



RWSC Research Funding Strategy Meeting

September 10,11, 2024 | 3:00-4:30 pm ET

Purpose and Objectives:

Implementing the RWSC Science Plan means developing a better understanding of the offshore wind and wildlife data landscape so that past, current, and future data are of high quality, interoperable, discoverable, and preserved for new regional scale analyses and studies.

This meeting was the first annual meeting convened by RWSC to provide the forum for funders of offshore wind and wildlife/environment research to share information with each other and RWSC so that data collection and research conducted in the upcoming year is coordinated and results in high-quality data that fill current data needs. The objectives of the meeting were to:

- Hear from RWSC and funders about coordination that is needed to improve data collection and research outcomes.
- Discuss opportunities to align or standardize data collection methods and sharing protocols to ensure regional interoperability.
- Share with RWSC and other funders any strategy and planning for how funding may be deployed over the next year.

Invitees: RWSC Sector Caucus members (Federal, State, Offshore Wind Industry, eNGO); Responsible Offshore Science Alliance (ROSA) staff; National Offshore Wind Research & Development Consortium (NOWRDC) staff

Meeting Materials

- Pre-Meeting Briefing Packet
- Meeting Agenda
- Presenter Slides
- View the full list of attendees and affiliations in Appendix 1

The first Annual RWSC Funding Strategy Meeting took place virtually over two consecutive afternoons in September 2024 (90-minute meetings each). Approximately 74 individuals participated on Day 1 and 62 on Day 2. A breakdown of participants by RWSC Sector Caucus is shown below. Participants represented most of the entities requiring and/or funding voluntary data collection and research related to offshore wind, wildlife, and environment in U.S. Atlantic waters.





Participants by RWSC Sector Caucus

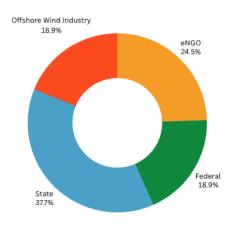


Figure 1. Day 1 and Day 2 participants by RWSC Sector Caucus.

A full list of attendees can be found in Appendix 1.

Day 1

Welcome/ Introductions

Emily Shumchenia (RWSC) and Pat Field (Consensus Building Institute) gave a high-level overview of the agenda and goals for the two-day Annual Funding Strategy Meeting. This meeting is the first annual meeting convened by RWSC to provide the forum for funders of offshore wind and wildlife/environment research to share information with each other and RWSC so that data collection and research conducted in the upcoming year is coordinated and results in high quality data that fills current data needs. The focus of Day 1 was to hear from the RWSC and Federal agencies on work to promote regional collaboration.

RWSC's Synthesis of Offshore Wind and Wildlife Research in U.S. Atlantic Waters

To introduce the conversation of coordination, the RWSC staff provided a synthesis of ongoing and planned offshore wind and wildlife research in U.S. Atlantic waters using the RWSC data landscape. Christian Laspada (RWSC) provided an update on the RWSC Ongoing Offshore Wind and Wildlife Research Database, which compiles ongoing and planned offshore wind and wildlife research projects. The RWSC database shows 102 active projects and 31 total funders across all subregions in the U.S. Atlantic waters. A similar synthesis for each subregion was provided to participants in the pre-meeting materials. Christian emphasized that the RWSC database has the potential to be a powerful source of public information that would allow for better research coordination and funders can help by providing



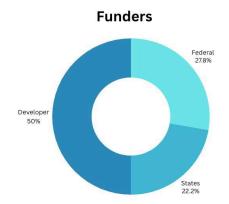


information on the projects they fund. Next, Samantha Coccio-Schillo (RWSC) gave an overview of the RWSC Research Planning Map and the process of displaying GIS data from ongoing and planned research projects on the public map. The information displayed on this public map was previously scattered across various platforms. The RWSC Research Planning Map serves as a single location to see and interact with all of this research data. Rachael Blake (Intertidal Agency/RWSC) gave an overview of the RWSC data governance program, including efforts to identify suitable data repositories and develop a centralized data catalog to improve data discoverability and reuse. Emily tied this synthesis together by explaining that it is clear that the funding and data management landscapes are not fit for the purposes of addressing some of these regional big-picture research questions that the Science Plan articulates. There is currently a huge risk of data loss. Emily provided two solutions for this:

- RWSC Subcommittees are working with data repositories to develop and/or identify best practices and standards for all offshore wind and wildlife data streams. Funders should require their use.
- RWSC facilitates active coordination among Sector Caucuses (funders) to align funding toward holistic outcomes.

