

# Offshore Research (Atlantic) New Projects Workshop

February 23, 2026

1:00pm ET

**RWSC**

Regional Wildlife Science Collaborative



**ROSA**

Responsible Offshore  
Science Alliance

# 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

# 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

# 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/<br>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

# 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

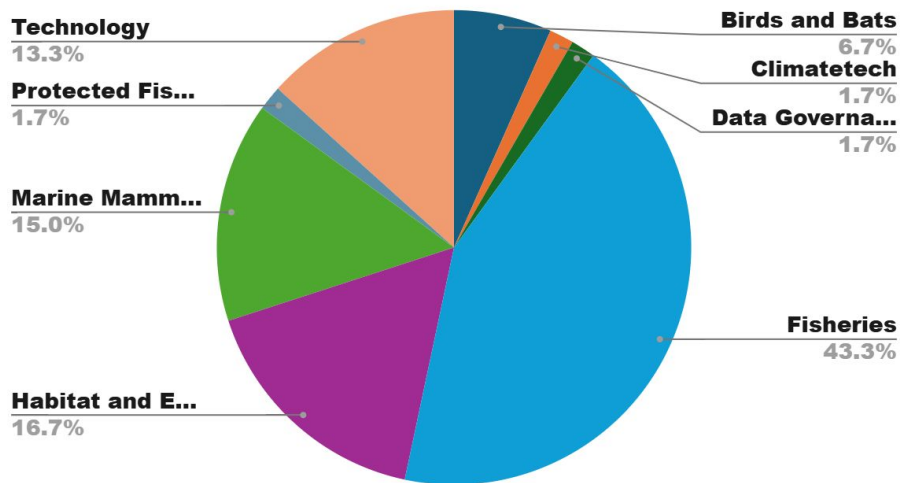
# Summary of new projects

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

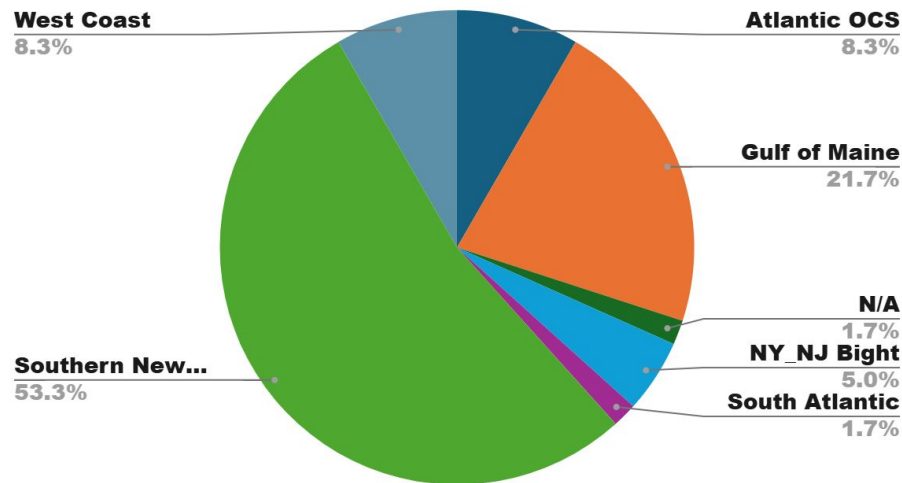
# Summary of New projects

*Caveats: some projects span focal areas and study areas*

## Focal Areas of Projects



## Study Area



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

# Project Presentations

**RWSC**

Regional Wildlife Science Collaborative



**ROSA**

Responsible Offshore  
Science Alliance

# 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.

# eDNA

## Overview of Marine Technology Society eDNA Committee

| Funder                                | Lead                      |
|---------------------------------------|---------------------------|
| Orsted                                | University of Connecticut |
| National Fish and Wildlife Foundation | John Hopkins              |
| NOAA Fisheries                        | URI                       |

# 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



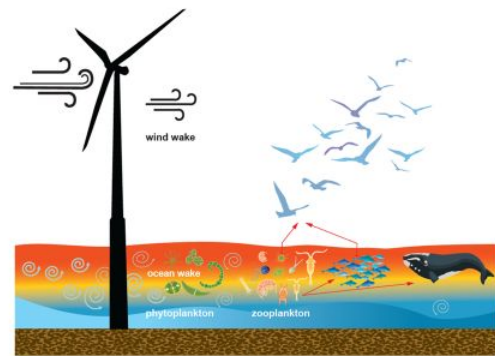
Multi-year project assessing **ecosystem connectivity** in the Revolution Wind area.

