Offshore Research (Atlantic) New Projects Workshop

September 22, 2025

1:00pm ET

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Agenda

1. Welcome & meeting purpose
2. Current RFPs & awards status
3. Drivers of coordination
4. Relevant examples (RWSC & ROSA)
5. Project Presentations
6. Next steps and adjourn

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Background

- ROSA & RWSC have been tracking partners' offshore research solicitations and procurements processes - and participating in proposal review/selection
- Many funders have participated in proposal review/selection for one another
- There is a huge opportunity for leveraging & coordination:
  - Research entities submitting similar proposals to multiple funders
  - Funders soliciting research on similar/related topics
  - Geographic area of focus Atlantic OCS
  - Offshore wind theme present in many

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Meeting Purpose

- Review the number of:
  - Funders
  - Research & monitoring categories
  - Projects involved in work in the upcoming 12-18 months.
- Coordination also needed in smaller groups
- Future meetings will be provided for:
  - Cross-taxa
  - Larger scale collaborations

    e.g., future iterations of this meeting series, RWSC subcommittees, ROSA Advisory Council meetings, etc.)

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State of offshore research

Since September 2024

- 16 new RFP processes (including RWSC & ROSA)
- 66 new projects
- ~$50M invested

ROSA & RWSC are facilitating coordination among funders to align projects

Stage	Entity
Projects selected & Announced	Massachusetts Clean Energy Center (MassCEC)
	NOAA Research Set Aside Program (NOAA RSA)*
	Responsible Offshore Science Alliance (ROSA)
	Maine OSW Research Consortium (ME OSW RC) - 1st Round
	National Fish & Wildlife Foundation Vessel Strike Risk Reduction (NFWF)*
Selection/ announcement underway	National OSW Research & Development Consortium (NOWRDC)
	Northeast Sea Grant Consortium (NE SGC)
	New Jersey Research & Monitoring Initiative (NJ RMI)
	Maine OSW Research Consortium (ME OSW RC) - 2nd Round
	Regional Wildlife Science Collaborative (RWSC)
	Marine Mammal Commission technology grants*
Open and Upcoming Funding Solicitations	Massachusetts Division of Marine Fisheries (Mass DMF) Fisheries Innovation Fund
	Maine OSW Research Consortium (ME OSW RC) - 3rd Round
	ME GEO BlueTech Innovation and Monitoring at the UMaine Demo Floating Turbine
	Annual NOAA Research Set Aside Program (RSA)*
	New York State Energy Research & Development Authority Sturgeon Request for Proposals (NYSERDA)
*RFP was not exclusively OSW-related studies	

Offshore research funder coordination

- ROSA & RWSC tracking partners research solicitations and participating in proposal review/selection
- Opportunity for fine scale leveraging and coordinating
    - Similar proposals submitted multiple funders
    - Funders soliciting research on similar/related topics
    - Geographic area of focus Atlantic OCS
    - Offshore wind theme present in many

Offshore research funder coordination

- Research coordination is not a new idea
- RWSC & ROSA are taking it to a new level by:
  - Participating in proposal evaluation and selection
  - Systematically convening funders
  - Providing examples of success
  - Gathering and processing project information from multiple funders
  - Providing funders “a leg-up” making connections between projects
  - Developing coordination-framework and concepts based on regional monitoring principles
  - Hosting research workshops

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Summary of new projects

- Obtained and included information from many funders:
  - RWSC & ROSA
  - MassCEC
  - NFWF
  - NYSERDA
  - MaineGEO
  - Marine Mammal Commission
  - NOAA Fisheries
  - New Jersey RMI
  - NOWRDC
- **47 total projects** in our spreadsheet
- Many projects are still in the contracting phase
- Many funders have not formally announced selections

