

Maine Offshore Wind Research Consortium Advisory Board

Meeting Summary

Monday, June 21, 2024
10:30AM – 12:30PM EST

Fully Virtual Meeting

MEETING OBJECTIVES

On June 21, 2024, the Maine Offshore Wind Research Consortium (the Consortium) Advisory Board (AB) held its eighth meeting online via Zoom. The objectives of this meeting were to:

- Introduce new Advisory Board members
- Receive brief updates on Research Consortium activities and research
- Prioritize research questions (8) through an Advisory Board discussion and vote

WELCOME & INTRODUCTIONS

Opening remarks given by Terry Alexander, co-chair of the Research Consortium. Terry acknowledged the many offshore wind-related meetings that have recently occurred and thanks everyone for their continued engagement in these conversations. Katy Bland, Program Manager (Sea Grant) provided a high-level overview of the process for selecting new Advisory Board (AB) members, starting with the Governor's Energy Office's (GEO) call for additional AB members with area-specific expertise to the Steering Committee's (SC) review of candidate materials and approval of candidates. Katy noted that the new AB members received a document of briefing materials to provide them with necessary background on the Consortium and Advisory Board meetings. The new AB members (Julian Fraize - technology, Ann Zoidis - marine mammals, and Kanae Tokunaga - economics) then provided brief personal introductions to the rest of the AB. Finally, Katy reviewed the meeting agenda and objectives and gave a brief overview of the meeting guidelines.

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

PROGRAMMATIC & RESEARCH UPDATES

Stephanie Watson, GEO, reminded meeting attendees of GEO's [Request for Information](#). Stephanie encouraged those who have not yet submitted responses to do so by the deadline on June 21. She also provided an update on the Research Array Lease. Much of the information presented was more thoroughly detailed during GEO's Research Array Informational Webinar on June 20 from which slides and a meeting summary will be posted shortly on GEO's [website](#). Offering an update on the state's next steps, Stephanie noted that the state is reviewing BOEM's lease offer to ensure it aligns with the goals of the [Maine Offshore Wind Roadmap](#), while also continuing efforts towards regional collaborative work, and advancing other aspects of responsible offshore wind.

Meghan Suslovic, GEO, provided brief updates on the Consortium-funded projects from the previous RFP. The socioeconomic data inventory study being performed by Karp Strategies and Alison Bates (Colby College) is concluding. Details and findings from the study will be presented to the AB on July 22. Information from the benthic mapping survey being conducted by Maine DMR should be publicly available by the end of the calendar year. The co-existence project performed by ERM and GMRI is finalizing Phase I, with expectations to complete the study in early 2025. Meghan encouraged members of the AB to keep these projects, their goals, and timelines in mind during this

next phase of research prioritization. Finally, Meghan gave an overview of the amount of funding available for FY25 (slide #8). Comment to make sure to utilize existing data portals and guidelines (e.g., NERACOOS; RWSC; ROSA) for data and information sharing.

REVIEW RESEARCH PORTFOLIO DECISION PROCESS

Laura Singer, SAMBAS Consulting, provided an overview of the decision-making process. In particular, Laura noted that in this process, the AB makes recommendations to the SC. Based on these recommendations, as well as legislative requirements, and considerations of overlap with other ongoing research activities and funding opportunities, the SC will make a final decision on the recommended projects and will make a formal recommendation to the state. The SC meeting and vote is scheduled to take place on July 1, and a decision memo summarizing SC decisions and rationales will be shared with AB members. Additionally, Laura highlighted the Conflict-of-Interest policy to offer an opportunity for AB members to ask questions related to conflicts of interest in the prioritization process.

RESEARCH PRIORITIZATION DISCUSSION AND VOTE

Olivia Burke, Carbon Trust, reminded AB members of the reprioritization process that has taken place this year. The process began in February, when small, informal group working sessions developed project ideas that align with the priority research topics. Olivia and Jan Matthiesen, Carbon Trust, then arranged follow-up discussions with AB members and Collaborators. Discussions from the calls guided the development of more detailed one-pager summaries for potential projects in the areas of highest priority. These proposed projects were then presented to the AB at the May 6 meeting, during which AB members reflected on the feasibility, urgency, and synergies of these projects. Since then, the projects have continued to evolve based on those discussions and additional input from individuals with relevant expertise. Olivia reminded the AB that these projects should help to achieve the goal of the Consortium, which are to “create a common understanding of the local and regional impacts (positive and negative) of floating offshore wind in the Gulf of Maine” as well as meet the three objectives of the Consortium:

- Explore opportunities and challenges that floating offshore wind poses to current and future uses in the Gulf of Maine, including how to best support co-existence with the fishing industry;
- Identify methods to avoid and minimize impacts on ecosystems and existing uses of the Gulf of Maine; and
- Investigate ways to realize cost efficiencies in commercialization of offshore wind to reduce potential costs to ratepayers.

