

Fisheries Technical Working Group (F-TWG) Meeting Summary

Friday, September 27th, 2024 from 1:00pm- 2:00 pm EST

Virtual Meeting

Background

As part of New York State's efforts to responsibly develop offshore wind (OSW) energy, the New York State Energy Research and Development Authority (NYSERDA) convened the Fisheries Technical Working Group (F-TWG) in 2018 to provide input to the state. The F-TWG held a virtual meeting via video conference on September 27, 2024. This summary is intended to capture the key points of discussion and action items identified during the meeting. For topics where there were differences of opinion among F-TWG members, this summary identifies areas of agreement as well as the different perspectives offered during meeting discussions.

There were 25 F-TWG members and other stakeholders in attendance through the Zoom meeting/conference call line. Staff from NYSERDA, Tetra Tech, the Consensus Building Institute (CBI), and the Cadmus Group, were also present to provide technical, facilitation, and logistics support.

This summary is organized to align with the structure of the meeting agenda ([Appendix A](#)). Opinions are generally not attributed to specific F-TWG members. Attendees are referred to interchangeably in the summary as stakeholders, participants, or F-TWG members. This summary provides an overview of the presented information about Regional Fund Administrator contracting, Master Plan studies, and the impact of offshore wind on oceanographic processes and larval transport in the Mid-Atlantic Bight, as well as feedback and suggestions regarding the shared information and process.

Action Items

The following key next steps resulted from the meeting:

- The next F-TWG meeting will take place October 15, 2024 from 10am to 12pm EST. Members are encouraged to attend.
- F-TWG members are encouraged to submit questions about the Oceanographic Processes study presented today to Morgan Brunbauer (morgan.brunbauer@nyserda.ny.gov).
- Members with additional questions or input about the Regional Fund Administrator process are encouraged to contact Morgan Brunbauer (morgan.brunbauer@nyserda.ny.gov)

Important Links

Regional Fund Administrator

<https://www.rfainfo.com/Home/AboutUs>

Master Plan 2.0

<https://www.nyserda.ny.gov/All-Programs/Offshore-Wind/About-Offshore-Wind/Master-Plan>

Offshore Wind Impact on Oceanographic Processes Study

https://epis.boem.gov/final%20reports/BOEM_2025-016.pdf

Welcome and Introductions

Morgan Brunbauer (NYSERDA) thanked all F-TWG participants and introduced the meeting. The meeting is intended to provide an overview of the updates to the Regional Fund Administrator for compensatory mitigation, and to share the results of the Offshore Wind Impacts on Oceanographic Processes study.

Pat Field (CBI) provided an overview of the ground rules for the meeting:

- Contribute – Your perspectives are important.
- Share time – There is a lot to cover and many people around the table.
- Integrate ideas and pose questions.
- Stay focused on the agenda.
- Avoid multitasking and other distractions.
- We all have our unique challenges in a virtual environment – it will take all of us being mindful to make this work.

The agenda for the meeting was to cover the Regional Fund Administrator updates, then answer questions about the status of the Master Plan 2.0, followed by a presentation on the Offshore Wind Impacts on Oceanographic Processes Study.

Regional Fund Administrator Update

Morgan Brunbauer (NYSERDA) and Pat Field (CBI) provided an update on the [Regional Fund Administrator](#). The Regional Fund Administrator (RFA) will be tasked with developing a fair and equitable financial compensation process to address potential economic losses incurred by the fishing industry due to offshore wind development off the Northeast and Mid-Atlantic coasts. Eleven East Coast states have been working with commercial and recreational fishing communities and offshore wind developers for over three years to create this compensation program.

NYSERDA is in the final stages of contracting for the Regional Fund Administrator and anticipates sending it out for signature in the next few days. During the contracting process, the scoring committee was given time to interview and evaluate potential bidders, and the scoring committee's recommendations were integrated into the contract to the extent possible. The selected bidders are eager to work with the Design Oversight Committee (DOC), the For-Hire Recreational Committee, and the broader fishing community, and other stakeholders.

NYSERDA has selected the commercial fisheries members and alternates for the DOC and is in the process of finalizing membership for the For-Hire Recreational Committee. These two groups will help provide advice and guidance to lead to decisions and directionality by the RFA.