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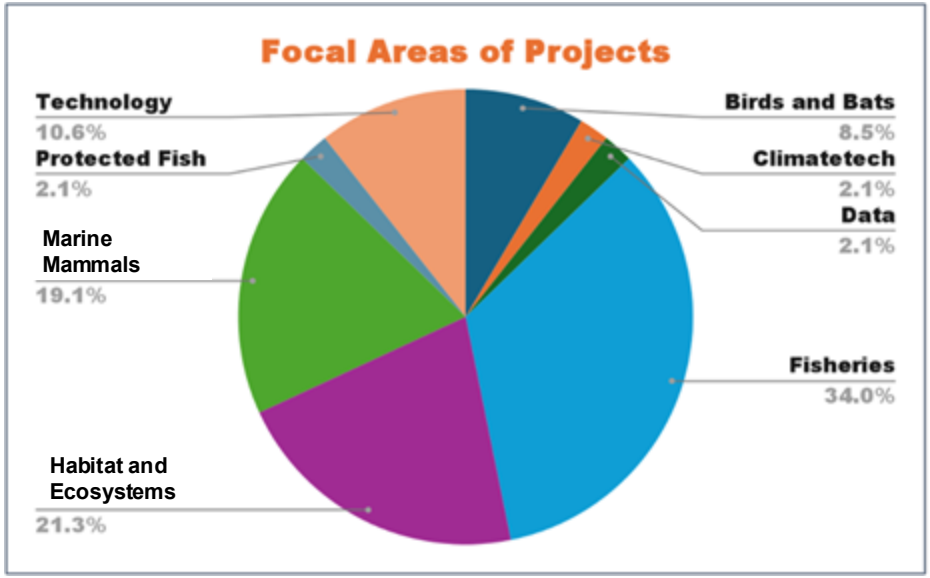
Summary of new projects

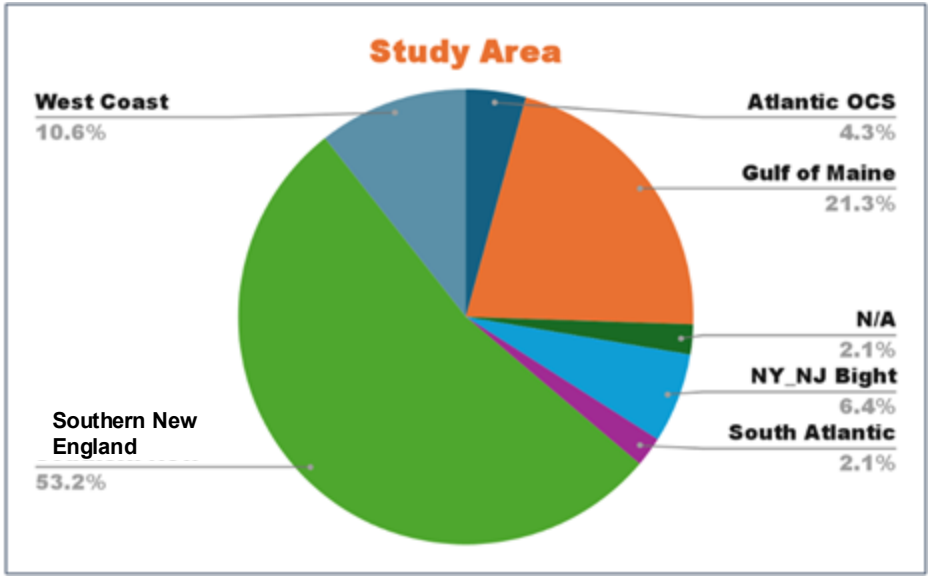
Topic Area	Funder(s)
Birds and Bats	Maine GEO, MassCEC, RMI, RWSC
Climatech	MassCEC
Fisheries & Protected Fish Species	Maine GEO MassCEC RMI ROSA NYSERDA
Habitat and Ecology	MassCEC NOAA Fisheries RMI RWSC
Marine Mammals	Maine GEO MassCEC MMC NFWF
Technology	NOWRDC

Summary of new projects

Projects by topic & study region

Caveats: some projects span focal areas and study areas





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Drivers of project coordination (areas of overlap)

Spatial - Same study area

Personnel/Equipment - Committed to multiple projects

Expenses - Ship time, equipment, travel costs

Temporal - Same data collection period

Data pipeline - Outputs from one, inputs/supplements another

Contractual - Requirement to allocate effort/budget for coordination

Data - Same data types/products

Research Question - Same/similar/complementary

Engagement - Interaction with stakeholders and/or organizations

RWSC Coordination Example - Answering big questions

Does (and how) infrastructure affect high trophic levels?