The Consortium may prioritize, scope, commission, and/or find collaborative partners to implement scientific studies on the ecological, technological, economic, and social impacts to achieve this goal.

The Consortium should prioritize projects and the SC will subsequently consider legislative requirements and other ongoing research activities and funding opportunities.

Research Topic#1: Modelling distributional changes to fish stock in response to temporal and spatial changes in the Gulf of Maine

Summary of draft project details (see slide #14 for more detail):

- Budget: ~\$400k
- Research Area: Co-use/co-existence and impact on wildlife
- Objectives:

- Better understand fish distribution by utilizing data from various sources to undertake a modelling exercise of present and future distribution within and adjacent to WEA sites.
- Dynamic modelling will examine potential climate change impacts and simulating marine protected areas will allow an evaluation of reduced biomass removals in overlapping locations to understand locally increased biodiversity, displacement, productivity and redistribution of fish species.

Summary of AB discussion:

- In general, AB members were interested in this project, but have concerns about funding limitations and time constraints.
 - Multiple AB members noted the ongoing efforts to do similar work, asking questions about whether these efforts are considered in this project's design and approach.
 - Suggestion to instead consider how modeling efforts already underway (which have already had significant investment) could be improved (i.e., leveraging AI to do predictive forecasting).
- Indication that while there is existing information to draw upon, data gaps still exist. More relevant data must be collected to begin modeling the approach for this project.

Research Topic #2: Assessing and minimizing risks to bat species in the Gulf of Maine in collaboration with the fishing industry

Summary of draft project details (see slide #13 for more detail):

- Budget: \$500k
- Research area: Impact on wildlife
- Objectives:
 - Conduct acoustic data collection and analysis on bat species to further support an ecological/ environmental baseline understanding in the Gulf of Maine.
 - This study focuses on yielding information on baseline bat activity rather than specifically collecting data within a location such as the proposed Wind Energy Areas (WEAs).
 - The primary data collection activity is anticipated to be bat acoustic detectors that could be fitted to the existing buoy networks, island weather stations, and coastal sites. There could be opportunities to build on planned work with fishing vessels, and other vessels of opportunity.

Summary of AB discussion:

- Considering the compelling conversations around this topic at the last AB meeting, question about how ecologists and biologists are thinking about the prioritizing research on birds versus bats.
 - While research on both bats and birds are necessary, there is virtually no data on bats and their use of offshore space. Understanding if bats are present in the offshore space will be critical as offshore wind projects move into the development phase.
 - Regarding the priority of bat research relative to bird research: There are currently significant tracking efforts for colonial nesting seabirds. Tracking data is immensely useful, bringing new insight into how birds are affected by offshore wind. Other bird species will need to be evaluated. Studying migratory birds will likely not be required of developers.

- Question about the possibility of combining the bat and bird studies. Response that both studies could be funded if the respective project budgets are scaled back. To perform the bat study well, a budget of 250k would be a reasonable minimum.
- Note that it would be helpful if the state agencies made a state priorities document available.

Research Area #3: Bird tracking study in the Gulf of Maine

Summary of draft project details (see slide #15 for more detail):

- Budget: ~\$500k - \$700k
- Research area: Impact on wildlife
- Objectives:
 - Conduct data collection and analysis on key bird species to further support an ecological/ environmental baseline in the Gulf of Maine and to support understanding the risk offshore wind poses to bird.
 - Ideally, over a minimum of a two-year period to account for variations in bird movement, data will be collected on prioritized (and identified by the RFP responder) bird species where there are data gaps.
 - Proposals may leverage existing assets or deployment of new technology within the total maximum budget. Projects should coordinate surveys that cover multiple lease areas.

Summary of AB discussion:

AB considerations of this project and the bat study were discussed together. Please refer to the previous section for an overview of AB discussion on this study.

