Offshore Research (Atlantic) New Projects Workshop

February 23, 2026

1:00pm ET

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Agenda

1. Welcome & meeting purpose
2. Current RFPs & awards status
3. Project Presentations
    a. eDNA
    b. Whales & Oceanography
    c. Fisheries Engagement
4. 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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Status of Offshore Research

Stage	Entity
Projects selected & Announced	Massachusetts Clean Energy Center (MassCEC)
	NOAA Research Set Aside Program (NOAA RSA)* 2025
	Responsible Offshore Science Alliance (ROSA)
	Maine OSW Research Consortium (ME OSW RC) - 1st Round
	National Fish & Wildlife Foundation Vessel Strike Risk Reduction (NFWF)*
	National OSW Research & Development Consortium (NOWRDC)
	Marine Mammal Commission technology grants*
	Maine OSW Research Consortium (ME OSW RC) - 2nd Round
	Massachusetts Division of Marine Fisheries Fisheries Innovation Fund
	ME GEO BlueTech Innovation & Monitoring at the UMaine Demo Floating Turbine
Selection/ announcement underway	Northeast Sea Grant Consortium (NE SGC)
	New Jersey Research & Monitoring Initiative (NJ RMI)
	Regional Wildlife Science Collaborative (RWSC)
Open Funding Solicitations	New York State Energy Research & Development Authority Sturgeon Request for Proposals (NYSERDA)
	NOAA Research Set Aside Program (NOAA RSA)* 2026
Upcoming Solicitations (TBD)	Maine OSW Research Consortium (ME OSW RC) - 3rd Round
	Sunrise Regional Research Funds (ROSA & RWSC)
	Massachusetts Clean Energy Center (MassCEC)
	National Fish & Wildlife Foundation (NFWF)

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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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

Summary of new projects

- Obtained and included information from many funders
- **60 total projects** in our spreadsheet
- Many projects are still in the contracting phase
- Many funders have not formally announced selections

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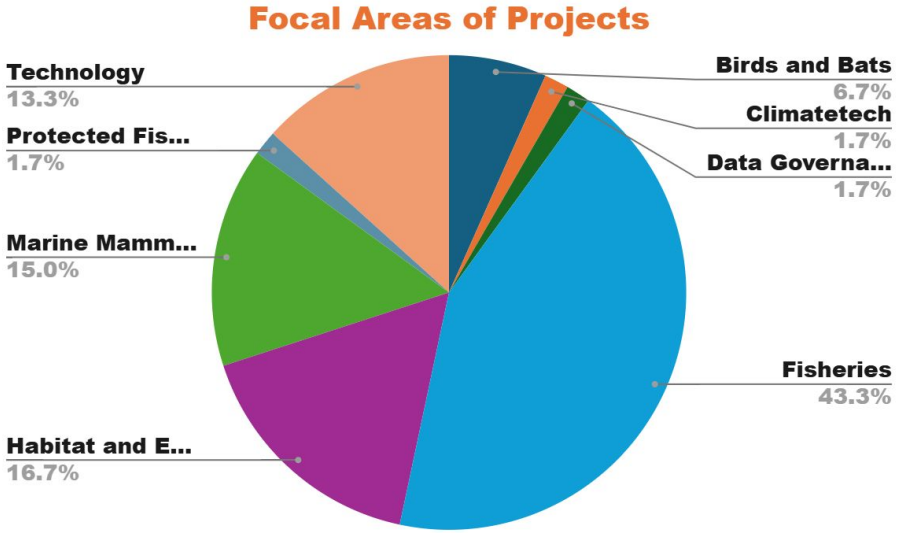
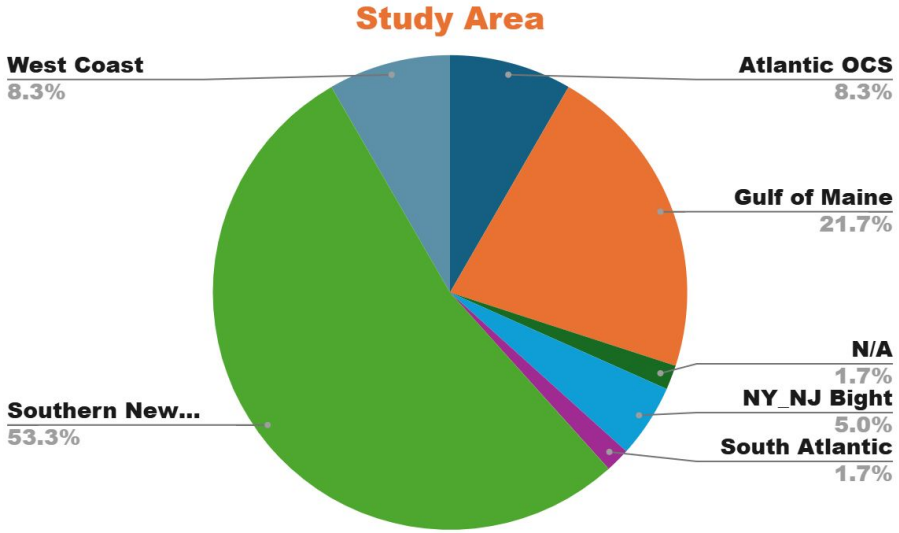
Summary of new projects

