Fisheries Technical Working Group (F-TWG) Office Hours Summary

Tuesday, August 15, 2023, from 6:00 to 8:00 PM
Virtual Meeting

Background

This summary describes key discussion points and provides an overview of the fourth and final F-TWG sponsored office hour style meetings, held on Tuesday, August 15, 2023, through a virtual meeting platform.

The slides from the meeting presentation are available here: PowerPoint Presentation (nyftwg.com)

Goals for the meeting included:

- Provide an overview of Master Plan 2.0: Deep Water, and provide a forum for fishing stakeholders to engage, explore, and coordinate views and comments on the process.
- Adhere to our ground rules for an effective meeting (e.g., stay on track, let others speak, be respectful, and focus on the substance not the people).

Invitations were sent to representatives of fishing interests and fishing industry stakeholders. Fishing industry participants were encouraged to join throughout the 2-hour session to ask questions, make comments and suggestions, and participate in discussions. Stakeholders that attended represented both commercial and recreational fishing interests. Staff from New York State Energy Research and Development Authority (NYSERDA), Tetra Tech, the Consensus Building Institute (CBI), and the Cadmus Group were also present to provide technical, logistical, and facilitation support.

Attendees are referred to interchangeably as participants or stakeholders in the summary.

Rules of the Road, Purpose, and Intent

The meeting opened with a review of meeting ground rules, the goals of the office hour style meetings, F-TWG's mission, and a round of introductions. Morgan Brunbauer (NYSERDA) and Patrick Field (CBI) welcomed the group and underscored that the F-TWG is a forum for discussion between the commercial fishing community and offshore wind (OSW) developers to provide advice and input to New York State (NYS). The August 15th office hour meeting focused on the ongoing work Tetra Tech is doing as part of Master Plan 2.0 and provided a forum for input from fishing industry F-TWG members and other fishing industry stakeholders. Office hour meetings are currently intended as a forum specifically for stakeholders directly associated with fishing interests and provide a space for these stakeholders to express their concerns and ask questions about the Master Plan 2.0 process.

Review of Master Plan 1.0 and Master Plan 2.0

NYSERDA provided an overview of Master Plan 2.0: Deep Water as well as a review of Master Plan 1.0. Master Plan 1.0 was a planning process to understand how best to reach New York's previous clean OSW goal of 2.4 gigawatts (GW), which has since been increased to 9.0 GW. It sought feedback from many different stakeholders, including the fishing industry, and included approximately 20 studies that assessed a variety of concerns. The process outlined risks to environments, fisheries, and other issues related to areas of suitability for OSW.

The purpose of Master Plan 2.0 is to set an organizing principal for OSW that continues to advance past the 60-meter contour. It provides an opportunity for New York State to evaluate and characterize the risks and opportunities for OSW development in a comprehensive, sequential, and logical approach. The Master Plan 2.0 process seeks to identify areas in the region that are of greatest and least risk to environmental and fisheries resources and users, and to recommend to the Bureau of Ocean Energy Management (BOEM) areas or topics for further assessment. It is an approach focused on the regional level and is meant to capture feedback from fishing interests and other stakeholders. These office hour style meetings are part of this process to gather feedback from fishing interests, and the process is intended to assess whether there are gaps in data, or changes in fishing industry concerns regarding deep water OSW.

Area of Analysis (AoA) Depths and Floating Wind Footprint

The AoA is split into three zones at different depths. Zone 1 is closest to shore and includes a portion of the continental shelf. It extends from the 60-meter contour to the continental shelf break at 250 meters, has a depth range of 32-82 fathoms, and is approximately 12,040 square miles. Zone 2 spans the steeply sloped continental shelf break from 150-2,000 meters, has a deep range of 82-1,093 fathoms, and is approximately 6,830 square miles. Zone 3 extends from the continental shelf break out to 3,000 meters, has a depth range of 1,093-1,640 fathoms, and is approximately 16,800 square miles.

The majority of OSW in the AoA is anticipated to be floating installations. There are multiple prototypes of floating OSW platforms with different styles of anchoring and cable diameters. Floating OSW infrastructure is built to a significant scale, and includes a platform, anchoring lines, and inter-array cables.

Summary of Questions and Discussions

A stakeholder stressed the importance of Zone 1 to the scallop fishery. Most of the scallop resource is harvested to about 37-38 fathoms, but scallop populations that contribute to the spawning biomass can be found out to 50 fathoms or deeper. To avoid impacts on the scallop industry, it would be important to consider development that is deeper than where scallops are encountered. Scallops can be found out to deeper depths towards the eastern edge of the AoA, and it is possible that the range that scallops are found may move due to future oceanographic changes.