## 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

## Goal:

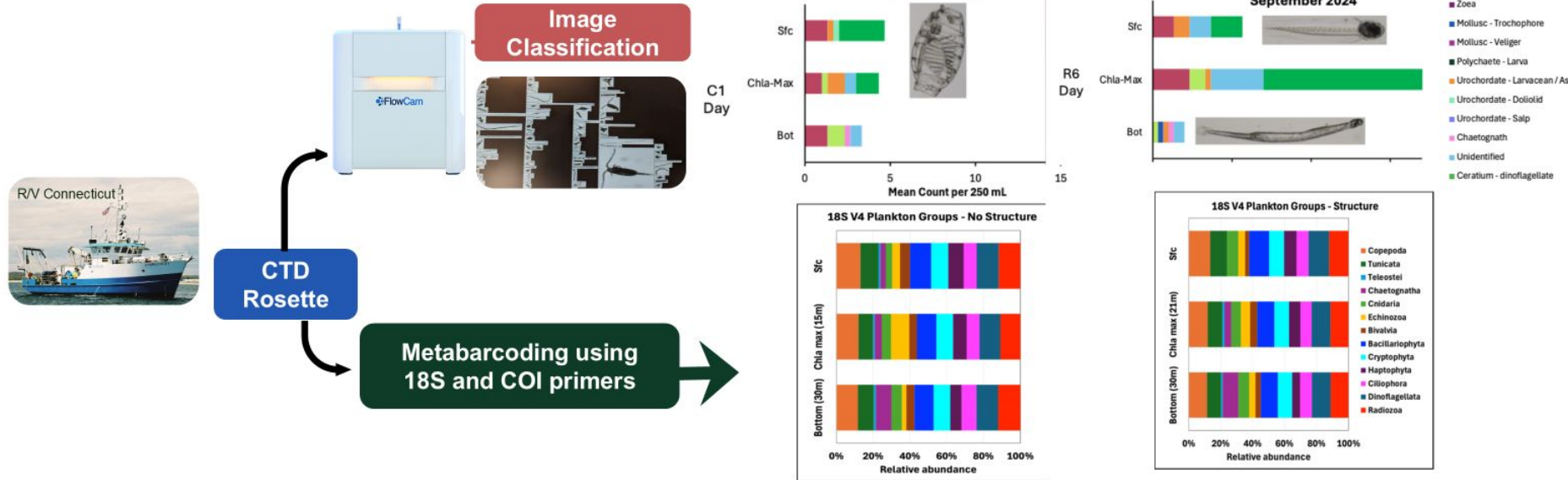
- Assess changes on plankton communities, sand lance distribution, and water-column processes.



Providence Business First, 2023



# Planktonic Diversity



- 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!

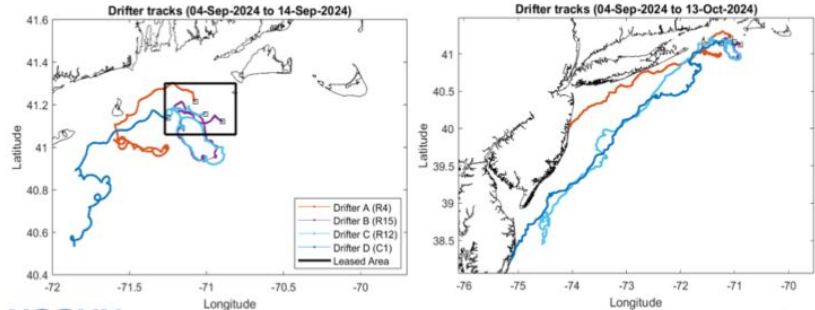
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Sand Lance:

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

## 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

65

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

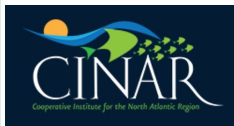


# Exploring Real Time Monitoring of North Atlantic Right Whales with Automated eDNA Analysis

- **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)

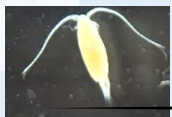
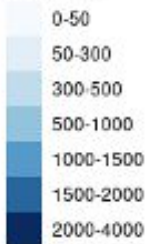


# North Atlantic Right Whale Feeding Ecology Using Scat Metabarcoding and Quantification of eDNA



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

Depth (m)