Topic Area	Funders
Birds and Bats	MaineDOER, MassCEC, RMI, RWSC
Climatech	MassCEC
Fisheries & Protected Fish Species	MaineDOER MassCEC RMI ROSA NYSERDA MassDMF Northeast Sea Grant Consortium
Habitat and Ecology	MassCEC NOAA Fisheries RMI RWSC
Marine Mammals	Maine GEO MassCEC MMC NFWF
Technology	NOWRDC, MaineDOER

Summary of New projects

Caveats: some projects span focal areas and study areas





Since the last public webinar (September),
10 new fisheries projects and 3 new technology projects have been funded

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Project Presentations

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Project Presentations

The purpose of this webinar is to hear from project teams launching research under three different themes

1. eDNA
2. whales and oceanography
3. fisheries engagement

The projects within each theme have a high probability of coordination or collaboration with one another due to: 1) similar methods being employed, with possibly shareable lessons learned; 2) study of similar processes or concepts; 3) production of data that could be used across projects; 4) use of the same or similar study area.

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eDNA

Overview of Marine Technology Society eDNA Committee	
Funder	**Lead**
Orsted	University of Connecticut
National Fish and Wildlife Foundation	John Hopkins
NOAA Fisheries	URI

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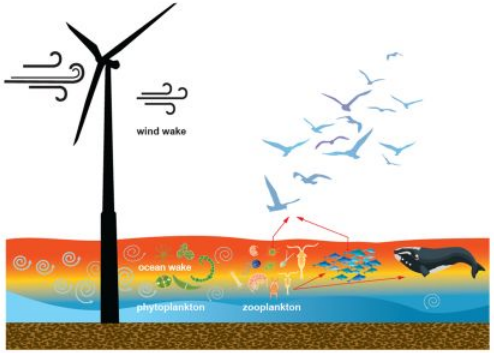
Ecosystem connectivity in Revolution Wind

PI: Evan Ward. Co-Pis: Paola Batta-Lona (research project manager), Heidi Dierssen, Hannes Baumann, Michael Whitney
Marine Sciences Department, University of Connecticut




Multi-year project assessing **ecosystem connectivity** in the Revolution Wind area.



Research topics:

1. Characterization of plankton diversity between OSW lease areas and control sites
2. Assessing spatial overlaps between sand lance habitat and OSW lease areas
3. Quantifying vertical structure and connectivity within a regional context

Providence Business First, 2023

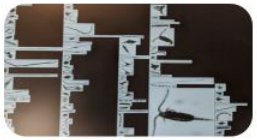
Goal:

- Assess changes on plankton communities, sand lance distribution, and water-column processes.

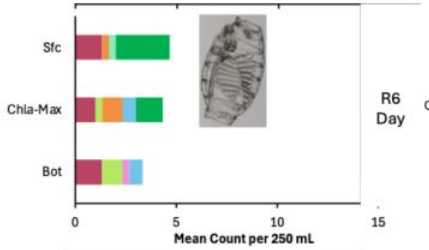
Planktonic Diversity

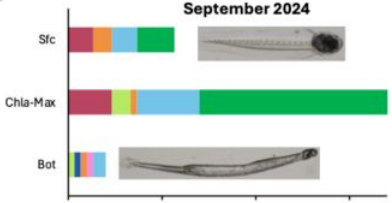
CTD Rosette

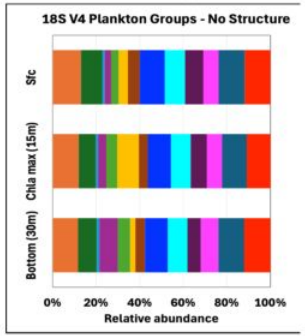
Image Classification

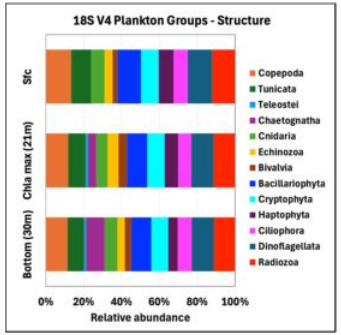


Metabarcoding using 18S and COI primers







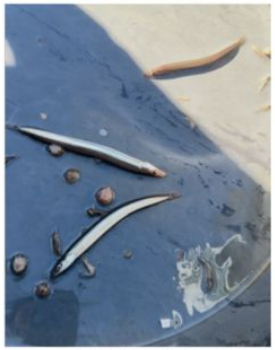


- Relative abundance of select plankton groups change with depth
- Lowest diversity in surface samples from the site with structure
- High-resolution phytoplankton data using HPLC, absorption, and IFCB; valuable for PACE-OCI calibration

Sand Lance and Physical Oceanography

Box Trawl Results/Catches From Our Cruises

Image Credit: Hannes Baumann



Sand lance! Yay!