Lastly, Emily shared the <u>RWSC Research and Data</u> page which lists recommended data standards, contract language, various policies, and other resources to help align funding and make progress toward more active coordination. More information on all of these presentations can be found on slides 5-21.

Participants asked if RWSC could provide information about the proportions of each Sector among the 31 funders and/or the proportion of the 102 projects funded by each Sector. Christian provided the following statistics from the RWSC database:



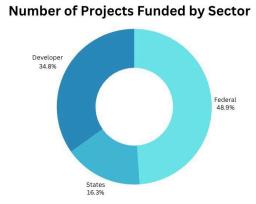


Figure 2. The total number of funders broken down by sector is shown on the left. Half of the 31 funders in the RWSC Database are offshore wind developers/companies. The number of projects broken down by each funding sector is shown on the right. Of the ~100 active projects, around half are funded by federal agencies.





This session closed with a poll asking if the funders on this call would agree to require the recommended data standards and data storage protocols and include coordination language in data collection and research RFPs, contracts, grants, etc.? Participants responded in chat. Any participants not in attendance are welcome to reach out to emily.shumchenia@gmail.com and christian@rwsc.org to discuss further.

Federal Activities

BOEM Environmental Studies Program and Implementation of POWERON Through RWSC

Rodney Cluck, Chief, Division of Environmental Sciences, Bureau of Ocean Energy Management

Rodney Cluck (BOEM) presented an overview of BOEM's Partnership for an Offshore Wind Energy Regional Observation Network (POWERON), which seeks to fund a regional passive acoustic monitoring network in U.S. Atlantic waters through Inflation Reduction Act (IRA) funds to BOEM and annual payments from offshore wind lease holders who opt into the program as part of their required marine mammal monitoring. POWERON seeks to understand if there are any measurable effects and shifts in baleen whale distribution because of offshore wind development, or other types of anthropogenic stressors. To implement POWERON, BOEM is partnering with NOAA Fisheries and RWSC. RWSC will receive approximately \$4M over three years to manage the coordination, planning, and deployment of passive acoustic monitoring instrumentation and ensure that the resulting data and data products are processed and archived in a standardized way. Questions and discussions from participants included:

- Does POWERON focus mainly on getting, storing, and quality controlling the data? Yes, there
 is no expectation of funding analysis of these data by developers. Data analysis will be
 funded separately and overseen by BOEM, NOAA, and RWSC.
- Is there a timeline of when the first round of analysis will be done? First-order data products (e.g., whale detection data) will be made available on a rolling basis, every 6 months. These data will be posted publicly.
- Should there be a similar program for birds and bats? Yes, but more funding is needed. Similar partnerships can also be done for eDNA analysis and other species.
- Does POWERON have a mechanism for maintenance funding to keep equipment in the field? The mechanism that BOEM envisions partially supporting this is an annual contribution from the developers that opt-in to the program. Developers would annually pay into the fund to cover the costs for all the things that were discussed. Additional funds would be needed to expand monitoring outside of the lease areas that have opted-in.





NOAA Fisheries Regional Coordination in Support of Federal Survey Mitigation

Andy Lipsky, Chief, Offshore Wind Ecology Branch, NOAA Northeast Fisheries Science Center

Andy Lipsky (NOAA) presented an update on NOAA's survey mitigation strategy and new monitoring initiatives. This included an overview of draft Northeast Survey Mitigation Plans. The research and monitoring priorities for the Northeast are to improve the understanding of biology, ecology, and oceanography and to assess offshore wind impacts. Andy gave an overview of projects to address these priorities, including passive acoustic monitoring, aerial survey efforts, and data standards development. See the presentation slides here for more information. Questions and discussions from participants included:

 Has NOAA received an ongoing budget to conduct these projects? NOAA has received limited funding to begin some of these efforts, including funds from the IRA.

