Maine Offshore Wind Research Consortium Advisory Board

Final Presentation: Fisheries Coexistence Project (ERM & GMRI)
"Exploring Approaches to Fisheries' Coexistence with Floating Offshore Wind"

Webinar Summary

Tuesday, February 25, 2025 12:00PM – 1:30 EST

Fully Virtual Meeting

Meeting materials are available here.

MEETING OBJECTIVES

On February 25, 2025, the Maine Offshore Wind Research Consortium (Research Consortium) Advisory Board (AB) held a virtual webinar meeting. The objectives of this webinar were to:

- Learn research outcomes of the ERM and Gulf of Maine Research Institute (GMRI) project "Exploring Approaches to Fisheries' Coexistence with Floating Offshore Wind."
- Discuss implications of research outcomes for future offshore wind research.
- Provide an opportunity for the AB and other attendees to present comments and pose questions.

WELCOME & INTRODUCTIONS

Opening remarks were given by Katy Bland (Maine Sea Grant), who reviewed the meeting agenda and objectives and gave a brief overview of the meeting guidelines. Katy then handed the meeting over to Advisory Board (AB) Co-Chair Alison Bates who welcomed participants. Meghan Suslovic (Governor's Energy Office) provided context for this project, noting that engagement with the fishing industry to advance key fishing priorities and data gaps has been an ongoing priority for the state. She reminded attendees that this project emerged during the AB's first prioritization process in 2023, after which the Governor's Energy Office (GEO) advanced a competitive solicitation. ERM and GMRI were awarded the contract in 2024 following a competitive Request for Proposals.

A list of AB members participating in the meeting and meeting observers is in Appendix A.

PROJECT: "EXPLORING APPROACHES TO FISHERIES' COEXISTENCE WITH FLOATING OFFSHORE WIND"

Presenters: Alice Sandzén (ERM) & Chas Van Damme (GMRI)

Timeline: March 2024 – February 2025

Project objectives:

- Complement ongoing efforts by the state, the Bureau of Ocean Energy Management (BOEM), the Research Consortium, and other entities by addressing critical data gaps
- Build on existing resources and data for greater efficiency and immediacy of results
- Allow decision makers and stakeholders to make sensible predictions for other regions/ species/ applications/ scales
- Provide collaborative research opportunities with community members

The team provided an overview of their methodological approach which began with a literature review of case studies and regulations. The case studies review (led by ERM) identified four types of coexistence (multipurpose, colocation, symbiotic use, and repurposing) and research gaps that could be filled through future studies of operational and developed projects. Stakeholder engagement (led by GMRI) occurred throughout every phase of the project, and during this phase, fishermen defined their understanding of 'coexistence' and identified primary concerns around the development of floating offshore wind (FOW). Key findings from the case studies and regulatory and legal review are outlined below.

The team also evaluated compatibility between fishing gear types commonly used in the Gulf of Maine and FOW technical components, such as platform types, mooring systems, and anchoring designs. This step resulted in clearly articulated concerns from the fishing industry regarding each of these FOW components. Key takeaways highlighted fishermen's concerns around safety and gear entanglement, as well as their preferences for smaller footprint designs, buried inter-array cables, and the "least impactful" anchoring system.

Overall, based on preliminary findings and ongoing input from stakeholders and the AB, this study resulted in technical compatibility assessments and specific recommendations. This study also outlined next steps for future research, listed below.

Key findings from the case studies review emphasize the importance of:

- Establishing a 'co-existence first' project design (i.e. selecting sites with minimal disruption; burying cables for protection)
- Engaging with stakeholders early and often
- Consistently utilizing agreed upon language (i.e., 'coexistence')
- Thinking creatively about potential local benefits
- Cooperating across sectors for successful project outcomes

Primary concerns identified through legal and regulatory review:

- Potential habitat changes (e.g. creation of artificial reefs, impacts of exclusion zones)
- Potential restricted access to fishing grounds, potential navigational route changes, safety concerns
- Costs for navigation, insurance consideration, and the need for compensation programs

Recommended next steps for GEO, the Research Consortium, and other collaborators are as follows:

- Empirical Data
 - Pilot coexistence zones and demonstration scale projects to test compatibility
 - Fill species distribution data gaps, conduct pre-construction surveys, and monitor ecosystem changes over time
- Modeling Studies
 - Model climate related changes to evaluate future species distributions
 - Model hydrodynamics and ecosystems to evaluate the impact of FOW arrays on species distribution and to inform layout design
 - Model socioeconomic impacts to evaluate how potentially restricted fishing zones may alter community livelihoods to promote equitable compensation
- Economic Impact Assessment

- Engage with the insurance industry to understand the potential insurance implications for fishermen who fish within a FOW array
- Design adaptive compensation models that represent all gear types and account for direct and indirect economic impacts
- Stakeholder Engagement Frameworks
 - o Evaluate the regulatory framework to ensure all stakeholders are represented
 - Evolve current engagement frameworks to further promote communication and collaboration between the fishing industry and FOW developers, while minimizing stakeholder fatigue

The Final Report will be finalized by the end of March and available to read on GEO's website.