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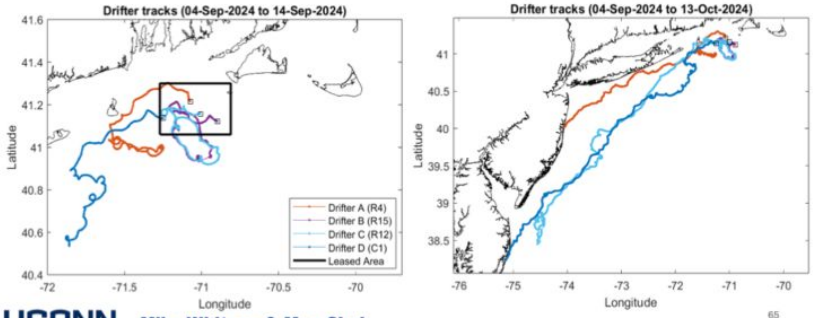
September 2024 drifter deployment

Within ten to twelve days, 3/4 drifters traveled alongshore southwestward, reaching New Jersey, Delaware, and Maryland. Currents influenced by downwelling-favorable winds.



UCONN Mike Whitney & Meg Shah

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Sand Lance:

Very low adult catch rates; continued qPCR and drift-modeling underway.

Physical Oceanography:

Drifters show rapid exit from project area (hours–days).

Next Steps - 2026–2027 Outlook

- Continue seasonal cruises (Spring & Summer 2026).
- Complete FlowCam AI classification, eDNA sequencing, sand lance larval transport models, and optical algorithm refinement.
- Advance drifter deployments to capture variability.

Summary:

Our project provides a baseline to track community changes as monopiles are colonized and plankton patterns evolve. We also aim to secure funding to continue this work post-construction and expand it to additional sites

Exploring Real Time Monitoring of North Atlantic Right Whales with Automated eDNA Analysis

- **PI**: Peter Thielen – Johns Hopkins APL (MD)
- **Co-Investigators:** Daniel Palacios, Christy Hudak – Center for Coastal Studies (MA)

- **Funder:** NFWF [Pending Award]

- **Project Goals**: Establish and demonstrate rapid environmental DNA (eDNA) analysis capabilities for NARW, leveraging both DNA sequencing and simple handheld assays. Work with local communities to augment ongoing regional monitoring programs.

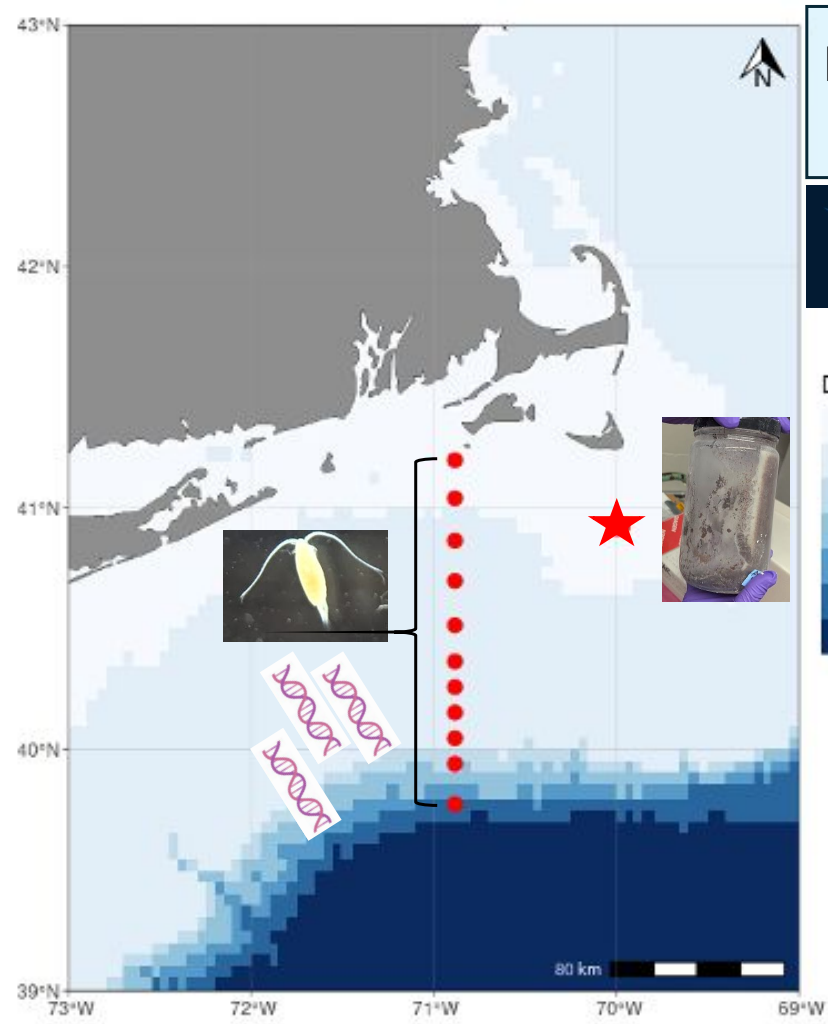
- **Proposed Locations**: Cape Cod Bay (Massachusetts), Grey's Reef National Marine Sanctuary (Georgia)

APL JOHNS HOPKINS APPLIED PHYSICS LABORATORY

CENTER FOR COASTAL STUDIES PROVINCETOWN

North Atlantic Right Whale Feeding Ecology Using Scat Metabarcoding and Quantification of eDNA

Tatiana Rynearson (**PI**), Sabine Angier (PhD Student), University of Rhode Island Graduate School of Oceanography;
Collaborators: Chris Orphanides, Danielle Cholewiak & Lisa Conger at NOAA



Question: What are the prey sources of NARWs in SNE? Can we use fecal DNA to determine them?
Hypothesis: NARWs may have a broader prey spectrum than expected.
Goal: Characterize prey sources and feeding ecology of NARWs in SNE.