> NYSERDA appreciated this input, and it will be noted.

A stakeholder asked about the potential distances between floating wind platforms.

> Tetra Tech and NYSERDA responded that there is currently uncertainty about the potential distances for floating OSW. It will be heavily dependent on the technology used. It is clear that floating platforms present a much greater challenge than currently experienced with fixed technology..

A stakeholder expressed serious concern that HDR, who is writing the Fish and Fisheries Study, is not on the office hour calls. The Fish and Fisheries Study has several shortcomings and seems to suggest that fishing will be able to return to areas of deep water OSW after development is complete, which is difficult to believe given the nature of floating wind technology. The study also does not include essential scallop surveys, and the following scallop surveys should be included: Fishery Science Center Scallop Dredge Survey, Virginia Institute of Marine Science (VIMS) Dredge Survey, University of Massachusetts School of Marine Science and Technology drop camera survey, and NOAA HABCAM.

Another stakeholder stressed that the only survey that is consistently surveying Zone 1 and parts of Zone 2 is the VIMS survey, which covers the entirety of the Mid-Atlantic.

> NYSERDA appreciates this feedback. The Fish and Fisheries Study is in draft form and is meant to provide a summary of what research has been done already. The goal of the study is to show what data has been captured to-date and identify any potential data gaps. If there are clear gaps, such as the additional scallop surveys that should be considered, NYSERDA encouraged stakeholders to please continue to identify them. That being said, there are ongoing difficulties with getting access to some data sets, and HDR is currently waiting for access to several data sets that will further inform the study. NYSERDA will ensure that significant uncertainties about impacts on fisheries and the pressing concerns of the fishing industry interests are reflected in the study. HDR and Tetra Tech are coordinating with NYSERDA to ensure inputs from the office hour sessions will be incorporated into the Fish and Fisheries Study. Comments made during these office hours have been included as comments for consideration in the Fish and Fisheries Study. Additionally, a Technical Memo detailing the Office Hour Meeting will be included in the Fish and Fisheries Study.

Stakeholders agreed that an estimated $1.2 billion loss over 10 years is an underestimate of impact on the fishing industry.

A stakeholder expressed concern that the process is moving too fast, without seriously considering input from the fishing industry. Near-shore OSW has not been developed to date, and now we are having discussions about deep water OSW, which involves unproven technology and will have uncertain returns. The international examples of OSW are all near-shore developments. It is uncertain what the net impacts of near-shore development are without considering what the net impacts of both near-shore and deep water developments will be. Given the significant time scales involved here, deep water OSW might not be developed for several years, along with the dynamic changes in ocean conditions, so fisheries may very well shift, further complicating the situation.

> NYSERDA appreciated this feedback and understands that the consideration of cumulative impacts is of utmost importance for fishing interests. NYSERDA will champion the need to fill data gaps around the net impacts of near-shore OSW and potential deep water OSW, and will continue to try and balance the many pressing concerns the industry has. The Fish and Fisheries Study will include acknowledgements about the uncertainties around the cumulative impacts of OSW development, and the related contestation around OSW up-front in the executive summary.

Fisheries Within the AoA

Tetra Tech provided an overview of the synthesis of research which shows known potential target fisheries within the AoA, and the types of fishing equipment used in the AoA. The data is from the Northeast Ocean Data Portal, input on Master Plan 2.0 provided by the National Marine Fisheries Service (NMFS), and comments from the proposed Hudson Canyon Sanctuary. This is a high-level summary with a detailed study of the fisheries in the AoA, and there will be a thorough study as part of Master Plan 2.0 that will detail the recreational and commercial fisheries in these Zones. Tetra Tech asked if participants would like to include any additional fisheries or gear-types in this list.

Summary of Questions and Discussions

A stakeholder raised the point that many fisheries that could provide relief to the fishing industry, as environmental changes unfold, are not included on the list of fisheries in the AoA. Zone 3 has tuna, triggerfish, and mahi-mahi, which could all provide relief to fishing interests looking for other resources to harvest. An overall problem in these analyses are the radical shifts that are occurring in water temperature and currents. The historical data for where fisheries occur are not sufficient for understanding where they might move to in the future, and what strategies will have to shift to accommodate these changes. It is fundamentally important to have a program that provides resilience to the fishing industry given the many uncertainties identified. The funding for resilience programs for the fishing industry should be put in place as soon as possible.