**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.

# 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<br>NERACOOS, UMaine<br>NERACOOS, UNH | Mid-Atlantic Marine Biodiversity Observation Network<br>Gulf of Maine Marine Biodiversity Observation Network<br>Coastal New England Marine Biodiversity Observation Network                          | Mid-Atlantic<br>Gulf of Maine<br>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>

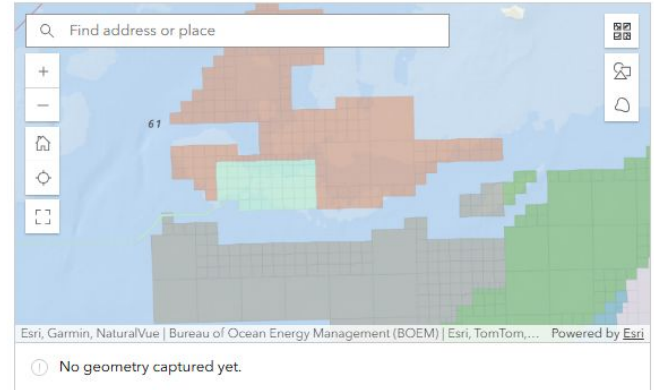
### Research Area Information

#### Purpose of this Survey

RWSC developed this tool to collect spatial information about research and data collection activities in the region to display in the Research Planning Map. If your research relates to passive acoustic monitoring, acoustic telemetry, or bird and bat tracking, you may have already contributed this information to RWSC if you followed RWSC recommended practices for long-term PAM, acoustic telemetry, and bird and bat tracking. If you followed these practices, your project's spatial data is likely already on the Research Planning Map and you do not need to fill out this survey. For help using this tool, please contact [emily.shumchenia@rwsc.org](mailto:emily.shumchenia@rwsc.org).

#### | Survey Instructions ▶

In what location are you collecting data?\*

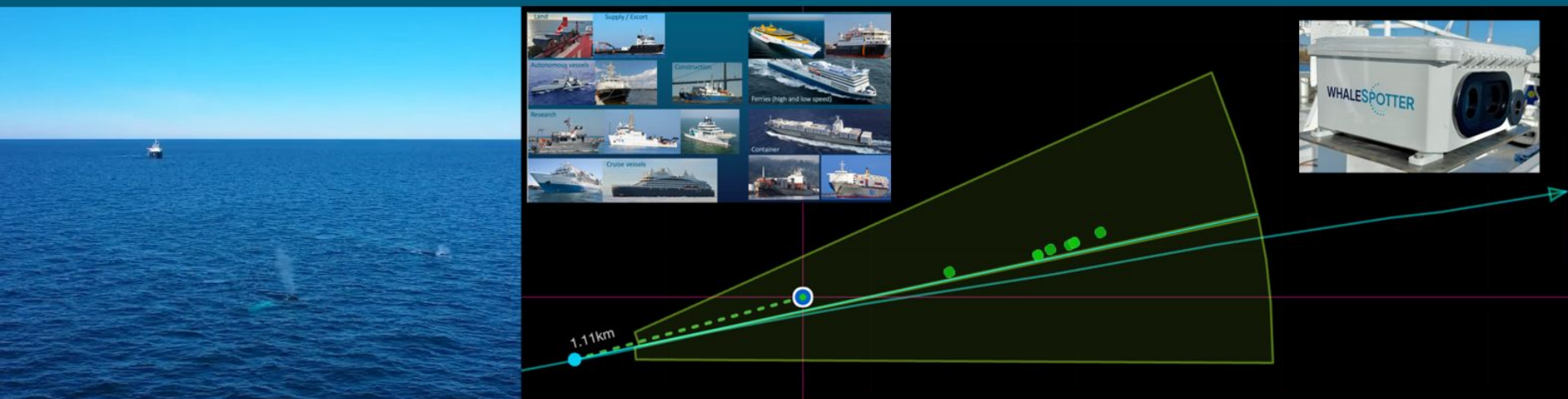


Project Name\*

Lead Entity\*

# Whales & Oceanography

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



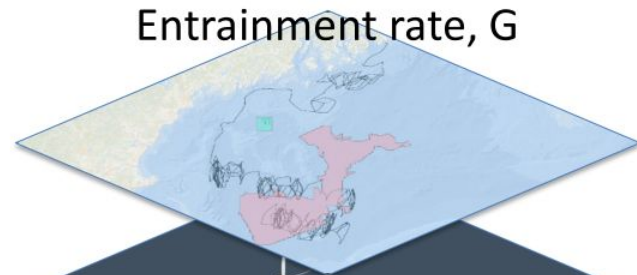
- Daniel Zitterbart, Woods Hole Oceanographic Institution
- NFWF
- How well do use mariners real-time whale alerts to avoid whale strike using the WhaleSpotter network ( % vessel strike risk reduced)
- Global (focus on North America)
- <https://www.whalespotter.com/>