Question: Can we track the presence and abundance of *C. fin* using molecular methods?
Hypothesis: *C. fin* eDNA can be used to predict *C. fin* abundance.
Goals: Develop new methods for determining *C. fin* abundance.

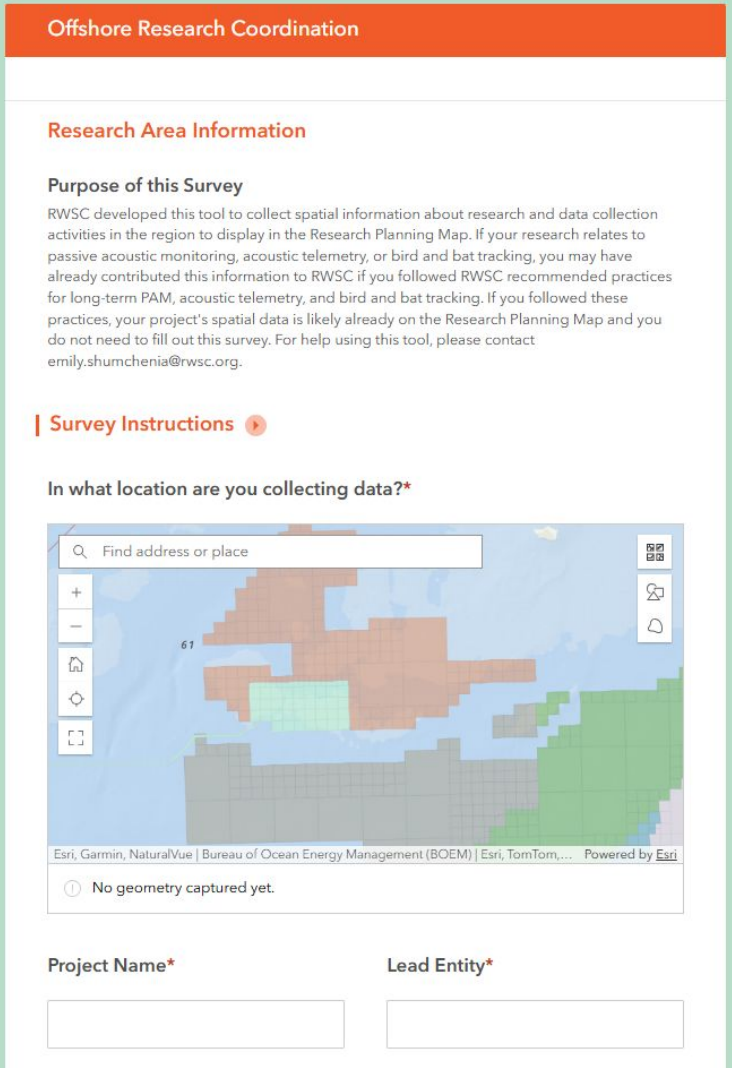
Sabine.angier@uri.edu

Additional eDNA projects

Funder	Lead	Title	Location
MassCEC	GMGI	Evaluating the effects of offshore wind development in southern New England on fisheries biodiversity using environmental DNA	Southern New England
NOAA IOOS MBON, National Oceanographic Partnership Program	MARACOOS, Smithsonian NERACOOS, UMaine NERACOOS, UNH	Mid-Atlantic Marine Biodiversity Observation Network Gulf of Maine Marine Biodiversity Observation Network Coastal New England Marine Biodiversity Observation Network	Mid-Atlantic Gulf of Maine Coastal New England
NJ RMI	Monmouth University	Assessing the impacts of offshore wind development with marine eDNA: an innovative, non-extractive approach for monitoring protected, prohibited, and commercially /recreationally important species.	Mid-Atlantic
Empire Wind	INSPIRE	Empire Wind eDNA Survey	NY/NJ Bight
NOAA	NOAA NEFSC	Marine communities of the northeast US continental shelf, slope, and Gulf of Maine: an eDNA perspective	Gulf of Maine, Southern New England, Mid-Atlantic