Project 1 (Britten et al.) - How wake effects (water, air and coupled) work and affect prey distribution

Project 2 (Orphanides et al.) - What's the distribution of zooplankton

Project 4 (Rynearson et al., what are right whales feeding on)

Project 3 Changes in effects of altering the chemical and biological attributes of substrate surfaces

ROSA Coordination Example

Different Funders, Overlapping Recipients

ROSA/MassCEC, UMass Dartmouth SMAST & New Bedford Port Authority
Fisheries Access/Co-existence Studies example

MassCEC, NBPA

- SMAST will track and model the behavior of vessels and gear; social scientists will collect real-time information from vessel captains. The project will foster better understanding of how fishing can be conducted within active wind areas and potentially inform the development of new fishing practices and gear.

ROSA, SMAST

- SMAST will interface with fishermen, electronics installation professionals, and equipment manufacturers to understand the capabilities and limitations of existing technologies; evaluate the performance of a suite of existing technologies onboard commercial fishing vessels within an existing wind farm.

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Project Presentations

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Presentation order

1. Goodenough
2. Goodenough
3. Deluca
4. O’Brien
5. Murphy
6. Britten
7. MacDonald
8. O’Donnell
9. Kneebone
10. Stokesbury
11. Rillahan
12. Rillahan
13. Pol/Brady

Local and Regional movements of Black Skimmer populations breeding in the North Atlantic

- Katharine Goodenough, Larid Research and Conservation, PI
- Tara Schneider-Moran, Town of Hempstead, Department of Conservation and Waterways, Co-PI, Luanne Johnson, Biodiversity Works, Co-PI, Shelby Casas, New York Audubon, Co-PI
- Funders: Nassau County Soils District, Larid Research and Conservation, Biodiversity Works, New York Audubon
- Research questions/goals: Our goal for this project is to track Black Skimmer migratory movements from two breeding colonies located in Long Island, New York and Martha's Vineyard, Massachusetts to better understand variation in spring and autumn routes across the annual cycle.
- Study Area: Long Island, New York; Cape Cod, Massachusetts; Atlantic Coast

laridresearch@gmail.com

Uncovering the hemispheric foot print of Royal and Sandwich Terns: A combined study of GPS telemetry and mark-recapture efforts

- Katharine Goodenough, Larid Research and Conservation Group, PI
- Lindsay Addison, Audubon North Carolina, Co-PI
- Funders: Audubon North Carolina, Larid Research and Conservation, anonymous donors
- Research questions/goals: Our local goal is to identify critical foraging grounds for terns nesting in the South Cape Fear River, North Carolina and assess needed conservation measures for this critical habitat. Our hemispheric goal is to track tern migration routes and wintering areas to assess connectivity between Audubon North Carolina's local conservation measures and the National Audubon Society's hemispheric conservation goals.
- Study Area: North Carolina, Atlantic Coast

laridresearch@gmail.com

Safe Passage: Mapping songbird migration routes and altitudes over the Atlantic to determine potential impacts of offshore wind

Principal Investigators: Bill DeLuca, National Audubon
Jill Deppe, National Audubon

Co-PI: Mike Hallworth, Vermont Center for Ecostudies

Funder: Massachusetts Clean Energy Center

Research Objective: Deploy 150 barometric pressure tags on three migratory songbird species to quantify the degree to which migratory routes coincide with Atlantic Coast offshore wind areas and whether migration altitudes overlap with the rotor sweep zone of wind turbines.