Another stakeholder echoed these concerns, stressing that several fisheries in Zone 3 could provide relief to scallop fleet/other fisheries if ocean changes push them to change behavior. Oceanographic changes are occurring in unpredicted ways, and the industry does not have the financing available to prepare for these uncertain changes. Climate change and noise pollution are considerable problems, oxygen depletion may also be an issue, and the impacts of all these could be significant.

A stakeholder pointed out that the mitigation amounts being discussed are far too low. If something reduces scallop harvesting by 50% in a year, that's roughly a $100 million loss. The development of resilient fisheries should be focused on.

> NYSERDA thanked the stakeholders for their input. This type of feedback about data gaps to address with future work products, research etc., helps inform the Master Plan 2.0 process. NYSERDA asked stakeholders if there should be more focus on future habitat suitability for fish species, given the changes being discussed.

A stakeholder responded that future habitat suitability should be considered, but there is a need to look at everything and consider worst case scenarios. Floating wind will preclude mobile gear use within the array. The stakeholder noted that they are unsure if any fisheries would be able to work within a floating array and stressed that there is a need to preserve the areas that are necessary for the fisheries to operate.

A stakeholder expressed serious exasperation at this process. The goal of Master Plan 1.0 was to identify areas with least risk and greatest opportunity, but it seemed like fishing industry input was not seriously considered, and now the industry is being asked for more input on potential developments in a massive geographic area. The stakeholder went on to ask why the NOAA sanctuaries are included as part of the AoA.

> NYSERDA appreciated this feedback and stressed that the AoA is not necessarily being considered for development. Master Plan 2.0 is meant to capture all available information on the AoA in order to identify areas of greatest risk to be considered for removal from consideration for deep water OSW.

A stakeholder stated their strong frustration with this process. None of the AoA is within NYS waters, and NYS has no claim on Federal waters. The stakeholder has a fleet of vessels that are permitted to operate in Federal waters, and the insinuation that NYS policy may prevent their operation in zones they are permitted for is offensive. Continuing to solicit input from the fishing industry, only to ignore it, creates significant anger with stakeholders, and it is getting tiring hearing about more studies, work

products, research initiatives, etc. when feedback doesn't seem to be seriously considered. NYS needs to make concrete statements about how it plans to avoid impacts on fisheries and vessels that are permitted to fish in Federal waters.

The stakeholder highlighted that any development in Zone 3 will require transmission cables that cross the continental shelf break in Zone 2. Due to the nature of the shelf, especially the strong currents, this would prevent the transmission lines from being buried, effectively precluding fishing activities in these areas. This will have especially pronounced impacts on fisheries that are constrained to the shelf edge, such as illex squid. Illex spawn off the shelf and come onto shelf with gulf stream dynamics. If anchors or cables that are part of developments disrupt the water conditions in these areas, then the fishery could suffer significant disruptions. The ecosystems and hydrology of the area are incredibly dynamic, and it is unpredictable what will happen if the developments alter the oceanographic processes, but the impacts could be catastrophic. NYS's cavalier attitude about this AoA is offensive.

A stakeholder asked about the costs of power from deepwater OSW. The industry cannot sustain much loss, and higher electricity costs could have an impact. The stakeholder asked the following questions: Are there cost-benefit studies being conducted? Given that this is unproven technology, do we even know if it makes financial sense to consider these developments?

> NYSERDA responded that there will be a cost-benefit study developed starting this fall to explore the cost implications of deep water OSW. The purpose of Master Plan 2.0 is to identify what areas should be recommended to be taken off the table for potential development, including considerations about costs and benefits. NYSERDA and Tetra Tech will discuss with HDR to include conversations about how the transmission lines may be installed, given the stated concern about how these lines will traverse the continental shelf edge.