2.1 Funded Research Synthesis
Fieldwork Location

https://survey123.arcgis.com/share/d8951e444dfc442a8c1ba79636e36408



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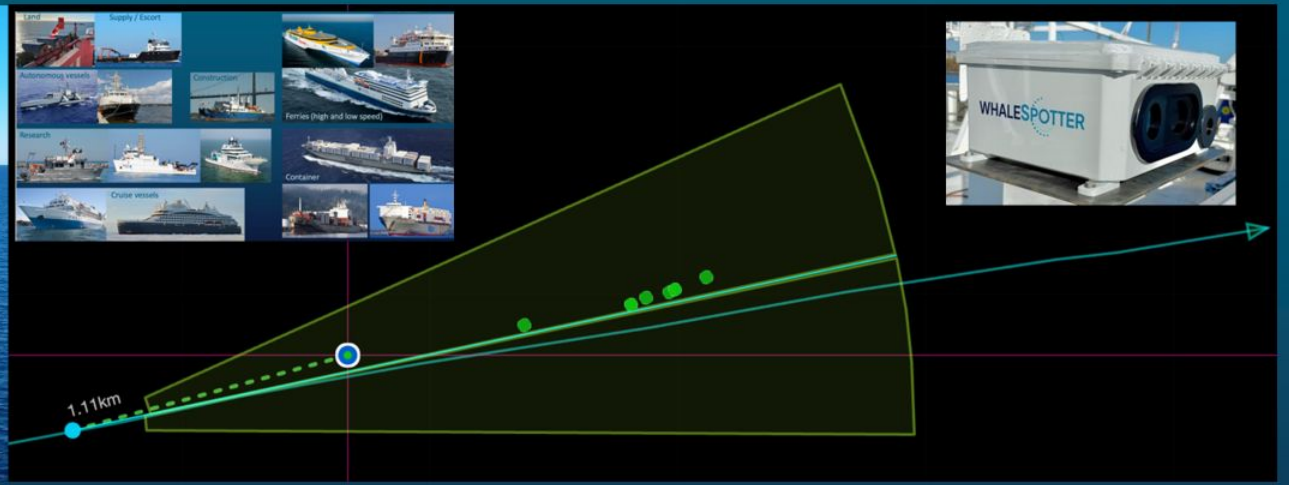
Whales & Oceanography

Funder	Lead
National Fish and Wildlife Foundation	Woods Hole Oceanographic Institute
MaineDOER	University of Maine

Efficacy of thermal imaging whale detection for vessel-strike collision avoidance

WHALESPOTTER
See what lies ahead.
Protect what lives below.™



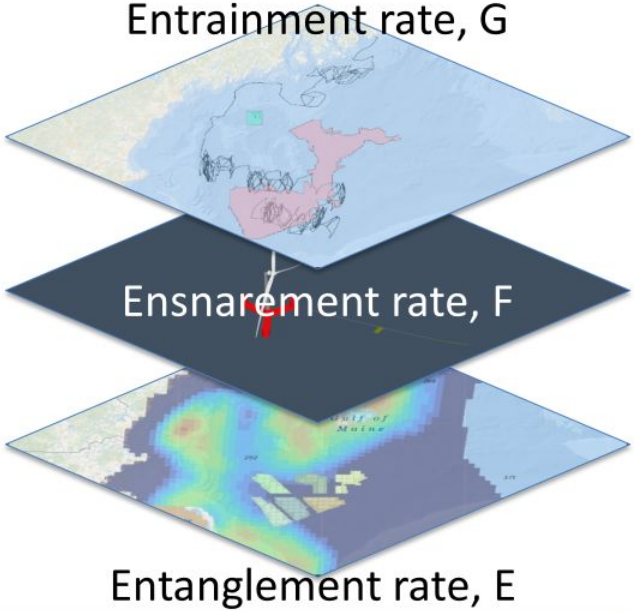
- **Daniel Zitterbart, Woods Hole Oceanographic Institution**
- **NFWF**
- **How well do use mariners real-time whale alerts to avoid whale strike using the WhaleSpotter network (% vessel strike risk reduced)**
- **Global (focus on North America)**
- https://www.whalespotter.com/

WOODS HOLE OCEANOGRAPHIC INSTITUTION

Quantification of the Risk of Secondary Entanglement due to Derelict Fishing Gear for Floating Offshore Wind Turbines

- PI: Spencer Hallowell, University of Maine Advanced Structures and Composites Center
- Co-PI: Damian C. Brady, UMaine
- Funder: Maine Department of Energy Resources
- Goal: Estimate secondary entanglement risk as the probability of **ghost gear entrainment** in a wind development area *times* the probability of **ensnarement of entrained gear** on infrastructure *times* the probability of **entanglement in ensnared gear** based on whale species distribution models.
- Hypothesis: The probability of secondary entanglement is low compared to primary entanglement risks.
- Research area: **Secondary entanglement**

Modeling Three "E's"