# 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 entrapment** 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”

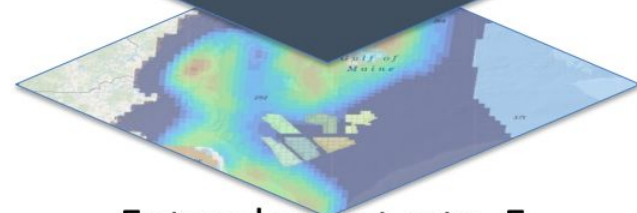
Entrainment rate, G



Ensnarement rate, F



Entanglement rate, E



# Additional Whales & Oceanography Projects

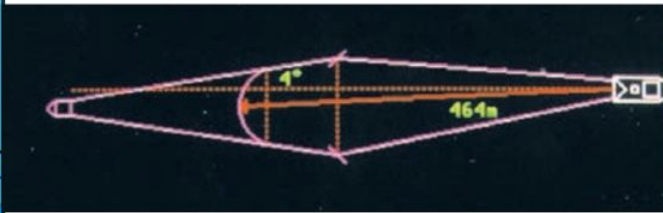
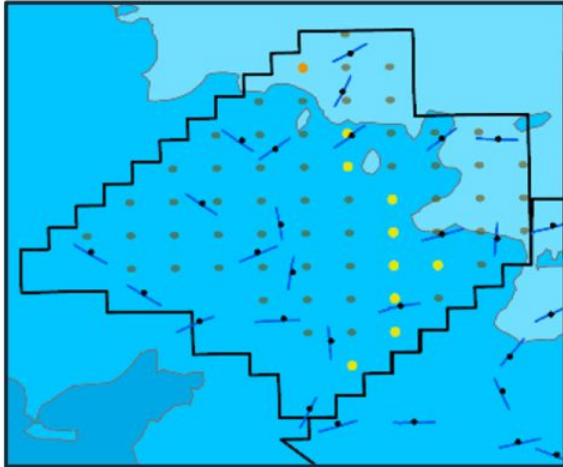
| Funder         | Lead          | Title                                                                                                                                                                                                                                                                                                                                                                                                                                | 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          | <ul style="list-style-type: none"><li>• Modeling the impact of offshore wind development on the circulation and biological productivity of Nantucket Shoals</li><li>• Southern New England zooplankton survey to inform right whale habitat use in and near the MA/RI WEA</li><li>• An uncrewed surface vehicle survey characterizing oceanographic conditions to inform ecosystem structure and protected species habitat</li></ul> | 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 commercial fishing vessels within an offshore wind energy area
- Study Area: Southern New England lease areas