- The DOC will represent commercial interests, and the For-Hire Recreational Committee will represent recreational interests.
- The Recreational Committee will be focusing on funds currently available and designated to the recreational industry.
- There were several questions about potential funding for alternates, as originally only permanent members of the DOC and For-Hire committee would receive funding. Funding has now been secured for both members and alternates to participate in both in-person meetings

and virtual meetings, at least for the first year. Efforts to secure funds for alternates to participate beyond the first year will continue. Alternates and full members will receive the same compensation.

- Most committee meetings will be virtual with only a few in-person meetings.
- The DOC and For-Hire committee members, the state members of each committee, and the developer partners will be made public at the same time, to provide equitable transparency.

Master Plan 2.0 Update

Morgan Brunbauer and Pat Field provided an update on the status of the [Master Plan 2.0](#), following several questions from F-TWG members.

Track 1- or first-year studies, which are environmental assessments, are expected to be published this year. There have been some delays in getting these studies published, as these studies have been included in a request to the Bureau of Ocean Energy Management (BOEM), and it was important to ensure the most up-to-date information was included in this request.

The studies associated with the second year, or Track 2, will be published as they become available. These are also on track to be published this year. The goal is to provide flexibility and transparency in this process, and some contractors who have worked on these studies are sharing their “draft findings” at conferences and larger meetings prior to the publication of these studies.

Offshore Wind Impact on Oceanographic Processes Study Presentation

Brian Dresser (Tetra Tech) introduced Nickitas Georgas (RPS) who provided an overview of the [Offshore Wind Impact on Oceanographic Processes: Cape Hatteras to Long Island](#) study. The project focuses on the impact of OSW development on oceanographic processes and larval transport in the Mid-Atlantic Bight (MAB) and is a collaborative effort between RPS Ocean Sciences and the Pacific Northwest National Laboratory, with funding from BOEM and the Bureau of Safety and Environmental Enforcement (BSEE).

The study evaluated three scenarios:

1. Baseline scenario with no wind turbines in the MAB
2. Partial/limited build-out scenario with 27.8 gigawatts (GW) of total development, consisting of 1,852 wind turbine generators
3. Full build-out scenario with 95.3 GW of total development, consisting of 6,353 wind turbine generators

All locations and turbine specifications were provided by BOEM. Turbines would have a 150-meter top height, 240-meter rotor diameter, and are supported by a 10-meter diameter monopile, fixed to the bottom. Turbines would have a cut-in cut-off speed of 3-25 m/s. Wind wakes were modeled using the Python-based PyWake model from the Technical University of Denmark, which has been used in similar studies. Waves were modeled using the SWAN surface wave model and the Delft3D-FM hydrodynamic model and structure grid.

In terms of oceanographic processes, the study found that:

- Wind turbines cause wake deficits, especially for wind speeds ranging from 3 to 11 m/s.
 - These wake deficits represent up to a 20% reduction of average winds but may be up to 30-50% around 1% of the time.
 - Wake footprints are noticeable within the wind farm and can extend 50-200km downwind.
- Surface wave changes because of these wind deficits are relatively minor.
 - These surface wave changes are local to wind farms, and strongest for farms aligned with the wind.
 - Surface waves experience reduced heights (~0.17 m, or less than 5%), and longer periods (~0.16 seconds).
- Changes also occur to the typical 2-13 cm/s southward alongshore tidal residual currents.
 - These changes are spatially complex with increases and decreases of up to 1 cm/s but increases tend to be stronger and further inshore where farms are located.
- Reductions in wind-driven vertical mixing also affect the water column, producing a doming of the thermocline and increases in summer stratification.
- Models show that local temperature increases of up to 1 degree Celsius could occur.
- There may also be changes in upwelling and downwelling dynamics.
- Cold pool seasonal evolution is not substantially modified.

Many marine species' life stages include a larval pelagic phase, and changes in hydrodynamics due to offshore wind development may influence larval dispersal. This study looked at how offshore wind development off the East Coast may affect three important commercial fisheries: Atlantic sea scallop, the Atlantic surf clam, and the black sea bass. The same three offshore wind development scenarios as above were examined. This presentation focused on the Atlantic surf clam. The study found that:

- Larval connectivity effects of wind turbines are location dependent.
 - There is a current connectivity hotspot for Atlantic sea scallop in the northern part of the domain, towards New Jersey and the New York Bight. This hot spot persists with offshore wind development.
- The presence of wind turbines tends to lead to larger larvae settlement distances for Atlantic surf clams.
- The inclusion of diurnal vertical migration behavior influences larval dynamics with and without offshore wind turbines.
 - Larvae dispersal distances increase with diurnal vertical migration because larvae are higher in the water column where currents are stronger
- Atlantic surf clam and black sea bass also see similarly mixed responses to offshore wind turbines, with patchiness in where larvae settle.