Additional Whales & Oceanography Projects

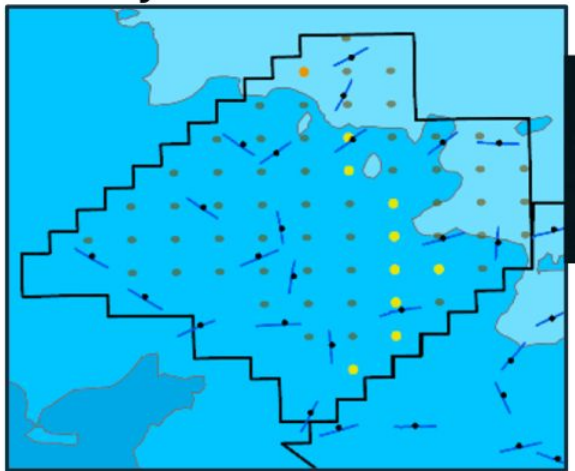
Funder	Lead	Title	Location
RWSC	WHOI	Coupled oceanic and atmospheric wake effects and their impact on nutrient supply and zooplankton community structure across turbine-, wind farm-, and regional-scales	Southern New England
NOAA Fisheries	NOAA	• Modeling the impact of offshore wind development on the circulation and biological productivity of Nantucket Shoals • Southern New England zooplankton survey to inform right whale habitat use in and near the MA/RI WEA • An uncrewed surface vehicle survey characterizing oceanographic conditions to inform ecosystem structure and protected species habitat	Southern New England
Vineyard Wind	WHOI, Rutgers	Vineyard Wind Ocean W'aKEs Study	Southern New England
Orsted	Stony Brook	Assessing environmental and biological drivers of North Atlantic right whale abundance and distribution in New York and Southern New England	Southern New England, NY/NJ Bight

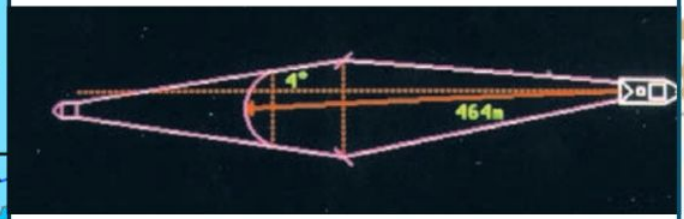
Fisheries Engagement

Funder	Lead
Massachusetts Clean Energy Center	New Bedford Port Authority
Massachusetts Division of Marine Fisheries	Commercial Fisheries Research Foundation
ROSA	University of Maine
Empire Wind 1 via ROSA	Gulf of Maine Research Institute
MaineDOER	Gulf of Maine Research Institute
New Jersey Research & Monitoring Initiative	Virginia Institute of Marine Science

Fishing in and Around Wind Farms

- Principal Investigator: Blair Bailey (New Bedford Port Authority)
- Co-PIs: Steve Cadrin, Chris Rillahan, Chengsheng Chen (SMAST)
- Funder: Massachusetts Clean Energy Center
- Objective: Document the behavior and interaction of commercia fishing vessels within an offshore wind energy area
- Study Area: Southern New England lease areas





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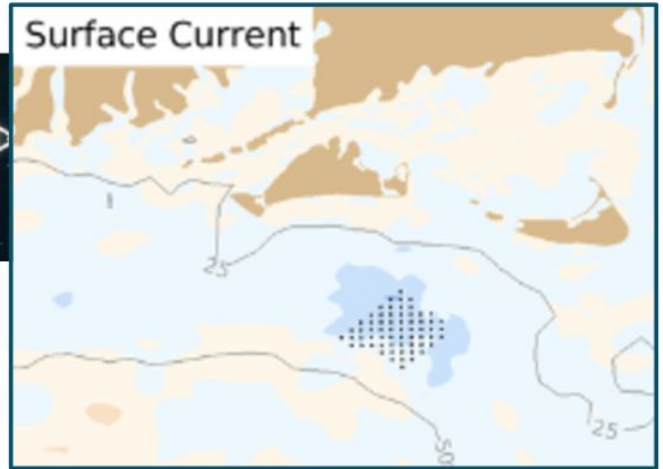


Evaluating the Hazard of Trawling Over Cable Protection Mattresses

Ruby Dener- Research Biologist, Commercial Fisheries Research Foundation

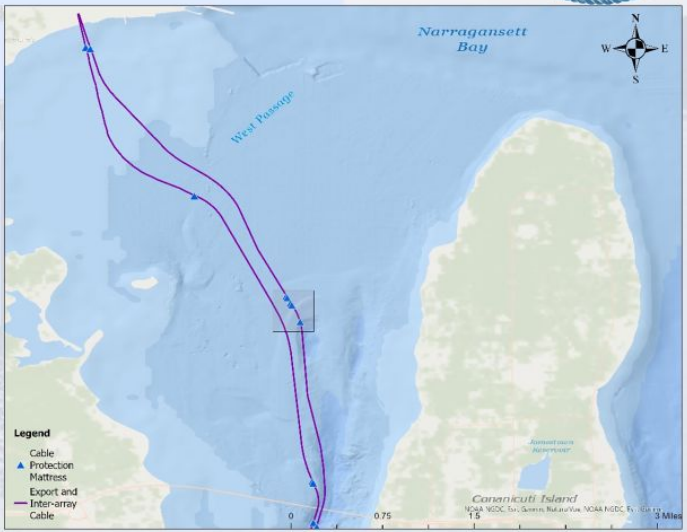
N. David Bethoney
Executive Director
CFRF

