

Floating Offshore Wind Research Array

Summary of Joint Fisheries/Wildlife Work Session

July 13, 2021

OVERVIEW

The Governor's Energy Office (GEO), in partnership with the Department of Marine Resources (DMR) and the Maine Department of Inland Fisheries and Wildlife (MDIFW), is holding a series of work sessions to inform the State's plans for an offshore wind research array and encourage engagement in the stakeholder process to inform the research lease application to the Bureau of Ocean Energy Management (BOEM). The joint fisheries/wildlife work session was the final session and focused on presenting the discover and discussions to date, GEO's direction on a preferred site and the research framework. The work session was open to all interested parties.

This summary focuses on the main points covered during the work session. The agenda, presentation slides and recording of the work session are available online:

<https://www.maine.gov/energy/initiatives/offshorewind/researcharray>

ATTENDANCE

The work session was attended by approximately 136 people including fishery associations, fishermen, consultants, academics, state and federal agencies, non-government organizations, and the public. Please note that participating in these sessions does not constitute approval nor endorsement of OSW development in the GOM generally or the Research Array in particular.

PRESENTATIONS

The GEO presented an overview of two legislative activities that will affect Maine's offshore wind initiatives; LD 1619, *An Act to Prohibit Offshore Wind Power Development in Territorial Waters and Submerged Lands of the State* and LD 336, *An Act to Encourage Research to Support the Maine Offshore Wind Industry*.

The DMR provided an overview of their site assessment process and Biological Research Institute shared their analysis of available data. A detailed summary of *siting considerations and stakeholder input can be found [here](#)*.

- The original area of interest (AOI) is approximately 770 square miles, and the overview map shows known exclusion zones to development including shipping lanes and Department of Defense (DoD) exclusion zones.
- DMR relied on publicly available data from its own database, the Northeast Regional Ocean Data Portal, the National Marine Fisheries Service, bathymetry and individual interviews and conversations to create a composite map.
- To provide a deeper understanding of fishing activity, DMR held twenty-six (26) interviews with fishermen who identified as fishing with the AOI.
- An overlay of available data and interviews allow for identification of areas with high levels of usage and multiple fishing activities where more conflict would likely occur.

- This information, combined with wildlife information for the NOAA Marine Life Data Analysis Team (MDAT) model, led to the identification of a narrowed AOI of approximately fifty-four (54) square miles in the east central portion of the original area of interest.

A preferred site of the intended sixteen (16) square miles within the narrowed AOI of 54 square miles was identified by GEO based on considerations of fisheries and fishing, wildlife, bathymetry, navigation, defense, cultural resources and costs. The shape of 16 square mile site allows for a variety of configurations to be determine after a lease is issued through additional dialogue. GEO is seeking input on the preferred site and any additional information to inform its final decision on a 16 square mile site with the narrowed AOI.

The GEO also shared information about the research framework for activities within the research array. Key areas of potential research fall under three thematic areas: human dimensions, ecosystem & environment, and technology development.

DISCUSSION

Below is a recap of the questions or comments raised (*italics*) and responses shared during the work session.

Will you be doing more interviews? What % of fishermen did you interview? What % of the catch did you interview?

- COVID-19 limited ability to connect with people and DMR had time constraints to collect information. DMR tried to reach out as best we could and engaged fishermen through webinars, surveys, word of mouth, zone council meetings, in addition to the twenty-six individual interviews. This is step one in a longer process once BOEM reviews the state's application. DMR is committed to understanding this area more and is hoping that more knowledge will be shared.

If you didn't interview as many people in some areas, wouldn't this information be inaccurate? I lobster fish inside some of the yellow areas with many other guys. I would think if all of us were interviewed, that area would quickly turn red. We can't base the future off the few selective interviews.

- The intensity of use was based on the average score for each grid, and would not be affected by additional fishermen, unless the intensity of use was different from the average.

Thanks to GEO and DMR for a lot of hard work to engage with folks. There was a lot of reluctance to participate in fishing interviews. On recreational layer, does this equal tuna?

- For the harpooners of tuna, they value this entire area as a prime area for fishing. For non-harpoon tuna fishermen, the interviews followed the other commercial fishermen's general sense of preferred locations (Platts Bank, Mistaken Ground, and key bottom structure depending on type sought).

This preferred area will have impact on mobile groundfishermen. Did you only look at nearer term or both?

- For fishing intensity, we used 2011-2014 data to give richer context to activity in the area, as suggested.

