy Areas

BOEM Information Need(s): BOEM needs to better coordinate science priorities and research objectives to better understand stakeholder concerns and coordinate with researchers to understand the potential behavioral, physical, and physiological impacts to marine protected species from offshore wind construction. An effective means to accomplish these goals is to leverage the existing structure of the RWSC and its coordination with subject matter subcommittees to identify priorities and coordination with the ocean data portals to create the necessary products and tools to facilitate better regional science. This information in turn will aid in environmental impact analyses for National Environmental Policy Act (NEPA), Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Marine Mammal Protection Act (MMPA) compliance.

Background: In July 2021, the Northeast Regional Ocean Council, the Mid-Atlantic Regional Council on the Ocean, and the Coastal States Stewardship Foundation were selected to host the newly establishment RWSC. The RWSC governance structure is dependent upon financial contributions from participating sectors for continued support of costs and needs of the RWSC (https://neoceanplanning.org/wp-content/uploads/2021/09/Final-RWSE-Governance-Structure_July-2021.pdf). There are many overlapping goals BOEM shares with the RWSC that can provide support to

develop products and tools to assist BOEM in its mission to manage development of U.S. Outer Continental Shelf (OCS) energy and mineral resources in an environmentally and economically responsible way. BOEM has already begun to work collaboratively with NOAA, States, and the RWSC to create an ocean data portal mapping tool to facilitate planning and research discussions with stakeholders (<https://www.northeastoceandata.org/CC43tZuT>) and has held workshops in support of RWSC efforts (Field et al. 2021a; Field et al. 2021b). The initial feedback on this early version of the passive acoustic monitoring tool was extremely positive and has assisted States and BOEM coordinate better to determine PAM deployment locations. Stakeholders has indicated that such tools are direly needed to facilitate better science coordination for offshore wind. Clearly, such efforts would not only benefit BOEM, but also provide valuable service to a multitude of other stakeholders involved with offshore wind development. Areas of coordination needed include oceanic data collection, passive acoustic monitoring, tagging efforts of birds, turtles, and marine mammals, aerial and shipboard surveys completed or planned to occur in the Atlantic. Preliminary discussions between BOEM and stakeholders has also explored the types of data products that would be most useful in providing information for analyses under NEPA, ESA, MBTA, MMPA, and for construction and operations plan development by industry. A complementary effort to provide support for the development of research priorities for taxa groups including the development of portal products and analytical tools would ensure stakeholder outreach and communication occurs in the development of such plans.

Objectives: Coordinate with stakeholders to create ocean data portal products and tools to support regional science collaboration and availability of ocean data products.

Methods: The RWSC will convene subject matter experts from different disciplines to develop research-priorities. Existing and planned research will be compiled. Completed research data will be assessed for the development of ocean data portal products. Priority work products and services through the ocean data portals will be completed. Additional work may be identified and developed subject to the availability of future funding. Additionally, planning tools for future research will be developed and made available on the ocean data portals. Products and serves will include tools for passive acoustic monitoring, aerial and vessel-based surveys, tagging studies and tracking data, and oceanic data collection. The information needs, and products created will be developed with input from BOEM and the RWSC taxa subcommittees and may include the following:

- Comprehensive data base of all ongoing and planned wildlife research in the Atlantic
- Visualization/information system for offshore wind & environmental research and data collection
- Developing interactive web tools to visualizing ongoing research activities that may include PAM, tagging, timing and footprint of wind farm construction, VENMCO receiver network, and vessel and aerial survey transects
- Focal species of tagging efforts and the location of tagging from BOEM ESP projects and OCS operators
- Developing interactive mapping tools showing the locations of the research with popups that display information on who, what, where, why the research or data collection activity is occurring
- Hosting spatial data and make available as web services leveraging existing platforms whenever possible
- Hosting meetings and workshops as required

Specific Research Question(s):

1. What are the research priorities and strategies for different geographically located wind energy areas (e.g., Maine, New England, New York Bight, and Mid-Atlantic)?
2. How will the development of research planning tools benefit the offshore wind research community?
3. Coordinating with the RWSC subcommittees and BOEM, what ocean data portal products and tools will facilitate improved research coordination, data analysis, and data products?

Current Status: The study was awarded in August 2023.

Publications Completed: N/A

Affiliated WWW Sites:

Northeast Ocean Data Portal Passive Acoustic Monitoring Planning Tool:

<https://www.northeastoceandata.org/NkVAqcoC>

Regional Wildlife Science Collaborative: <https://neoceanplanning.org/rwse/>

References:

Field P, Baker K, Van Parijs SM, Staaterman E, Cody MB. 2021a. Improving monitoring, data consistency, archiving, and access for improved regional integration of renewable energy Science. Workshop summary on passive acoustic monitoring and marine mammals - June 2-3, 2021. Sterling (VA): U.S. Department of the Interior, Bureau of Ocean Energy Management.

Field P, Bigger D, Loring P, Cody MB, Baker K, Shumchenia E. 2021b. Improving monitoring, data consistency, archiving, and access for improved regional integration of renewable energy science: workshop on satellite and GPS tracking of avian species - June 29-30, 2021. Sterling (VA): U.S. Department of the Interior, Bureau of Ocean Energy Management.