Coordination Through RWSC for Whale Detection Technology Evaluation Workshops Attracted Additional Non-Government Funds

Joy Page, Environmental Research Manager, U.S. Department of Energy

Joy Page (DOE) discussed DOE's efforts to support the development of improved whale detection technologies for offshore wind, including a collaborative technical paper being produced with the National Renewable Energy Laboratory (NREL), Pacific Northwest National Laboratory (PNNL) and other partners including RWSC. Working with RWSC resulted in additional private funds to RWSC to help support the workshops which ensured robust expert engagement and socialization/review of the DOE work products. RWSC has played a critical role in bringing together experts, managing facilitation, and producing workshop summary reports. Overall DOE's partnership with RWSC on this has been a great example of an entity with expertise and resources leading work that the collective group agreed is needed while including the collective group in that work through RWSC. This type of scenario was explicitly described in the Science Plan, and this is the first example of this happening to address a Science Plan priority. See the presentation slides here for more information. Questions and discussions from participants included:

 Does DOE have the ability to fund other efforts such as recreational fishing quantification and interaction with offshore wind? Yes, DOE can fund anything related to deployment barriers to offshore wind, but there is a limited budget. DOE is happy to chat further about this.





The meeting concluded with a series of Mentimeter polls to gauge participants' perspectives on the sufficiency of coordination, the benefits to their organizations, and support for continuing the partnerships showcased. The group then had an open discussion on ways to further improve regional coordination, including the potential for efficiency gains through more centralized funding and data management.

The poll results from Day 1 can be found here.





Figure 3. snapshot of poll results from Day 1 of the 2024 RWSC Annual Funding Strategy Meeting. Full poll results can be found <u>here</u>.





Day 2

Welcome/Introductions

Emily reviewed the agenda and meeting purpose, noting that this is the first time since the RWSC science plan was finalized that the four sectors are coming together to reflect on what offshore wind wildlife research is being actively funded, who is doing what, and what those plans might look like in the coming year. Key topics from yesterday's meeting were also recapped, including the synthesis of the RWSC database that shows 102 active projects and 31 total funders across all subregions in the U.S. Atlantic waters.

Offshore Wind Companies' Site Assessment and Voluntary Research

RWSC's Role in Administration and Management of Sunrise Wind Regional Research Program

Kim Peters, Senior Manager, Biological Sciences Group, Ørsted

Kim Peters (Ørsted) presented an overview of Sunrise Wind's Regional Research Program, which includes \$4.2 million in research funding commitments as part of their power purchase agreement requirements with the state of New York (\$5k per MW). Ørsted has three existing projects focused on seal behavior, plankton distribution, and North Atlantic right whale acoustics that are supported by these funds. They also plan to use \$1.7 million of the total to fund a regional avian research effort in coordination with RWSC. RWSC will provide technical and administrative support for the regional avian research effort. Data standardization and making data public is an important component of the projects. New York required that Ørsted submit a Data Availability Plan, so most of these data will be made public. Questions and discussions from participants included:

- Do the projects presented overlap with net conservation benefit? Ørsted has not yet discussed how these studies could potentially relate.
- Is there an internal process for developers to try to standardize projects? Yes, Ørsted has started to create standards for their monitoring projects such as avian and bat acoustics.

Opportunity to Coordinate Studies of Regional Scale Hydrodynamic/Oceanographic Impacts

Liz Marsjanik, Senior Manager, Environmental Affairs, Vineyard Wind

Liz Marsjanik (Vineyard Wind) discussed the potential funding of regional studies consistent with the recommendations in the National Academies Committee on Evaluation of Hydrodynamic Modeling and Implications for Offshore Wind Development report "Potential Hydrodynamic Impacts of Offshore Wind Energy on Nantucket Shoals Regional Ecology: An Evaluation from Wind to Whales." Liz highlighted the





need for regional coordination through RWSC to better understand the localized impacts of turbine structures on the environment. For example, she proposed leveraging existing assets like multiple developers' survey vessels and coordination among federal agencies to optimize research efforts and avoid duplication. Liz also provided an overview of the monitoring projects Vineyard Wind is conducting. Questions and discussions from participants included:

 Do you require your contractors to use specific standards to promote data sharing? Yes, for certain projects and data is always shared with regulators. Liz did note that some of the data collected has national security concerns and is not posted publicly.

State Requirements and Research

New Jersey Research & Monitoring Initiative Open RFP

Caitlin McGarigal, Research Scientist, New Jersey Department of Environmental Protection

Caitlin McGarigal (NJ) presented on New Jersey's Offshore Wind Research and Monitoring Initiative's (RMI) \$4.75 million RFP covering 7 research focus areas, including habitat changes, fisheries, and noise impacts. The RMI is requiring awarded projects to coordinate with RWSC and ROSA to ensure alignment with regional efforts. The RFP also requires awardees to describe plans for data collection, management, and sharing. The RMI has already received 83 Letters of Intent. See the presentation slides here for more information. Questions and discussions from participants included:

• How is the evaluation panel for the RFP selected? The RMI aims to have one reviewer from academia, one from the State, and one from a Federal entity. If this is not possible, they fill in with expert consultants.