Research Area #4: Socioeconomic Impact Assessment of Floating Offshore Wind Development in the Gulf of Maine

Summary of draft project details (see slide #16 for more detail):

- Budget: ~200k
- Research area: Socio-economic
- Objectives:
 - Phase 1:
 - Define and identify the communities that will be most likely to be significantly affected (positively or negatively) by offshore wind development (based on the WEAs). This could include impact in fishing, from electrical infrastructure and construction activities.
 - Assess how impacted communities may change over time (e.g., by the phase of development)

Summary of AB discussion:

- Concerns that this study will not be feasible until there is more certainty around cabling routes and the affected communities.
- Multiple recommendations to develop a more clearly defined scope and determine if the study will focus on direct or indirect impacts.
- Note that a good progression could be Karp/Alison Bates' inventory as phase 1, framework development as phase 2, and impact assessment as phase 3.
- Although other socioeconomic and environmental justice assessments are required of BOEM and other agencies, they occur later in the process and are sometimes unsatisfactory. A study through the Consortium provides an opportunity to inform and improve the federal

process and steer developer analyses and assessments in a direction that the Consortium finds adequate. Note that requirements under NEPA do not provide as much detail as this project would.

- Note that the AB could provide a guidance document on the assumptions that would be used. Note that “Best Practices” will be included in the Socioeconomic Dataset Inventory outputs.

Research Area #5: Framework for Socioeconomic Impact Assessment of Floating Offshore Wind Development

Summary of draft project details (see slide #17 for more detail):

- Budget: N/A
- Research area: Socio-economic
- Objectives:
 - Develop a common framework (could build on existing) to assess the socio-economic impact of offshore wind on affected communities.

Summary of AB discussion:

AB considerations of this project and the previously mentioned Socio-economic Impact Assessment were discussed together. Please refer to the previous section for an overview of AB discussion on this study.

Research Area #6: Understanding the risk and remote detection of secondary entanglement

Summary of draft project details (see slide #18 for more detail):

- Budget: Phase 1 & 2 - \$350k
- Research area: Technology; impact on wildlife
- Objectives:
 - Investigate the potential impact and likelihood of secondary entanglement in floating offshore wind moorings and cable systems.
 - Understand the extent of fishing gear accumulation on the floating wind structures and leverage existing data, such as from the Gulf of Mexico.
 - Identify technologies that can minimize the risk of secondary entanglement, determine the most effective methods for automated detection and approaches to removal.
 - Optional: Test and validate relevant technologies.

Summary of AB discussion:

- Conversation around the relevance of this study to the Gulf of Maine.
 - Is this study specific to the Gulf of Maine, or is there a broader need for this kind of research? Depending on the answer to this question, this may be a study that should be addressed by NOAA or other agencies.
 - This topic comes up in many conversations surrounding offshore wind, and it is a concern for Maine from an ocean user, stakeholder, and policy perspective.
- There is no need to redevelop monitoring systems; rather, desktop research (literature review; inventory of existing technology) would be useful.
- Based on the larger interest in this research across the nation, suggestion to pursue opportunities to collaborate on this work to extend the reach of the work.

Research Area #7: Industrialization of the floating supply chain in Maine

Summary of draft project details (see slide #19 for more detail):

- Budget: ~\$250k?
- Research area: Technology
- Objectives:
 - Explore innovative technology solutions for infrastructure development, industrialization, and cost reduction. Provide a comprehensive understanding of how to advance the floating supply chain industry in Maine through technology development, while maximizing economic benefits and minimizing costs. The study will analyze market potential, regulatory factors, and technological readiness. This research is crucial for identifying opportunities for growth and efficiency within the floating supply chain industry in Maine, and for developing strategies to leverage technological advancements to drive sustainable economic development.

Summary of AB discussion:

AB members provided no questions or comments about this study.

Research Area #8: Feasibility study on coexistence with aquaculture in the Gulf of Maine

Summary of draft project details (see slide #20 for more detail):

- Budget: ~\$200k
- Research area: Technology; co-use
- Objectives:
 - Explore the synergies between offshore aquaculture and floating offshore wind in the Gulf of Maine.
 - Analyse the operational and infrastructure requirements of each industry to develop conceptual designs that optimize spatial efficiency and operational synergy while mitigating potential conflicts.
 - Define the operational protocols and maintenance procedures necessary for the co-existence of mussel farming and offshore wind infrastructure to ensure long-term sustainability and success.

Summary of AB discussion:

- Concerns that there's not enough existing research to inform a feasibility study.
- Although an interesting topic, it may not be within the scope of the Consortium's work at this time and may be better framed as co-location research.