Synthesis of Comments

Tetra Tech provided an overview of a synthesis of existing comments from a variety of prior OSW efforts across a range of geographic areas. These comments focused on deep water environmental concerns from the fishing industry, and included input from NYSERDA Master Plan 1.0, Gulf of Main Draft Call Area, Central Atlantic Draft Wind Energy Areas, Responsible Offshore Development Alliance (RODA) Research Priorities, the proposed Hudson Canyon Sanctuary, and other efforts. Comments identified broad environmental concerns associated with floating OSW. 57 comments were reviewed, and all comments were from fishing industry representatives. The comments were grouped into 19 broad thematic categories, and the results were displayed in a table showing the number of comments by theme, highlighting the most common themes. Some specific comments made by NMFS regarding Master Plan 2.0 were highlighted, and related to:

- Concerns about impacts of OSW on the cold pool process (an annual band of cooler bottom water created by thermal stratification that facilitates the distribution of many species).
- Concerns about impacts of OSW on the Frank R. Lautenberg Deep-Sea Coral Protection Area and the Georges Bank Coral Protection Area, which comprise substantial portions of Zones 2 and 3.
- An emphasis on the importance of underwater canyons for fisheries.
- Concerns about impacts on shelf break habitats for marine mammals in Zones 1 and 2.
- A concern that Zone 3 habitat usage is not well known or studied.

Some of the most common identified concern themes across the 57 comments related to:

- Transit, which included comments focused on establishing routes specifically for vessels to transit through OSW lease areas.
- Navigational Safety, which included comments focused on the feasibility of vessels to safely navigate through a development area.
- Excluded fisheries, which included comments focused on the potential of deep-water OSW infrastructure to effectively exclude fisheries from operating in development areas.
- Infrastructure hazards, which included comments related to any operational safety concerns related to deep water OSW infrastructure.
- Inter-array cable depth, which included comments related to the need to determine the depths of inter-array cables to ensure consistency across the windfarm grid.
- Upwelling, which included comments specifically related to upwelling impacts.
- Oceanographic processes, which included comments related to a broad range of oceanographic processes.

Summary of Questions and Discussions

A stakeholder asked about the issue of whale entanglement. It seems that whale entanglement wouldn't be as acute a concern as habitat disruption, noise pollution, etc.

> Tetra Tech responded that the synthesis of the comments is meant to capture existing comments as they were written, and comments specifically about the potential for whale entanglement (or secondary entanglement) are reflected in the synthesis.

A stakeholder stated that they will provide comments to the Fish and Fisheries Study that will highlight studies about larval transport.

A stakeholder asked about consideration of a NYS sponsored buyout option/financial impact mitigation. If NYS is going to, by design, enact policies that restrict or eliminate business, there should be serious discussions about financial compensation.

> NYERSDA responded that the Fish and Fisheries Study does not include discussions of financial impact mitigation. This will be advocated for.

Feedback from Office Hours 1, 2, and 3

Tetra Tech provided an overview of the feedback from the first, second, and third office hour style meetings. During these meetings, participants made a number of points and raised several concerns.

Key takeaways from Office Hour 1 included:

- The importance of all of the themes identified in the synthesis of the comments, ranking is not needed.
- The need to review the NOAA Proposed Hudson Canyon Sanctuary Comments. These were reviewed and included.
- Concerns around larval transport, the need to understand the relation of oceanographic processes and larval transport, and the possible impacts OSW development could have on it.
- The need to include themes from the New York Bight comments. These were reviewed and included discussions of important fishing grounds, transit corridors, OSW grid layouts, larval transport, navigational safety, the exclusion of fisheries, and the impacts on radar.

- The importance of understanding that floating OSW will have a considerably different footprint than fixed OSW, due to the presence of infrastructure in the water column (such as inter-array cables and anchoring systems). There is a floating OSW technical study that will be completed as part of Master Plan 2.0. This will be a high-level informational research project that will provide context for stakeholders to understand what the footprint of deep-water OSW could look like. NYSERDA recognizes there is currently an information gap about this technology.

Office Hour 2 takeaways included:

- The importance of considering the exclusion of fisheries, upwelling, and oceanographic processes when considering OSW development.
- The need for more information about which platform designs are most commonly used, and what depths the inter-array cables will be at.
- The need to include the input from FSF letters for the MA RFI and RI/MA EA that influenced the communication of information to remove scallop areas from the MA-RI wind energy areas.
- Discussions about lack of consideration of areas closer to shore for OSW development in NYS, which would have considerably less impacts on fisheries.
- Discussions about the type of mooring systems used by deep water OSW, and what kind of constraints these could have on fishing interests.
- A concern that Mid-Atlantic groups seem to be underrepresented in the Synthesis of Comments.
- An interest in the potential to install cell receivers on OSW infrastructure to extend cell service at sea.
- A sustained concern about the impacts of OSW developments on radar navigation, and the potential for collisions with OSW infrastructure.
- The need to include the pelagic longline fishing industry in discussions about deep water OSW development.

