



NJDEP Research and Monitoring Initiative: Project Fact Sheet



Offshore wind farm contributions to a regional environmental and ecological monitoring system to address multi-user needs

Research Motivation

- The marine user community depends on oceanographic, meteorological, and ecological observations to support multi-use decision-making, regulation, and policy. To meet this demand for observations, there is a clear need to develop a well-defined, feasible, and built-to-purpose environmental and ecological observing system that will collect the best available data to fulfill the state's mandates to protect and responsibly manage New Jersey's marine and coastal resources.

Principal Investigators and Institutions

- Josh Kohut and Michael Crowley, Rutgers University Center for Ocean Observing Leadership
- Douglas Zemeckis, Rutgers Cooperative Extension
- Anthony MacDonald & Tom Herrington, Monmouth University Urban Coast Institute
- Rebecca Green and Cris Hein, National Renewable Energy Laboratory
- Kris Ohleth, Special Initiative on Offshore Wind

RMI Research Priorities Addressed

- Priorities 1-12 are addressed through this project. We will deliver guidance on how to monitor wildlife (priorities 3-12), the ocean and atmospheric environment (priority 2), and the potential data management that could be leveraged or required to store all the information (priority 1).

Geographic Scope

- New Jersey/New York Bight as well as the greater Mid Atlantic Bight

Methods or Approaches Used

- Task 1 recommends language that describes appropriate environmental and ecological requirements for individual wind energy projects responding to NJBPU offshore renewable energy credit (OREC) solicitations.
- Task 2 engages the broad stakeholder community to develop a conceptual plan outlining individual wind farm contributions to a regional environmental and ecological monitoring system that would meet the needs of the offshore wind developers, a diversity of marine user community and stakeholder groups, and inform the mitigation of use conflicts.

Expected Outcomes or Deliverables

- The expectation is that this work will provide a roadmap to states and developers for a standard suite of equipment and approaches to support a consistent regional research and monitoring effort and consistent information/data provided to ocean users amongst east coast wind farms.

Regional Coordination / Collaboration / Data Sharing

- In addition to the PIs, our team will engage partners across a range of expert communities that include, but are not limited to, NJDEP, NJBPU, NYSEDA, Wind Developers, BOEM, NOWRDC, IOOS/MARACOOS, ROSA, RWSC, eNGOs and fishers and other ocean users.

Project Completion Date

August 31, 2025

Total Project Budget

- \$282,289