Study Area: Mt. Mansfield, VT, 3 additional sites across the boreal forest in Canada

william.deluca@audubon.org

Audubon

VERMONT CENTER FOR ECOSTUDIES
Uniting People and Science for Conservation

Blackpoll Warbler. Mike Fernandez

Comparative analysis of marine mammal density and detection rates from aerial surveys

oobrien@neaq.org

- PI: Orla O'Brien, Anderson Cabot Center for Ocean Life at the New England Aquarium
- Funded by: MassCEC
- Objective 1: Comparison of the probability of detection from different altitudes
  - We will work to understand the effect of altitude on aerial survey detections and determine the comparability of density estimates from variable flight heights.
- Objective 2: Comparison of visual and digital methods for estimating animal density
  - We will assess the utility of visual vs digital surveys for estimating abundance for a range of species.
- Study Area: Southern New England Wind Energy Areas and surrounding waters

MASSACHUSETTS CLEAN ENERGY CENTER

New England Aquarium

Protecting the blue planet

Anderson Cabot Center for Ocean Life at the New England Aquarium

Promoting Beneficial Colonization of Offshore Wind Infrastructure

Lead PI: Annie Murphy (INSPIRE Env) Annie.Murphy@venterra-group.com
Co-PIs: Colleen Hansel (WHOI), Loretta Roberson (MBL), Dan Kuchma (Tufts)
Partners: Jamie Lescinski (Boskalis), Anthony Devarskas (Ørsted)
chansel@whoi.edu

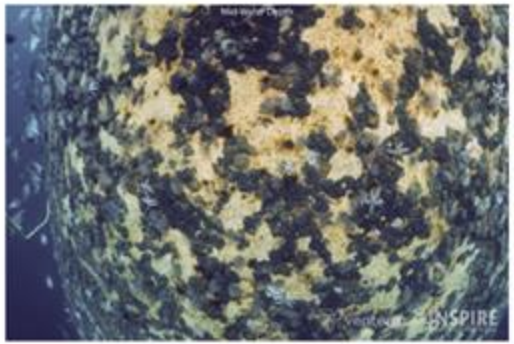
Offshore Wind Science and Research:
Funding for Projects, Partnerships, & Initiatives
OSW-2024-02

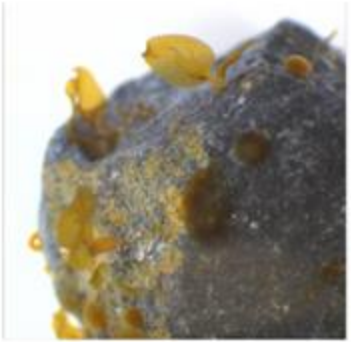
OBJECTIVES:

1. Develop innovative materials and approaches to increase biodiversity associated with offshore wind infrastructure
2. Engage with stakeholders to develop a strategy to decide when and how to implement NID strategies in offshore wind infrastructure

STUDY AREAS:

Buzzards Bay, MA; Southern New England; Gulf of Maine





Coupled oceanic and atmospheric wake effects and their impact on nutrient supply and zooplankton community structure across turbine-, wind farm-, and regional-scales

- PI: Gregory Britten, WHOI Biology gregory.britten@whoi.edu
- Co-Pis: Ke Chen (WHOI Physical Oceanography)
  Glen Gawarkiewicz (WHOI Physical Oceanography)
  Rubao Ji (WHOI Biology)

- Funder: RWSC (NYSERDA regional monitoring requirement for Empire Wind 1)

- Core Question:
  What is the impact of offshore wind development on the ocean circulation, nutrient dynamics, and zooplankton community structure at the turbine-, wind farm-, and regional scales?

- Study area: Nantucket Shoals

Project Title: Understanding Fishing Interactions: Gulf of Maine Fisheries and Floating Offshore Wind

PI: Hannah MacDonald, Gulf of Maine Research Institute (GMRI)

hmacdonald@gmri.org

Key project leads and partners:

- Chas Van Damme – Energy Solutions Project Manager, GMRI
- Brian Holden – President, United States Maritime Resource Center
- Partnering organizations: Cape Cod Commercial Fishermen's Alliance, Massachusetts Lobstermen's Association, Gloucester Fisheries Commission

Funder: Massachusetts Clean Energy Center (MassCEC)

Research Questions:

- How do floating offshore wind designs (turbines, mooring, and inter-array cables) interact with different fishing gear types (e.g., trawls, purse seine, longline)?
- What operational and navigational challenges do fishers anticipate when operating within floating offshore wind arrays?
- Under what conditions, if any, can fisheries and floating offshore wind coexist?
- What design modifications or stipulations could minimize conflict and maximize compatibility between industries?