Jeff Grant
Owner/Operator
FV Provider

Jonathan Knight
Proprietor
Superior Trawl LLC

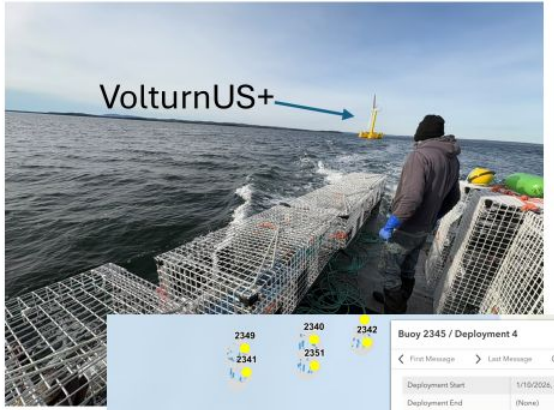
Massachusetts Fishery Innovation Fund

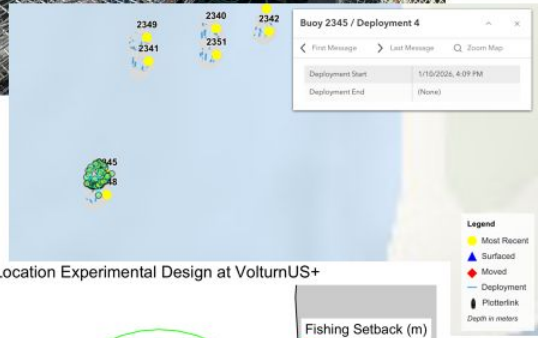
Assessing risks to commercial fishing operations co-located with offshore wind cable protection mattresses

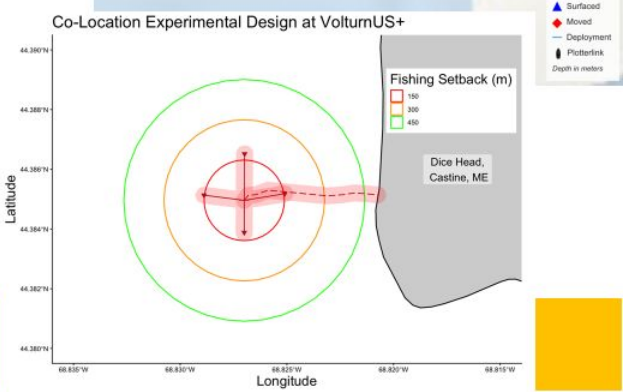


Co-Locating Fixed Fishing Gear with a Demonstration Scale Floating Offshore Wind Turbine

- PI: Damian Brady, University of Maine, School of Marine Sciences
- Co-PIs: Anthony Viselli and Spencer Hallowell, UMaine Advanced Structures and Composites Center
- Funder: Responsible Offshore Science Alliance
- Goal: To develop **Standard Operating Procedures** for fixed gear fishery operation at UMaine's VolturnUS+ informed by **fishing gear drift experiments** relating the probability of turbine-fishery interactions to **metocean conditions**.
- Hypothesis: Safe operational distances decrease during large tides and extreme weather events and should be informed by these conditions.
- Research area: **Fisheries engagement**







Top: Setting fishing gear at VolturnUS+.
Middle: BlueOcean Gear GPS buoy online interface.
Bottom: Distant gradient design of fishing drift experiment.

Project Title: Supporting Fisheries Access in the Gulf of Maine through Scenario-testing & Visual Simulations

Gulf of Maine Research Institute

Co-PI's: Jonathan Labaree & Aaron Whitman, Gulf of Maine Research Institute (GMRI)

Project Team and Partners:
- Chas Van Damme – Energy Solutions Project Manager, GMRI
- Brian Holden – President, United States Maritime Resource Center

Funder: Responsible Offshore Science Alliance (ROSA)

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, lobster traps, jigging machines, gillnets)?
- What navigational, safety, and operational constraints do fishers foresee when fishing within floating offshore wind arrays?
- What design modifications or stipulations could minimize conflict and maximize compatibility between industries?
- How can we achieve a more sustainable and mutually beneficial coexistence between these two industries?

Hypothesis: By engaging fishing stakeholders and testing industry-specific challenges through iterative workshops involving 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:
- Enable fishermen to visualize and experience their fishing operation in a floating offshore wind environment so they can identify barriers and propose solutions.
- Develop guidance for designing construction and operational plans that accommodate fishing activities.
- Create tools and resources that will make the complexities of floating offshore wind more accessible to a broader range of stakeholders.
- Contribute to knowledge gaps on coexistence between fisheries and floating offshore wind.

Study Area: Coexistence and operations

Socioeconomic and cultural impact assessment to inform responsible floating offshore wind development in the Gulf of Maine

Economic Assessment

Kanae Tokunaga, PI
Sr. Research Scientist
Coastal and Marine Economics
Gulf of Maine Research Institute (GMRI)

Todd Guilfoos, Co-PI
Associate Professor of Environmental & Natural Resource Economics
University of Rhode Island (URI)

Socio-cultural Assessment

Christine Beitl, Co-PI
Associate Professor of Anthropology
University of Maine (UMaine)

Research Associates

Clea Harrelson (UMaine) - Sociocultural
Ben Cotton and Jay Kim (GMRI) - Economic

Engagement

Hannah MacDonald
Sr. Program Manager
Fisheries Engagement, GMRI

Chas Van Damme
Project Manager
Energy Solutions (GMRI)

Funding

MAINE DEPARTMENT OF Energy Resources

Advisory and External Review

Maine Coast Fishermen's Association (Advisor)
Project Advisory Council (10 members)

PEER Associates (Project Evaluation)