# 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

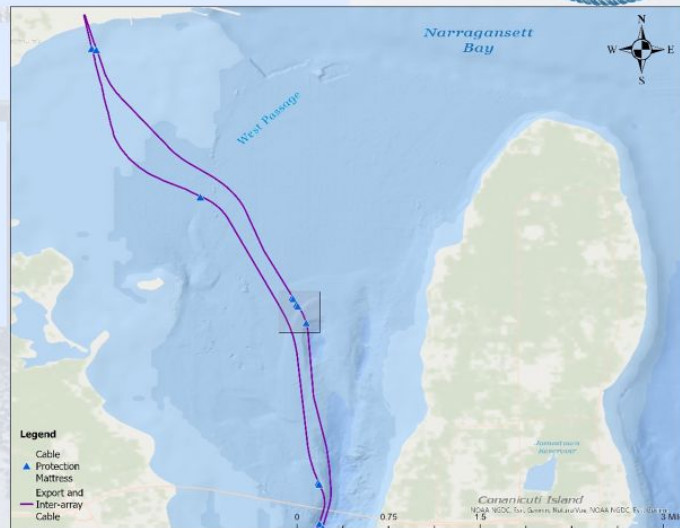
**Jonathan Knight**

Proprietor  
Superior Trawl LLC



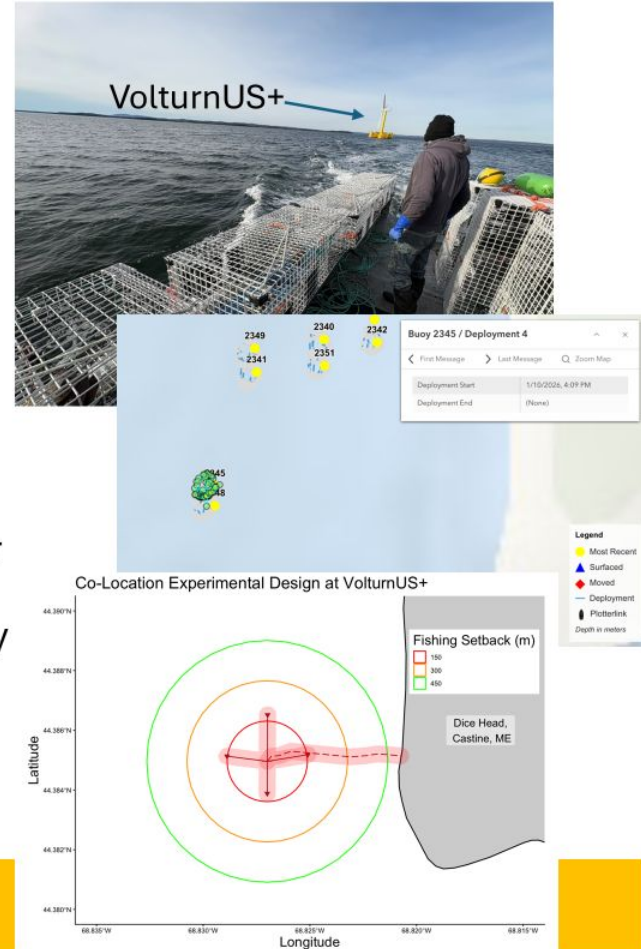
## Massachusetts Fishery Innovation Fund

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 VoltturnUS+ 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 VoltturnUS+.

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



**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 Beitzl, 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)



## Advisory and External Review

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

MAINE DEPARTMENT OF  
Energy Resources

# 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

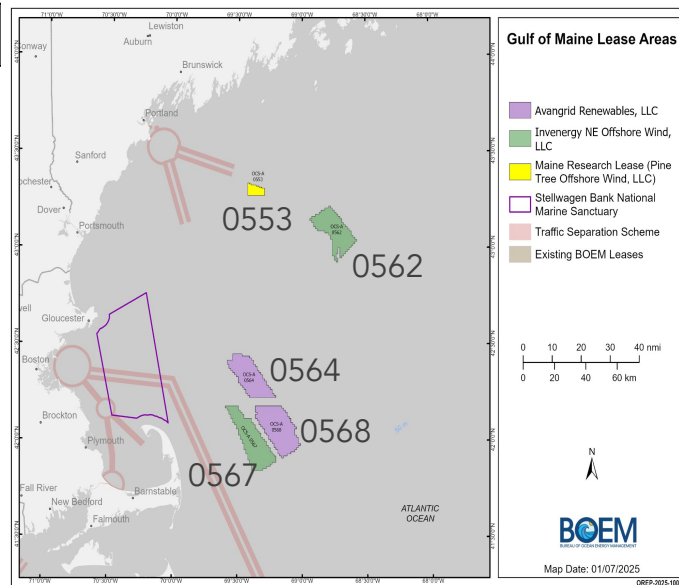
- Interviews and archival research to define and characterize attributes of "community"
- On the water impacts
  - Identify linkages between fishing grounds and shoreside communities
- Shoreside impacts
  - Document baseline place-based cultural values



Synthesis: Overall impacts and impacted communities

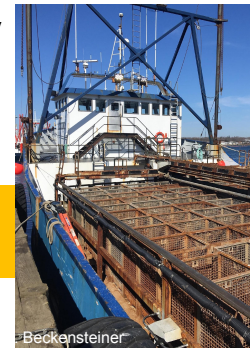
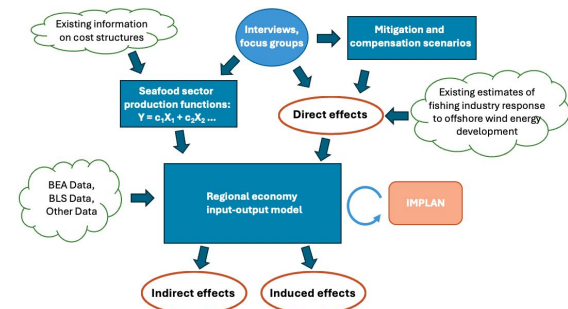
## Engagement

- 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)



R. Mann

# 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

# 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)