Hypothesis: We hypothesize that by engaging fishing stakeholders and testing industry-specific challenges through simulations and visual tools, we can better understand how floating offshore wind interacts with fisheries. This process will help identify, evaluate, and address challenges through design, lease stipulations, and stakeholder-informed recommendations, thereby clarifying whether and how coexistence may be possible in the Gulf of Maine.

Goals:

- Contribute to knowledge gaps on coexistence between fisheries and floating offshore wind.
- Enable informed decision-making by the Commonwealth of Massachusetts and regional stakeholders during planning, leasing, and construction.
- Build capacity for fishing stakeholders to understand floating offshore wind technologies through simulation and visual tools.
- Develop practical recommendations to minimize conflict and advance both industries responsibly

Study Area: Coexistence and operations

Evaluating the effects of offshore wind development on fisheries using environmental DNA (eDNA)

- PI: Tim O'Donnell, Gloucester Marine Genomics Institute tim.odonnell@gmgi.org
- Co-PI: John Logan, PhD MA Division of Marine Fisheries

- Funder: MassCEC

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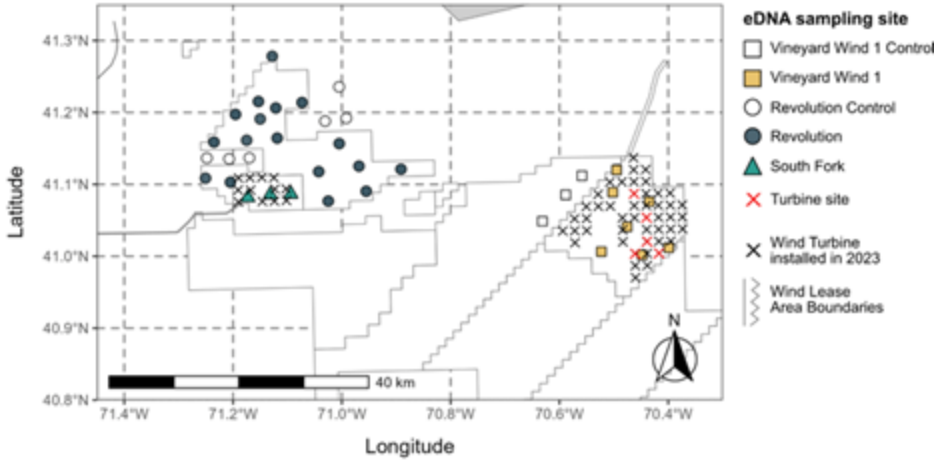
GLOUCESTER MARINE GENOMICS INSTITUTE

Commonwealth of Massachusetts DIVISION of MARINE FISHERIES



- Objectives
  1. Conduct an eDNA metabarcoding survey for vertebrate and invertebrate
  2. Combine project results with 2023-2024 eDNA data and traditional survey
  3. Disseminate results for future offshore wind development
- Study area: Southern New England (Revolution, South Fork, Vineyard Wind 1)

Disentangling Environmental Variability and Offshore Wind Activity on Fish Presence

PI: Jeff Kneebone (NEAQ); *Co-PIs*: **Nima Farchadi (SDSU/WHOI)**, Rebecca Lewison (SDSU)

jkneebone@neaq.org

nfarchadi@sdsu.edu

Funder: Responsible Offshore Science Alliance (ROSA)

Goals

- Create a **SDM framework** that provides a comprehensive **assessment of impacts** of offshore wind phases on Highly Migratory Species in **Southern New England.**
- Provide insights on the **utility of eDNA-based prey data.**
- Develop **recommendations** for the **temporal sampling frequency** for offshore eDNA metabarcoding monitoring.