Discussion

- Question about specific examples or recommendations to promote fishermen's participation in
 the design aspect of FOW projects. Response that engagement would need to happen prior to
 the Construction and Operations Plan (COP) phase. Further, developers could communicate with
 fishermen to describe how they're making decisions on layout and mooring types, helping to
 establish mutual understanding of what's driving the design of the wind farm.
- Question about whether the research team considered pair trawling and offshore seines.
 Response that there are many nuances and scenarios to be considered, and that this is assessment is based on a desktop review and assumptions. A common theme that emerged throughout the study was that fishermen found it difficult to provide feedback on different design scenarios without specific details on what design or technologies would be used.
- Question about the number and placement of inter-array cables within arrays. Response that the layout designs for lease areas in the Gulf of Maine have not yet been determined and is outside the scope of this work.
- Question about FOW impacts on marine mammals. Response that while outside of the scope of this study, these concerns are a high priority for the AB, and the upcoming round of Consortiumfunded projects includes a study on secondary entanglement.
- Question about how the potential economic benefits for towns were considered in the study.
 Comment that Maine has a long maritime history, and new job creation will not necessarily
 encourage fishermen to shift careers. Response that one of the case studies reviewed provided
 examples of different economic benefits resulting from offshore wind generation. In one case, a
 local fishing organization gained ownership of a fueling business that fueled a fleet of boats used
 to develop an offshore wind project. This case offers an example of how existing jobs could be
 supplemented, not replaced.
- Comment that a lot of work still has to be done by developers with offshore wind leases in the Gulf of Maine, including site assessment. This may present an opportunity for the fishing industry to share their knowledge about benthic conditions to help inform anchoring design types. Developers may find that certain scenarios might not be feasible based on bottom type.
- Comment that when FOW leasing begins, consideration should be given to concentrating the turbines in one spot, leaving space for fishing and habitat, and ensuring the inter-array cables

are not in the way of fishing activities. Response from another participant that there are design reasons for spacing out the turbines, including functionality and energy production.

APPENDIX A – ATTENDANCE

Advisory Board Members

Terry Alexander, F/V Jocka, Co-Chair Alison Bates, Colby College, Co-Chair Dave Cowan, Diamond Offshore Wind Jack Cunningham, Maine Lobster Union Julian Fraize, NOWRDC

Sarah Haggerty, Maine Audubon

Bob Humphrey, Sport-Ventures

Fred Moore, Pleasant Point Passamaquoddy Reservation

Laura Morse, JASCO

Jocelyn Runnebaum, TNC

Daniel Salerno, Fisheries Scientist, Limington, Maine

Graham Sherwood, GMRI

Kanae Tokunaga, GMRI

Mary Beth Tooley, O'Hara Corp

Stephanie Watson, GEO

Trevor White, Indian Township Passamaquoddy Reservation

Ann Zoidis, Tetra Tech

Advisory Board Members - Not Present

Damian Brady, UMaine

Wing Goodale, BRI

Ben Martens, MCFA

Patrice McCarron, MLA

Walt Musial, NREL

Bill Needelman, Portland Waterfront Coordinator

John Perry, MDIFW

Anthony Viselli, UMaine ASCC

Carl Wilson, Maine DMR

Gayle Zydlewski, Maine Sea Grant

Collaborators

Morgan Brunbauer, NYSERDA

Todd Callaghan, MA CZM

Doug Christel, NOAA NMFS

Jennifer Couture, NEFMC

Hollie Emery, MA CZM

Fiona Hogan, RODA

Andy Lipsky, NOAA NEFSC

Cheri Patterson, New Hampshire Fish & Game

Mike Pol, ROSA

Brad Schondelmeier, MA DMF

Angela Silva, NOAA NEFSC

Maine's Congressional Delegation or State Representatives

Adam Lachman, Sen. Angus King

Presenting Project Team

Chas Van Damme, GMRI Hannah MacDonald, GMRI Tayebeh Tajalli Bakhsh, ERM Alice Sandzén, ERM Gwyneth Roberts, ERM

Program Management, Advisors, and State Agency Staff

Beth Bisson, Maine Sea Grant
Katy Bland, Maine Sea Grant
Olivia Burke, Carbon Trust
Caroline Coccoli, Carbon Trust
Julia Hiltonsmith, Maine Sea Grant
Jessica Jansujwicz, Maine Sea Grant
Meghan Suslovic, GEO
Afton Vigue, GEO
Erin Wilkinson, Maine DMR
Casey Yanos, Maine DMR

Additional observers attended online.