



NYSERDA

NYS Fisheries Technical Working Group (TWG)

June 12, 2020

Basics of Zoom

The screenshot shows the Zoom interface with several key elements and annotations:

- Meeting Information:** Meeting ID: 770-118-569, Meeting Topic: My Meeting, Host: Brittaney Andrews@wwfus.org, Invitation URL: <https://wwfus.zoom.us/j/770118569>.
- Participant ID:** 17. Annotation: "Enter Participant ID if you are dialing in via phone" with an arrow pointing to the ID field.
- Join Audio:** Computer Audio Connected. Annotation: "Mute and unmute yourself" with an arrow pointing to the microphone icon.
- Share:** Share screen. Annotation: "Turn your camera on or off" with an arrow pointing to the video icon.
- Invite Others:** Invite Others button.
- Chat box:** Chat box. Annotation: "Direct your chat to a specific person" with an arrow pointing to the "To: Everyone" dropdown.
- Participants Panel:** Participants (1) list showing Sara Roble-Guerrero (Me) with Mute and Rename buttons. Annotation: "Raise hand for questions/comments" with an arrow pointing to the Raise Hand button. Another annotation: "Change your screen name to First name Last Name, Affiliation ('Chair', 'Co-chair', 'WG Member', 'Observer')" with an arrow pointing to the Rename button.
- Bottom Bar:** Mute, Start Video, Invite, Participants, Share, Chat, and Leave Meeting buttons.

Mission Reminder

- The mission of the Fisheries Technical Working Group (Fisheries TWG or “F-TWG”) is to provide advice and guidance to help steer the State of New York’s efforts to advance offshore wind development in an environmentally responsible way and to protect and sustain the State’s and region’s fisheries and fishing communities
- For purposes of this framework, the term “fisheries” includes commercial and recreational fishing as generally used in fisheries management-related discussions.

FWTG Objectives

- Enhance communication and coordination
- Disseminate information
- Provide advice and input
- Support scientific research

FTWG Ground Rules

- Engage constructively with one another
- Acknowledge and articulate differences with respect and clarity
- Provide input and advice to the State of New York, including broadly shared advice where possible
- In lieu of agreement among F-TWG members, articulate the range of advice clearly and the reasons for differences

Agenda

10:00 **Welcome**

10:10 **Program Status Updates**

- New York 2020 OSW Solicitation update – *New York State Energy Research and Development Authority (NYSERDA)*
- Status of Empire and Sunrise Projects - *Developers*
- Status of New York Bight Wind Energy Area (WEA) designation and other Activities– *Bureau of Ocean Energy Management (BOEM)*

10:45 **Relevant F-TWG Topics for Discussion**

- Report out on the New York Bight Transit final product – *NYSERDA*
- Background on need and intent for cabling technical review – *Morgan Brunbauer, NYSERDA Commercial Fishing Liaison*
 - Approach to the Work – *Tetra Tech, NYSERDA Technical Consultant*
 - Discussion and advice – *F-TWG Members*

11:25 **Other Items and Issues**

11:30 **Next Steps and Adjourn**



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Updates

Updates

- New York 2020 OSW Solicitation update – *New York State Energy Research and Development Authority (NYSERDA)*
- Status of Empire and Sunrise Projects - *Developers*
- Status of New York Bight Wind Energy Area (WEA) designation and other Activities– *Bureau of Ocean Energy Management (BOEM)*



Commercial and For-Hire Recreational Fishing

Vineyard Wind 1 Project

Supplement to the Draft Environmental Impact Statement (SEIS)