Socioeconomic and cultural impact assessment to inform responsible floating offshore wind development in the Gulf of Maine

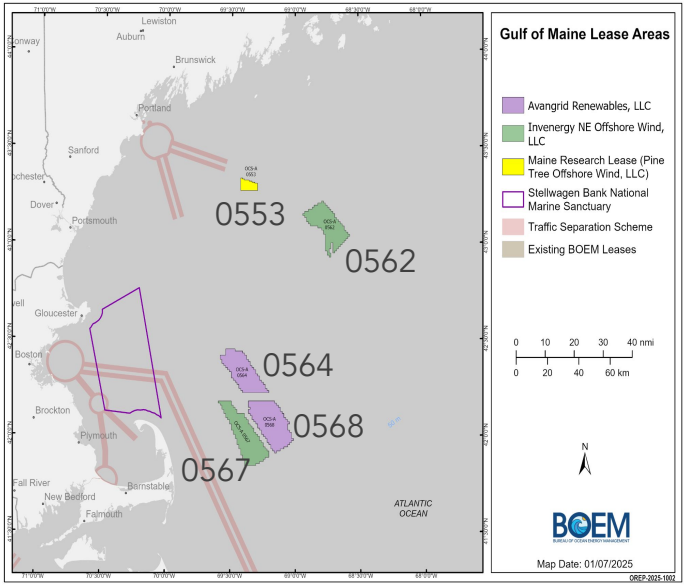
Project Goal and Study Area: To conduct a baseline assessment of social, economic, and cultural impacts of floating offshore wind development on Maine's fishing industry

Economic Assessment

- Scenario-based assessment
- On the water impacts
  - Fishing ground and landed values, incorporating potential changes in fishing behavior
- Shoreside impacts
  - Shoreside infrastructure
  - Employment & wages

Socio-cultural Assessment

- Interviews and archival research to define and characterize attributes of "community"
- On the water impacts
  - Identify linkages between fishing grounds and shoreside communities
- Shoreside impacts
  - Document baseline place-based cultural values



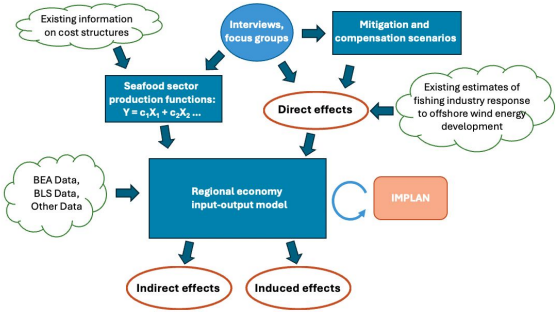
Synthesis: Overall impacts and impacted communities

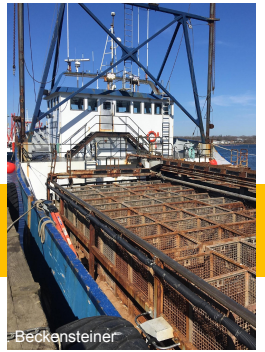
Engagement

- Inclusive and iterative participation from fishing communities for knowledge co-production
- Build stakeholder capacity to understand, critique, and apply the assessment results in their decision making

The seafood economy in the face of change: Socioeconomic analyses to support industry adaptation to offshore wind

- Lead PI: Andrew Scheld, Virginia Institute of Marine Science, William & Mary
- Co-PIs: S. White & A. Michaelis (VIMS), D. Munroe & S. Borsetti (Rutgers), T. Dameron (Last Tow, LLC)
- Funder: NJ DEP & BPU, Research and Monitoring Initiative
- Primary objective: Develop a modeling framework that can be used to assess the economic effects of offshore wind energy development on the local seafood economy
  - Research Question 1: How do changes in fishing activity by clam fleets affect output, income, and jobs for shoreside dependent industries?
  - Research Question 2: How do the socioeconomic effects of mitigation policies that maintain or enhance fishery production differ from direct compensation to the fishing sector?
  - Research Question 3: What is the relationship between policy complexity and uncertainty in socioeconomic effects across mitigation and compensation policies?
- Study area: US Mid-Atlantic & Northeast (MA to VA, focus on NJ)





Additional Ongoing Projects with Fisheries Engagement

Funder	Lead	Title	Coordination
Massachusetts Clean Energy Center	Gulf of Maine Research Institute	Understanding Fishing Interactions: Gulf of Maine Fisheries and Floating Offshore Wind***	Coordination with ROSA-funded project presented today
ROSA	UMass Dartmouth SMAST	Evaluation of Technologies for Trawl and Dredge Vessels to Safely Operate within Offshore Wind Farms***	Coordination with MassCEC-funded NBPA presented today
NYSERDA	BrownGreer	Regional Fund Administrator	

***previously presented

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Regional Wildlife Science Collaborative

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Responsible Offshore Science Alliance

Next Steps

- A second iteration will be held in late 2026 for projects unable to share today
- Future iterations of funder coordination meeting series
- RWSC Subcommittees (esp. April 16 Habitat & Ecosystem)
- ROSA Advisory Council meetings (incl. Thursday, 3/19 @ 1pm ET)

RWSC
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