REVIEW EXTERNAL FUNDING OPPORTUNITIES

Olivia noted that the state has begun conversations about regional collaborations. She also noted that the state is aware of available federal funding, but encourages AB members and collaborators to share other funding opportunities that they may be aware of. As always, the Consortium should be looking to maximize and leverage its funding to support as many prioritized projects as possible.

WRAP UP AND NEXT STEPS

- The poll to rank proposed projects will be available to AB members until next Friday, June 28.
- SC will meet on July 1 to make final decision and recommendation to the state.
- Karp Strategies and Alison Bates' presentation regarding the Socio-economic impact study

is scheduled for July 22, 1:00pm-2:30pm. Calendar invites will be sent out soon to AB members. Observers can register for the webinar on [GEO's "Upcoming Meetings" webpage](#).

APPENDIX A – ATTENDANCE

Advisory Board Members

Terry Alexander, F/V Jocka, Co-Chair
Alison Bates, Colby College, Co-Chair
David Cowan, Diamond Offshore Wind
Jack Cunningham, Maine Lobstering Union Local 207
Julian Fraize, NOWRDC
Wing Goodale, Biodiversity Research Institute
Sarah Haggerty, Maine Audubon
Laura Morse, Invenergy
Walt Musial, NREL
Bill Needelman, Portland Waterfront Coordinator
John Perry, Department of Inland Fisheries and Wildlife
Jocelyn Runnebaum, The Nature Conservancy Maine
Daniel Salerno, Fisheries Scientist, Limington, Maine
Kanae Tokunaga, GMRI
Mary Beth Tooley, O'Hara Corp.
Anthony Viselli, University of Maine
Stephanie Watson, GEO
Ann Zoidis, Tetrattech
Gayle Zydlewski, Maine Sea Grant

Collaborators

Todd Callaghan, MA Coastal Program
Fiona Hogan, RODA
Tricia Perez, ROSA
Marianne Randall, NOAA Fisheries

Program Management, Advisors, and State Agency Staff

Beth Bisson, Maine Sea Grant
Katy Bland, Maine Sea Grant
Olivia Burke, Carbon Trust
Julia Hiltonsmith, Maine Sea Grant
Caitlin Shanahan, NERACOOS
Laura Taylor Singer, SAMBAS Consulting LLC
Meghan Suslovic, ME GEO
Erin Wilkinson, ME DMR
Casey Yanos, ME DMR

No members of Maine's Congressional Delegation or State Representatives were present.
No Tribal Representatives were present.
Additional observers attended in person and online.

Advisory Board Members Not Present:

Carl Wilson, ME DMR
Bob Humphrey, Sport-Venture
Ben Martens, Maine Coast Fishermen's Association
Graham Sherwood, Gulf of Maine Research Institute
Damian Brady, University of Maine

Patrice McCarron, Maine Lobstermen's Association

APPENDIX B – ZOOM CHAT LINKS

Links from AB members and collaborators that are related to the research topics are included in the project discussion summaries above.

Links shared:

Stephanie Watson, GEO

Re: GEO's Request for Information

<https://www.maine.gov/energy/sites/maine.gov.energy/files/2024-04/Maine%20GEO%20SW%20RFI%20April%202024%202024.pdf>

Laura Morse, Invenergy

"Side note- For reference here is a USGS Alaska tag tracking site TAME. Is there something similar for Gulf of Maine?"

<https://www.usgs.gov/tools/tagged-animal-movement-tame>

Emily Shumchenia, RWSC

"Members of the board might also look at <https://database.rwsc.org/birds-and-bats> to see what else related to bird and bat studies is being funded by partners around the region. Many tagging/tracking studies will characterize bird movement in the Gulf of Maine even if they aren't capturing/tagging animals in the Gulf of Maine. These projects are either partners for you and your program or could inform how much you want to invest in a particular topic given everything else being funded on that topic."

Laura Morse, Invenergy

"BOEM does require socioeconomic assessments; here's one of the guidance docs"

<https://www.boem.gov/sites/default/files/documents/about-boem/Social%20%26amp%3B%20Econ%20Fishing%20Guidelines.pdf>

Laura Morse, Invenergy

"I wanted to highlight some planned studies of relevant that BOEM is funding for 2025:"

https://www.boem.gov/sites/default/files/documents/environment/environmental-studies/SDP_2025-2026.pdf