States are Working Together to Compare and Align Data Expectations Associated with Monitoring and Mitigation Requirements

Shannon Kearney, Wildlife Biologist, Connecticut Department of Energy and Environmental Protection Kate Press, Senior Project Manager, Environmental Research, New York State Energy Research and Development Authority

Shannon Kearney (CT) and Kate Press (NY) summarized a recent meeting that the RWSC State Caucus held to discuss the environmental and fisheries monitoring activities that are being required by states in their offshore wind solicitations and agreements with developers. The RWSC State Caucus is tracking and characterizing the range of requirements and the processes/mechanisms that states use to implement them. A main conclusion is that each state has a different process for how offshore wind energy solicitations and requirements are drafted and approved, but there is an opportunity to standardize the





types of data collection/monitoring being required and where/how those data are delivered and shared. Questions and discussions from participants included:

 Developers mentioned that environmental management plans required by State agencies are helpful but not functionally used in compliance. Developers would like to discuss this more in the future.

Maine Offshore Wind Research Lease Data Sharing Plan

Stephanie Watson, Offshore Wind Program Manager, Maine Governor's Energy Office

Stephanie Watson (ME) gave an overview of Maine's new offshore wind research lease for a floating research array in Federal waters. She presented on floating technology, ecosystem interactions, and data sharing. The developer of the research array (Diamond Offshore Wind), in coordination with the state, will be conducting research and data collection related to floating offshore wind technology development and efficiencies as well as interactions with ocean users and the Gulf of Maine ecosystem. Data generated by the research at the array will be shared publicly. See the presentation slides here for more information. Questions and discussions from participants included:

• Is Maine requiring the developer of the research lease to participate in the RWSC? Not yet, but they have asked the developer to contribute to a research fund and there are options to implement this.

Q&A, Reflections from Participants/Polls and Discussion Prompts

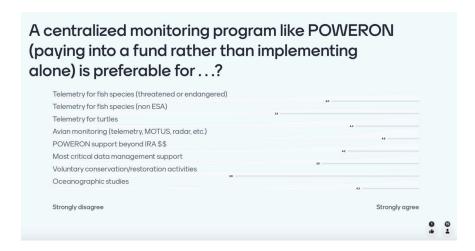
The group participated in a series of Mentimeter polls to gauge preferences on collaborative funding approaches, the value of RWSC coordination, and perceptions of how different sectors are contributing to and benefiting from regional coordination. The results sparked discussion around incentives, data sharing challenges, and balancing individual project needs with regional priorities. Key takeaways include:

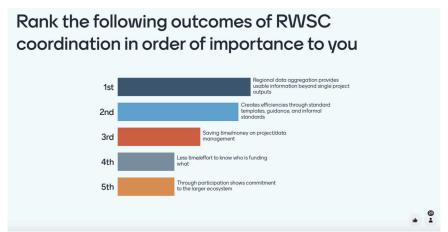
- A centralized monitoring program like POWERON is highly preferable for avian monitoring and oceanographic studies.
- The aggregation of regional data to provide usable information beyond single projects/outputs is a key value of RWSC.
- The quickest and easiest way to implement consistent data sharing and aggregation will be through regulatory or procurement requirements.

The poll results from Day 1 and 2 can be found here.









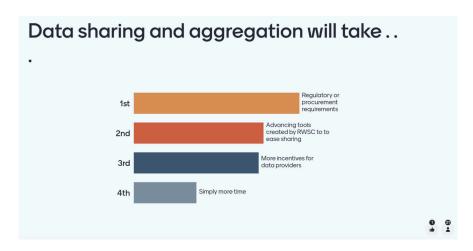


Figure 4. A snapshot of poll results from Day 1 of the 2024 RWSC Annual Funding Strategy Meeting. Full poll results can be found <u>here</u>.





Conclusions, Next Steps, and Adjourn

Participants identified several ways that they can improve coordination with each other through RWSC to deploy research funding and ensure high-quality and accessible data.

RWSC will capture presentations and discussions from the two days in a meeting summary document and develop a Funding Strategy Action Plan. The Sectors will use the Plan to guide their future work on this topic, including at upcoming quarterly Sector Caucus meetings.





Appendix 1.

Full list of meeting attendees via Zoom's participant report.