The full report can be viewed in two Volumes, [Volume 1](#) and [Volume 2](#). There is also a technical summary available which can be viewed [here](#).

Summary of Questions and Discussion

In regard to the study, Brian Hooker (BOEM) shared that the final report is undergoing internal review at both the BOEM and the Northeast Fisheries Science Center. Through the same request for proposal, BOEM also funded a study conducted by DHI that looks at a slightly different approach than the

modeling methodology used by RPS. The DHI study also evaluated scallops but included an additional species' larval transport and expanded the domain to the southern New England area. BOEM intends to present the results of both studies once they're final.

- Morgan Brunbauer emphasized that these results are just a snapshot and not the only studies being considered by BOEM.

A member noted that this presentation would be good to give at the MAFMC (Mid-Atlantic Fishery Management Council) meeting.

A member asked to clarify the results of the study, and whether the conclusion is that wind turbines would push scallop larvae further south than in the baseline scenario.

- Nickitas Georgas (RPS) confirmed that mean circulation is going slightly further south. However, in terms of larval dispersal distances, the low normal distributions don't change at a statistically significant level. There is patchiness in larval transport changes in the model.
 - Pat Field asked to confirm whether "patchiness" means in some places there isn't consistency in larval transport, and that larvae can get stuck in some wind energy areas.
 - Nickitas confirmed this is accurate, and that the deficits created by wind turbines within wind farm areas may result in larvae getting stuck.
- Pat asked what this might mean for biological productivity.
 - Nickitas responded that he would be happy to pass along questions to biologists and other scientists who can answer that question.

A member asked if the baseline scenario does not include future changes and wind speeds and directions anticipated from climate change.

- Nickitas confirmed that the baseline conditions are the actual 2018-2019 conditions and the effects of climate change have not been studied in this context yet.

A member asked if similar results were observed for the black sea bass, with larval survival of black sea bass decreasing due to beaching or settlement in a suboptimal habitat.

- Morgan shared that that portion of the report is not ready yet.

A member suggested having a summary of the major report findings and their potential implications available in "layman's terms" for those without a scientific background.

Pat Field mentioned that other members with questions about the study can send them to Morgan Brunbauer (morgan.brunbauer@nyserda.ny.gov) to compile and send them to Nickitas.

Conclusion and Next Steps

The following additional next steps resulted from the meeting:

- The next F-TWG Meeting will be held on October 15, 2024 from 10:00am to 12:00pm EST. Agenda topics include:
 - Cooling Water Use at Offshore Converter Stations Study update by Tetra Tech
 - Boulder Relocation and Management Guidance Framework update by the Massachusetts Office of Coastal Zone Management

- Offshore wind overview update by BOEM
- There will be additional opportunities for F-TWG members to engage with the RFA process in the coming months. Members are encouraged to reach out to Morgan Brunbauer (morgan.brunbauer@nyserda.ny.gov) with any additional questions or comments.
- NYSERDA encourages F-TWG members to provide feedback on the Master Plan 2.0 Track 2 study, *Characterizing Oceanographic Conditions and Analyzing Extreme Weather Risks and Potential Interactions with New York State's Offshore Wind Infrastructure* when it becomes available for review.

Appendix A: Meeting Agenda

New York State Fisheries Technical Working Group (F-TWG)

27 September 2024, 1:00 pm – 2:00 pm EST

Zoom Link:

<https://us06web.zoom.us/j/84322606770?pwd=EopLewsBWeRfMmngTeHI8zDjuCojt0.1>

<u>Time</u>	<u>Agenda Item</u>
1:00 – 1:10 pm	Welcome <ul style="list-style-type: none"> • Introductions • Purpose of FTWG • Meeting agenda and ground rules
1:10 – 1:55 pm	Offshore Wind Impacts on Oceanographic Processes Study <ul style="list-style-type: none"> • Presentation by <i>Nickitas Georgas, Tetra Tech</i> • Larval transport impact summary • Questions
1:55 – 2:00 pm	Next Steps <ul style="list-style-type: none"> • Summary of action items from today • Next F-TWG meeting