Outcomes

- This research will build on existing offshore wind monitoring efforts and help **disentangle the influence of environmental variability and offshore wind activity** on pelagic fish presence in offshore wind lease areas
- Results will inform the design of more effective acoustic telemetry and eDNA monitoring efforts.

Connectivity and Dispersal of Black Sea Bass, *Centropristis striata*, within Southern New England

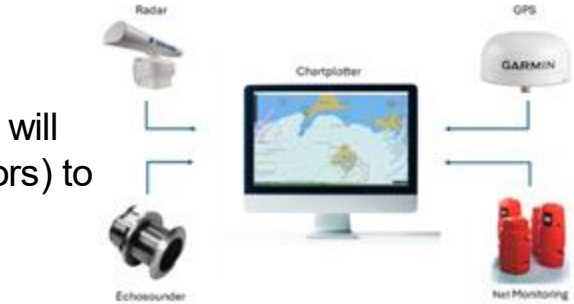
- **PI**: Kevin D.E. Stokesbury, School for Marine Science and Technology (SMAST)
- **Co-PIs**: Max Zavell (SMAST), Geoff Cowles (SMAST), Tim O'Donnell (GMGI), Pingguo He (SMAST), Changsheng Chen (SMAST)
- **Funder**: ROSA

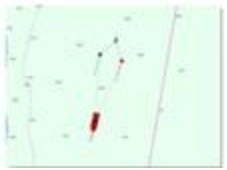
mzavell@umassd.edu

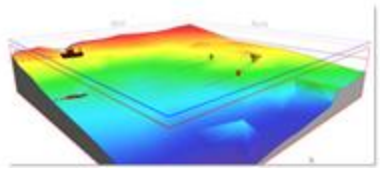
- **Research Goals/Questions**:
  - Are Black Sea Bass spawning at turbines within windfarms and do these turbines act as sinks?
  - How connected are Black Sea Bass aggregations between turbines and windfarms across the region?
  - Are larvae dispersed to favorable settlement habitats if spawned at an offshore windfarm?
  - Develop high-resolution hydrodynamic fields to assess windfarm development scenarios on regional oceanographic dynamics.
- **Study area**:
  - Southern New England and Rhode Island & Massachusetts Wind Energy Area

Evaluation of Technologies for Trawl and Dredge Vessels to Safely Operate within Offshore Wind Farms

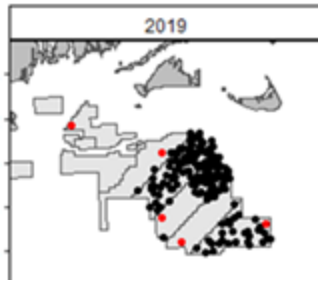
- PI: Christopher Rillahan, SMAST – UMass Dartmouth (**crillahan@umassd.edu**)
- Co-PIs: Pingguo He, Paul Farnham & Michael Decker (F/V Heather Lynn), John Lees (Owner of 5 scallop vessels)
- Funded by EW1 administered by ROSA
- Primary Objective: To assess and test equipment/technologies that will enable mobile fishers (primarily bottom trawlers and dredge operators) to safely coexist with offshore wind farms, ensuring they can continue fishing using traditional fishing gear while minimizing risks and disruptions from wind farm infrastructure.
  - Synthesize the state of existing technologies
  - Real-world evaluation of available technologies
  - Compile findings and stakeholder outreach
- Southern New England WEA







An Analytical Framework to Assess the Regional Impacts of Offshore Wind Farms and Evaluate Fisheries Monitoring Plans



- PI: Christopher Rillahan, SMAST – UMass Dartmouth (**crillahan@umassd.edu**)
- Co-PIs: Adam Delargy, Pingguo He, Steve Cadrin, Kevin Stokesbury, Max Zavell, Keith Hankowsky, Amber Lisi, David Rudders (VIMS) & Sally Roman (VIMS)