The economic data they used [in Southern NE] was not that great and I fish there for squid in summer. Based on his knowledge, the economic data would have underestimated his fishing income there to 10%.

- DMR agrees that economic data tends to underrepresent actual catch. The more data we could get, then the better we can understand.

Glad you are looking at that. As member of a take reduction team, according to NOAA data there was only \$350K data worth of fishing activity and DMR's numbers were an order of magnitude greater.

Because Platts was in this area of interest, if you were to have expanded this potential site analysis to encompass more of the coast, would we be seeing different types of areas rising as good siting? Concerned about the original narrow focus would skew to inaccurate representation for siting.

- DMR noted that there were constraints, but the approach to quantify across fishing activity was sound. Knitting together uses by space and time provided DMR with more information about fisheries. The fishing industry has deep knowledge and use of these areas. The connectivity of use around the RA with other areas will be a focus of study in the future.

As a research project, what kind of baseline data exist for us to start understanding change in these areas over time? Does the \$3M in new state resources for OSW research apply to get good surveys year-round?

- DMR noted when you get down to the narrowed AOI, it is below the resolution of the federal trawl survey. Objective #1 is to collect higher resolution baseline trawl data, oceanographic data, and tagging data; Objective #2 is to learn more about the impacts to existing fishery use. We can potentially utilize some state funds for survey work, but some baseline monitoring will also be funded by the developer.

Does the Maine Inshore Trawl Survey sample in the narrowed AOI?

- No, the DMR vessels do not currently survey within the narrowed AOI, but we are exploring what will it take to get our trawl survey vessel to this area.

Did you capture other states' fishing areas?

- Yes, DMR tried to capture use by other states. The further Downeast, the more Maine vessels (and less from other states). Wilkinson tow sets up for fishing to the south and is heavily fished by other states.

Are there any areas where wind and fishing don't overlap, outside the AOI?

- DMR did not characterize areas outside of the AOI.

Has there been, or will there be bottom surveys done within the area of interest similar to those S Mast has done with their camera survey in the Mass Wind Area?

- DMR did get detailed bathymetry for all but bottom third of area. We have not conducted camera surveys.

I am concerned about over industrializing the ocean. Have you looked a lot at Europe and if not, can you do that?

- GEO noted some efforts (e.g., through MOU with Crown Estate). Most OSW history is more on fixed structures, but there are a few full-scale floating arrays deployed off Scotland and Portugal. We do want to learn more about floating platforms to build on existing research.
- DMR noted that "we're still drinking from a firehose for information." Still lots to be learned.

In the UK for example, the sand lance population had a 50% decline in areas where windmills are located.

- DMR observed that it is interesting that the fisheries and wildlife data lead to this area, because the top question relates to the impacts on resources.

Migration routes of marine mammals would overlap with the AOI and could lead to a potential entanglement risk. Have you considered copepod abundance parameters and habitat suitability to predict behavior and movement patterns of right whales in the AOI, such as Ross et al 2021?

- DMR utilized only abundance and distribution information based on the MDAT maps on the Northeast Ocean Data Portal and sightings data. However, if these were critically important areas, you would expect to see this reflected in management actions to protect right whales such as the fixed gear closures currently proposed. Plankton surveys would be a priority for baseline working the near future.

The configurations are due to what? Will we be able to transit those areas or can we fish fixed gear?

- GEO wants to learn about the best configuration by further engaging with stakeholders. There was intent to develop a transit lane that might be more likely to be used for fishing as it would be a wider lane than the distance between turbines.

Is GEO going to require the developers to allow fishermen who want to fish there to fish there?

- New England Aqua Ventus has been committed to that, we just need to abide by safety needs.
- General policy on USCG and informal transit corridors between turbines – these are not regulated. There are no restrictions from a USCG perspective for transit or fishing.

Is the preferred site what you will submit, or might you change it? On micro-siting, is the state's intention to avoid hard bottom areas?

- Will get feedback on preferred site and provide best available information to inform that process. Your question on bottom, we know that there is some outcropping that is rocky.

You said that fishing may be permitted in the transit areas, but you are showing that as reserved for mooring lines (gray). Also assume that there will be inter-array cables between the platforms. So how do you reconcile these?

- There would be a separate transit lane that was beyond the scope of the moorings, and the intent is to bury the inter-array cables between platforms, such that they would only be in the water column as they come down from the platform and would remain within the footprint of the mooring system while in the water column.

During the BOEM process, is there a potential that the lease site changes after all this work has been done?