Office Hour 3 takeaways included:

- Request to assess floating OSW options with turbines sited as close as possible, in order to minimize the exclusion areas for fisheries. This could be a potential future work product.
- Considerable commercial pelagic longline fishing in Zone 2 and Zone 3, determined by oceanic processes. There needs to be a distinction between bottom longline and pelagic longline interests, with anything outside of 100 fathoms in depth being an area for pelagic longline gear.
- Agreement with NMFS concern that there is a lack of knowledge and studies around the benthic habitats in Zone 3.
- Underwater noise is under emphasized in the comment synthesis.
- Distinction between navigational safety for non-fishing vessels and fishing vessels.
- Concerns with prioritizing the different comment themes against each other and ranking them. The primary concern should be the cumulative impacts of OSW development.
- Greatest area of concern are the impacts on fishing in Zone 1.
- Number of turbines required to meet 9 GW depends on technology and size.
- New York is working with 11 other states, developers, and interest groups to develop a regional compensation framework for compensation that accounts for losses associated with OSW. NYSERDA is the signing party for OSW contracts.

Summary of Closing Questions and Discussions

A stakeholder recommended the addition of oxygen depletion to the list of issues being considered. The stakeholder went on to stress that impacts on larval transport, sargassum movement, fish congregation, predation, and underwater noise that could be caused by deep water OSW development are all important to consider. Oxygen depletion has been observed in the North Sea, and it seems to be related to the development of OSW, although the mechanism is currently unknown. The oceanographic processes being discussed are incredibly dynamic and difficult to understand, and the impacts of development are very uncertain.

A stakeholder raised the question of why NYS is not pursing OSW in state waters as it could be done quicker and with less political opposition. The transmission lines would also be shorter and there would be less impact on deep water fisheries. The examples of OSW in Europe are mostly near-shore developments.

Another stakeholder agrees with this assessment and line of questioning and has been asking these questions since before the Empire Wind lease. The South Shore of Long Island has significant wind resources and would be an excellent place to put OSW. Views are not protected by Federal law and shouldn't be given more weight than fishing industry interests. Federally permitted vessels from other states should not be impacted by NYS developments.

> NYSERDA responded that Master Plan 1.0 looked at NYS waters, and about 20 studies identified a number of complexities and risks of developing OSW in state waters. This included concerns about bird fly-ways, cabling, visibility, and impacts on in-state fisheries. NYSERDA will take comments back for a reevaluation of this.

A stakeholder emphasized that the longline industry has significant interests in the AoA and asked NYSERDA to continue to focus on longline comments.

> NYSERDA responded that this input is appreciated, and the longline industry interests will continue to be explored further.

A stakeholder reiterated that NYS needs to consider the net impacts of all policies that impact fishing interests. Electricity prices, fossil fuel prices, and exclusion of fisheries due to OSW development need to be considered together when trying to understand how to build resilience for the fishing industry. The situation is incredibly dynamic, changes are coming fast, and it seems that no one is really considering the long-term implications of all of these policies and environmental changes on the fishing industry.

A stakeholder expressed concern that the AoA is so large, and asked what authority NYS has to consider development in Federal waters.

> NYSERDA reiterated that the map is not showing areas that will be developed. The AoA is a tool to understand the offshore space and gain a scientific understanding of what is happening in these geographic/hydrologic zones. The goal is to build an understanding of the environment in these areas, how resource users utilize these areas, and what the cost considerations of deep water OSW development would be. As OSW goals go up, it is important to build knowledge about these deep water zones in order to inform future conversations about OSW viability.

A stakeholder asked if there are attempts to solicit input from fishing interests in other states.

NYSERDA responded that they are having conversations with other states along the eastern seaboard about current goals, future goals, current leases, and how goals can be collaboratively pursued. Fishing interests from other states are included as part of the F-TWG, and there is an understanding that these issues are multi-state in nature. One of the goals of the process is to be as inclusive as possible, if there is more that can be done to bring in other voices from more states, stakeholders are encouraged to raise this and reach out to NYSERDA.

Next Steps

- NYSERDA and Tetra Tech will continue with their Master Plan 2.0 Fisheries Engagement Approach.
- Tetra Tech will incorporate the feedback and input from this meeting into ongoing research and data gathering efforts, including coordination with HDR for updates to the Fish and Fisheries Study, reflective of input received to-date.
- The feedback from the office hour meetings will be compiled into a memo that will be attached to the HDR Fish and Fisheries Study.
- The F-TWG will meet on Friday, September 22nd from 9:30am-1:30pm eastern.