- Funded by EW1 administered by ROSA

- Primary Objective: To develop and test the efficacy of an analytical framework for detecting the regional impacts of offshore wind development on multiple commercially and recreationally important species and optimizing the design of fisheries monitoring plans.
    - Use spatiotemporal models to predict the distribution and abundance of several species by integrating data from multiple sources and correlating them with environmental and operational covariates
    - Create a simulation framework to assess the ability to detect changes in species abundance within existing monitoring plans.
- Southern New England WEA and Mid-Atlantic WEAs

Co-Design Solutions for U.S. Floating Offshore Wind Farms & Fishing Compatibility

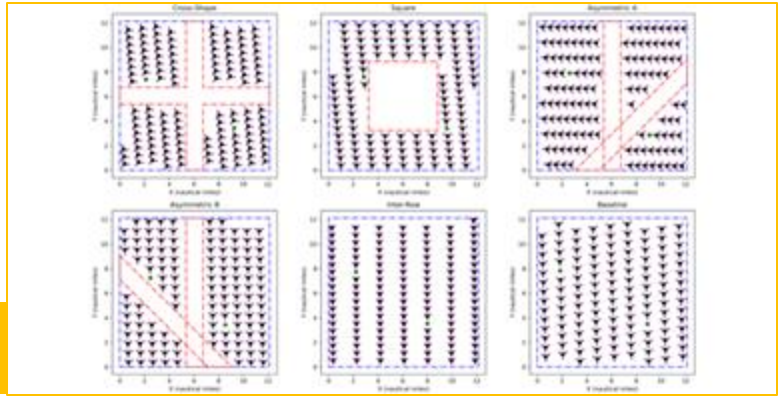
mike@rosascience.org

E. Lozon, National Renewable Energy Laboratory (NREL), M. Pol (ROSA), E. Rzeszowski and D. Brady (UMaine), K. Ampela (NREL)

Funded by National Offshore Wind Research and Development Consortium (NOWRDC)

- Develop and apply a framework incorporating fishing coexistence into floating wind design options
- Conduct semi-structured interviews with commercial and recreational fishery participants to gather information on fishing operational requirements and critical considerations for floating projects
- Optimize fishing-informed floating wind design solutions using case studies for the Gulf of Maine lobster fishing industry and Central Atlantic commercial and recreational fishermen
- Provide recommendations for technology solutions that optimize the potential for U.S. floating wind farms to coexist with fishing
- Gulf of Maine and Mid-Atlantic Bight

Fishing-Informed Array Options



Additions?

Opportunity for those who did not submit a slide to introduce themselves and their relevant work.

- Chris Orphanides, NOAA Fisheries (chris.orphanides@noaa.gov) - Nantucket Shoal/SNE zooplankton, ADCPs, oceanographic data, uncrewed vehicles
- Tom Shyka, NERACOOS (tom@neracoos.org) - real-time oceanographic data and data management
- Joe Jurisa, Univ. of Maryland (jjurisa@umces.edu) - internal waves, hydrodynamics

Next Steps

- A second iteration will be held in Early 2026 for projects unable to share today
- Future iterations of funder coordination meeting series
- RWSC Subcommittees
- ROSA Advisory Council meetings (incl. Thursday, 9/25 @ 1pm ET)
- Gauge AT meeting interest/timing

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October 14, 2025
1 - 2:30pm

Third session of funder coordination

Provide updates to each other on contracting terms, progress facilitating coordination – opportunity to add tasks in scopes of work specifically to support coordination activities

Additional state agency staff or industry partners may be interested in joining

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Contact us

RWSC

https://rwsc.org for Subcommittee meetings calendar (events page), and mailing list

- Emily Shumchenia, Director emily.shumchenia@rwsc.org
- Julia Dombroski, Research Director julia@rwsc.org

ROSA

https://rosascience.org for events page and mailing list

- Reneé Reilly, Executive Director renee@rosascience.org
- Mike Pol, Research Director mike@rosascience.org
- Patricia Perez, Research Project Manager tricia@rosascience.org

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