Name	Affiliation
Abigail Ryder	Bureau of Ocean Energy Management
Alexa Sterling	Environmental Protection Agency
Alison Chase	Natural Resource Defense Council
Andy Lipsky	National Oceanic and Atmospheric Administration
Ashley Norton	Delaware Department of Natural Resources and Environmental Control
Atma Khalsa	Avangrid Renewables
Caitlin McGarigal	New Jersey Department of Environmental Protection
Candice Cook-Ohryn	Shell / Atlantic Shores Offshore Wind
Carl LoBue	The Nature Conservancy
Carl Wilson	Maine Department of Marine Resources
Casey Nolan	Maryland Department of Natural Resources
Casey Yanos	Maine Department of Marine Resources
Catherine McCall	Maryland Department of Natural Resources
Cheri Patterson	New Hampshire Fish and Game Department
Chris Stout	South Carolina Department of Environmental Services
Christian Laspada	Regional Wildlife Science Collaborative
Colleen Brust	New Jersey Department of Environmental Protection
Cynthia Pyc	RWE Clean Energy, LLC
David Ciochetto	Rhode Island Coastal Resources Management Council
Debbie Brill	Regional Wildlife Science Collaborative
Deirdre Boelke	RWE Clean Energy, LLC





Name	Affiliation
Desray Reeb	Bureau of Ocean Energy Management
Ebru Unal	Mystic Aquarium
Elise Campbell	Avangrid Renewables
Elizabeth Marsjanik	Vineyard Offshore
Emily Shumchenia	Regional Wildlife Science Collaborative
Emma Stoney	Maryland Energy Administration
Francine Kershaw	Natural Resource Defense Council
Garry George	The Audobon Society
Heather Genievich	New Jersey Department of Environmental Protection
Henry Woolley	US Fish and Wildlife Service
Hollie Emery	Massachusetts Coastal Zone Management
Howard Rosenbaum	Wildlife Conservation Society
Ingrid Biedron	Bureau of Ocean Energy Management
Jen Banks	Total Energies
Jenny Ewald	Bureau of Ocean Energy Management
Jeremy Potter	Bureau of Ocean Energy Management
Joel Southall	RWE Clean Energy, LLC
John Herbert	Massachusetts Audubon Society
Jordan Katz	Regional Wildlife Science Collaborative
Joy Page	US Department of Energy
Julia Dombroski	National Offshore Wind Research & Development Consortium
Juliet Lamb	The Nature Conservancy
Kate Press	New York State Energy Research and Development Authority
Kate Wilke	The Nature Conservancy Virginia





Name	Affiliation
Kathryn Roy	Attentive Energy
Katie Fillingham	Center for Ocean Leadership
Kim Peters	Ørsted
Kim Peters	Ørsted
Kori Groenveld	National Offshore Wind Research & Development Consortium
Kyle Baker	Bureau of Ocean Energy Management
Kyle Cassidy	SouthCoast Wind
Laura Kleber	Vineyard Offshore
Lisa Engler	Massachusetts Clean Energy Center
Maggie Ostdahl	National Aquarium
Michael Freeman	Ocean Conservancy
Michael Stocker	Ocean Conservation Research
Nate Fuller	US Fish and Wildlife Service
Nick Napoli	Northeast Regional Ocean Council
Nick Sisson	National Oceanic and Atmospheric Administration
Nikelene Mclean	Regional Wildlife Science Collaborative
Nils Bolgen	Massachusetts Clean Energy Center
Pat Field	Consensus Building Institute
Rachael Blake	Intertidal/ Regional Wildlife Science Collaborative
Reneé Reilly	Responsible Offshore Science Alliance
Rodney Cluck	Bureau of Ocean Energy Management
Ryan Green	Virginia Coastal Zone Management
Samantha Coccia-Schillo	Regional Wildlife Science Collaborative
Scott Johnston	US Fish and Wildlife Service





Name	Affiliation
Scott Lawton	Dominion Energy
Sean Lucey	National Oceanic and Atmospheric Administration
Shannon Kearney	Connecticut Department of Energy and Environmental Protection
Sharon Whitesell	Ørsted
Stephanie Vail-Muse	US Fish and Wildlife Service
Stephanie Watson	Maine Governor's Energy Office
Sue Barco	Regional Wildlife Science Collaborative
Terra Haight	New York State Department of State
Todd Callaghan	Massachusetts Executive Office of Energy and Environmental Affairs
Tracy Romano	Mystic Aquarium
Tricia Perez	Responsible Offshore Science Alliance