- When BOEM receives the lease application, they will issue public notice, conduct a NEPA analysis, and make a determination. GEO doesn't know what modifications might be made, but it is a federal decision, not a state one.

How much does it cost to lease the 16 square mile area; who pays for it and who gets paid and how long does the lease last?

- There is no lease cost for a state if the site is for energy research and the lease has no set length. The legislation that directs the Public Utilities Commission to issue a Power Purchase Agreement (PPA) which establishes a set term of no less than 20 years, after which the project will need to go to decommissioning.

I understand that it's premature in overall process but what is the projected timeline to determine a preferred interconnection location?

- GEO has no specific date. One year or a couple of years.

Why can't commercial fisherman lease the area then?

- BOEM regulations allow for leasing related to offshore energy only.

What/who is insuring the project - both damage and performance?

- This is a joint partnership with NEAV. State will hold the lease and work with its private partner in meeting all lease obligations, including financial commitments.

Have you had contact with overseas wind farms? Seems like we have a lot of holes but how are we moving forward without the data. There are places out there that have these sites up, how can we go this far with as little data that we have. If we have these farms available and not working, why are we moving forward (cost, infrastructure, cost to consumer). How can you move to a preferred site without the data available?

- The state is trying to use studies in other areas as context for the questions we all have. However, European experiences won't help us with what we are missing in terms of data in the Gulf of Maine.

I think the USCG alluded to a track of some kind that they might be interested in putting in like we have for cruise ships in the Bar Harbor area. We have a one-mile wide track here that definitely restricts lobster fishing in this swath for 30-40 miles. Is this being talked about.

- USCG is reviewing the Gulf of Maine overall and considering regulatory actions, fairways, to ensure safe travel between ports.

Seems to be a lot of research centered around the array itself. Will there be any research/investigations into the effects of the ~25-mile connection cable? Or is the expectation just bury it & forget it?

- Yes, there are certainly questions to explore potential ecosystem and fishing activity impacts from the cable. As noted tonight, we just identified a few examples here, and the further work to develop a full work plan will continue.

Do you have a budget to do all these different research projects outlined?

- The GEO does not have a budget yet. The process is seeking broad questions, trying to build on other existing efforts at NOWRDC and ROSA. Will need to prioritize. The State has contributed \$3M, but we will need to seek additional funding to reach these goals.

Other comments:

- *Europe installed 14.7 GW of new wind power capacity in 2020 (gross installations). ... 75% of that was offshore wind. Norway (1.5 GW), Germany (1.4 GW), Spain (1.4 GW) and France (1.3 GW) led in the installation of onshore wind.*
- *Has anyone looked into new ways to fish that might avoid some problems? Are there any expected changes along the coast which might alter fish movement and fishing patterns? For example, increased spawning on rivers and streams where dams are being removed?*
- *As the Gulf warms, will other species join the at-risk populations?*
- *In case folks are not aware, in 2020 URI hosted a series of webinars that are freely available online about the fixed bottom, Block Island Windfarm and changes in the ecosystem with*

perspectives from European researchers who have been studying fixed bottom wind farms. Again, this is fixed bottom and we are talking about floating wind. There are only two commercially operating floating wind farms in production, the first one starting in 2017 off Scotland. Another resources is URI webinar series: <https://seagrant.gso.uri.edu/special-programs/baird/>

- *In June 2018, New York State Energy Research and Development Authority was awarded \$18.5 million from the U.S. Department of Energy (DOE) to lead a nationwide offshore wind technology research and development consortium.*

NEXT STEPS & CLOSING REMARKS

GEO is soliciting any further feedback on the narrowed AOI and preferred site through July 30, after which they will finalize the site and research framework and submit a lease application to BOEM. This is an initial step in the process and in advance of the separate federal review process. As part of its review, BOEM will issue a public notice, conduct a NEPA review that includes a public comment period, and make a determination of the final research lease issuance and location. Surveys and permitting of activities within the research array are expected to take a few years and will include interaction with researchers and the public through official public comment and additional stakeholder outreach.

The state is launching an 18-month roadmap process for offshore wind, with working groups on fisheries and environment & wildlife. GEO wants to make sure we are taking the experience and what we have learned from the research array and carrying it forward into the State's roadmap effort. GEO acknowledged the time and input and continued participation especially even for something many of participants don't agree with. We need to have a lot more conversations together throughout this process. Your time is really appreciated and we thank you all for the effort over the last several months.