MA Habitat Working Group on Offshore Wind

Convened Virtually

November 4, 2025, 9:00 – 12:00 PM

MEETING SUMMARY

The following is a summary of the meeting. Presentations shared can be accessed on the Habitat Working Group website.

State Updates

The Massachusetts Clean Energy Center (MassCEC), Massachusetts Division of Marine Fisheries (DMF), and Massachusetts Office of Coastal Zone Management (CZM) shared the following updates:

MassCEC: Zach Jylkka provided updates on MassCEC-funded research projects and the funding landscape.

- MassCEC-funded projects from the 2024 solicitation on fisheries, habitat, and wildlife are moving forward. The Habitat Working Group will receive updates as they progress.
- In September, BOEM notified MassCEC that funding for Campaign 9 with the New England Aquarium was terminated due to shifting administration priorities. This funding was intended for surveys of protected species in the Southern New England lease areas, to monitor changes over time related to offshore wind and climate change. The cancelled funds of ~$490,000 were intended to carry out the surveys through April 2026. MassCEC is committed to the continuation of these surveys and is exploring alternative funding options. Ideas for funding can be directed to Jessica Redfern (jredfern@neaq.org) and Zach Jylkka (zjylkka@masscec.com).

DMF: Brad Schondelmeier shared updates on offshore wind project status, the Fisheries Innovation Fund, and a recent recreational fishing sampling trip.

- **Project Status:** DMF shared status updates for the five offshore wind projects currently under operation or construction: South Fork, Vineyard 1, Revolution, Sunrise, and Empire. More information can be found in the slides, this map of existing projects, and on the NROC Data Portal.
- **Fisheries Innovation Fund:** The RFP for the $1.75 million mitigation fund closed on August 29th. Twenty proposals were received seeking $3.37 million. Contracts are expected to be awarded in November with projects beginning in January 2026.
- **Recreational fishing sampling trip in lease area:** On October 10, DMF staff took part in a sampling trip out of Westport to experience fishing in a lease area, and to understand recreational interactions. Staff observed that new foundations were well-populated and colonized by species including mussels and black seabass, scup and cunner. DMF noted that navigating the area in low-visibility or at night will require vigilance, updated charts and appropriate navigation technology.

CZM: Hollie Emery provided updates on the Ocean Management Plan review process and Energy Facilities Siting Board reforms.

- CZM is working with seven working groups to review the Ocean Management Plan.
- The Climate Act of 2024 has reformed the state permitting process for energy projects. The Act consolidates state and local permits into a single review by the Energy Facilities Siting Board to streamline the process. The regulations defining this new consolidated process are open for comment through the week of November 4th, 2025. More information can be found at Energy Infrastructure Siting and Permitting Reforms.

Department of Fish and Game Biodiversity Initiative

Jen Ryan, Assistant Commissioner for the Department of Fish and Game presented on the Biodiversity Initiative. Key elements of the presentation are included below, and specific details are captured in the presentation slides.

- Executive Order No. 618 directs the state to meet biodiversity goals for 2030, 2040, and 2050.
- Initiatives include investing in marine habitat mapping, restoration efforts, and a Blue Carbon Finance Program for salt marshes.
- The Order directs the state to consider biodiversity criteria in energy facility siting and operation.

Participants shared the following questions (Q) and answers (A):

Q: What sorts of partnerships are you exploring for the Biodiversity Initiative?
A: While the details are still being worked out, the goal is to have different tiers of engagement, from working groups that meet on a quarterly basis, to featuring groups developing pollinator gardens.

Q: Are there any specific conversations on the intersection of this initiative with offshore wind?
A: The focus for the state has been on energy siting on land, specifically solar. However, it is anticipated that there will be further iterations of the initiative that include marine habitats.

Comment: The Mashpee Wampanoag Tribe is interested in involving high school students in citizen science, monitoring, and restoration of marine and coastal ecosystems. This would be in line with the biodiversity initiative.
Response: Jen Ryan and Blair Bailey (New Bedford Port Authority) will connect with David Weeden (Mashpee Wampanoag Tribal Council) to explore possibilities for this collaboration.

Nature Inclusive Design Discussion

Todd Callaghan, MA CZM introduced the discussion as a follow up to the Habitat Working Group meeting in June 2025, where Nature Inclusive Design (NID) was a central focus. While this topic was met with high interest from participants, there remain several open questions about how to move forward priorities related to NID:

- What can and should the state prioritize in regulations and procurement related to NID?
- Should NID initiatives prioritize specific species or general ecosystem function?
- What data exist to demonstrate the effectiveness of NID strategies?

- How do NID initiatives balance the cost of implementation with incentives for developers?

Participants engaged in a discussion on the above questions, which covered the following themes:

- **Developing state guidance and coordination:** Many participants were supportive of the state taking a proactive role in developing guidance for NID, with participants noting that in the absence of state direction, NID approaches will default to strategies defined by developers. Further, developers are looking for guidance. Guidance will be most impactful if connected to requirements within Power Purchase Agreements, which the state has authority over.
- **Need for increased understanding of the science behind NID before developing guidance:** The group discussed the need to base guidance on scientific evidence, in order to clearly point to the added value of NID strategies, and the range of potential outcomes.
    - **State of the science:** Some participants recommend convening a "State of the Science" of NID workshop where participants share their research and projects, and identify what is known and what would benefit from additional research. They suggested this would be an important precursor to developing state guidance.
        - Participants suggested looking to the NYSERDA State of the Science 2026 workshop, combining efforts and hosting a follow up to the recent MOCEAN workshop, drawing on the recent MTS/IOOS Biodiversity Tech Surge report (October 2024), and partnering with MTS/IOOS, the marine group within the Biodiversity Initiative, and the RWSC States Caucus.
- **Species to prioritize in NID guidance:** Participants discussed the need to identify specific "end points", i.e., types of species to prioritize for habitat development, for NID rather than broad mandates, and suggested several potential species categories to prioritize: 1) vulnerable/endangered species, 2) economically important species (e.g., lobster) 3) species that improve water quality (e.g., oysters), and 4) species losing habitat due to offshore wind projects. Recovery plans for listed species could be a helpful resource and method to focus and prioritize NID efforts.
- **Expansion of habitats included in NID guidance:** Participants suggested expanding the scope of NID to include land-based conservation, noting species that utilize both offshore and onshore habitats, such as Piping Plovers and Roseate Terns. One rationale for this is that the state has greater leverage to implement conservation actions within their boundaries compared to federal waters
    - Participants discussed adapting the Ocean Resources and Waterways Trust Fund – historically used for seafloor species – to support broader avian and coastal biodiversity goals
- **Existing State projects:** It was suggested that the Habitat Working Group work with the Department of Fish and Game to compile a list of existing state NID projects that benefit specific species, e.g., sturgeon, cod, roseate tern, that could be shared with developers as model projects with developers.

Bubble Curtains

Dave Doyle, with ThayerMahan, presented on the technology and impact of bubble curtains for noise mitigation during offshore wind construction. Key elements of the presentation are included below, and specific details are captured in the presentation slides.

- Bubble curtains use hoses to release air, creating a wall of bubbles with lower density and sound speed than water, causing sound waves to scatter and reflect. They take inspiration from humpback whales' use of bubble curtains to trap prey.
- Effectiveness is influenced by water depth. The most common placement of the hoses is up to 50 meters deep. Deeper placement requires additional equipment to keep adequate pressure.
- The technology has been shown to create a noise reduction of over 90% (11dB) and is most effective at low frequencies (100-500Hz).

Participants shared the following questions (Q) and answers (A):

Q: How do you ensure the hose is placed correctly, with holes upright and not pushing air into the sediment?
A: The hose has markers every 30 meters. The ship drives in a circle to lay the hose, usually coming within 2-3 meters of the target location. The hose has 5-8 holes per meter that are distributed randomly to give the highest probability of most of the holes pointing up.

Q: How does the noise mitigation compare to ambient noise changes, such as those seen during COVID?
A: During the pandemic, sound levels decreased by roughly 1-2 dB. Bubble curtains are specifically mitigating high-intensity piling noise, though ambient port noise remains quite loud (120-130 dB). A study on marine sound levels during the pandemic can be found here: https://research.noaa.gov/a-rare-glimpse-of-a-quieter-ocean/

Q: Does the spacing between double bubble curtains affect efficacy?
A: Generally, curtains are spaced apart at a distance equal to the water depth (e.g., 30 m depth = 30 m separation) to optimize the bubble mass surfacing.

Maine Research Array Updates

Casey Yanos, Maine Department of Marine Resources, provided updates on the Maine Research Array. Due to funding changes, the scope has shifted from yearly surveys to a focus on inter-offshore connections and wider work. Updated survey activities include:

- Passive Acoustic Monitoring: Reduced to a single receiver deployed in July 2025 due to funding and personnel limitations.
- Telemetry: VR2AR receivers were deployed from July to November to pick up tagged individuals. Since July, they have detected sharks and shortfin mako.
- Trawl Survey: Started in July, the survey consists of 34 tows over 8 days. They are currently conducting the fall survey with a goal of four surveys over the next two years.

Participants shared the following questions (Q) and answers (A):

Q: What level of data is being collected in the trawl survey?
A: The trawl survey is collecting length and weight. For some species, the survey also tracks sex.

Q: When will data be available for the trawl survey?
A: Data will be publicly available on a rolling basis once it passes quality assurance and control.

Participant Updates

Emily Shumchenia, RWSC: The POWERON program, an option provided by BOEM for developer monitoring, has lost funding, making its future uncertain. RWSC is convening a monthly meeting with research funders to discuss project selection and resulting research. The goal is to coordinate more effective research and collaborations between researchers. RWSC continues to advance data governance efforts with the Northeast Regional Ocean Council (NROC) and MARCO.

Mike Pol, Responsible Offshore Science Alliance (ROSA): A working group was formed a year and half ago to update data governance guidelines related to fishing gear and benthic image data. The working group is developing a proposed structure for people collecting data with fishing gear (e.g., trawl survey cameras mounted on gear), including a proposal for a joint repository. ROSA will continue to provide updates as this effort progresses.

Blair Bailey, New Bedford Port Authority: Blair Bailey raised concerns regarding the long-term usage of data collected from baseline and impact studies, specifically regarding how cumulative impacts will be assessed and addressed if actual impacts exceed estimates.

Next Steps & Action Items

Abby Fullem, Consensus Building Institute facilitation team, closed the meeting and reviewed the following next steps:

- **MassCEC** will provide updates on research projects at future meetings.
- **David Weeden, Blair Bailey and Jen Ryan** will follow up on opportunities to involve youth in citizen science work.
- **The HWG Planning team** will consider next steps for the Nature Inclusive Design conversation, including potential for a "State of the Science" meeting.
- **CBI** will write and share a summary of the meeting.