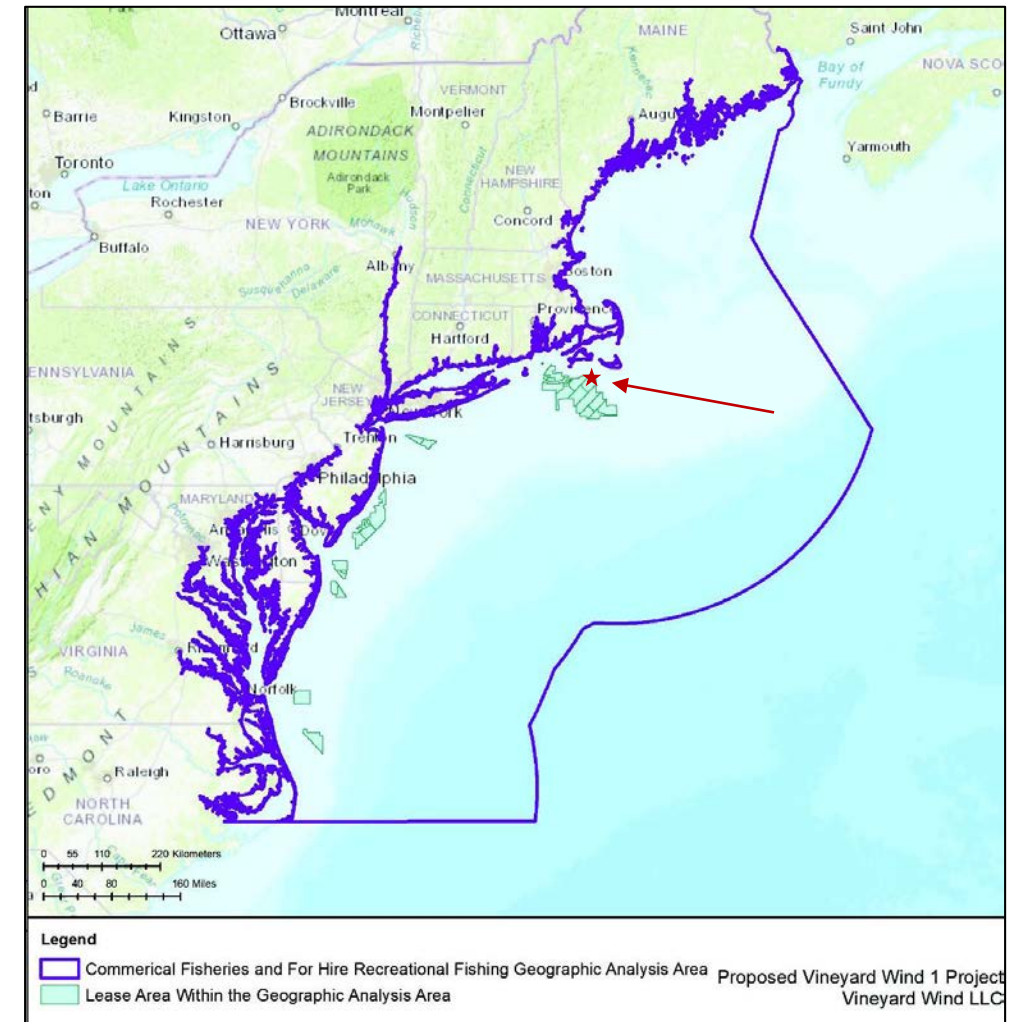
Virtual Public Meetings – June 12, 2020

Brian Hooker | Biology Team Lead



Commercial and For-Hire Recreational Fisheries Geographic Analysis Area

Includes the boundaries of the management area of the New England and Mid-Atlantic Fishery Management Councils for all federally-managed fisheries within the U.S. Exclusive Economic Zone (3 - 200 nautical miles from the coastline) through Cape Hatteras, N.C., plus the state waters of the Commonwealth of Massachusetts (0 to 3 nautical miles from the coastline)



Commercial and For-Hire Recreational Fisheries Impact Producing Factors Analyzed

- Anchoring
- New cable emplacement and maintenance activities
- Noise
- Port Utilization
- Presence of Structures
- Increased Vessel Traffic
- Climate Change
- Regulated Fishing Effort



Estimated Cumulative Commercial Fisheries Revenue Exposure

Table 3.11-3: Average Annual Percentage of Total Mid-Atlantic and New England Fishery Revenue Exposed to Offshore Wind Energy Development by FMP (2020-2030)

FMP	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2030*
Atlantic herring	0.00%	0.05%	0.29%	0.40%	0.44%	0.71%	0.71%	0.75%	0.75%	0.75%	0.75%	\$194,175
Bluefish	0.00%	0.08%	0.47%	0.61%	0.66%	0.99%	1.18%	1.20%	1.20%	1.20%	1.28%	\$18,322
Golden tilefish	0.00%	0.03%	0.06%	0.39%	0.48%	1.06%	1.06%	1.06%	1.06%	1.06%	1.06%	\$49,716
HMS	0.00%	0.00%	0.04%	0.07%	0.07%	0.08%	0.10%	0.10%	0.10%	0.10%	0.13%	\$2,262
Mackerel/squid/butterfish	0.00%	0.45%	0.83%	1.29%	1.31%	2.34%	2.38%	2.47%	2.47%	2.47%	2.56%	\$1,160,421
Monkfish	0.00%	0.30%	2.57%	2.97%	2.98%	4.53%	4.57%	4.62%	4.62%	4.62%	4.70%	\$904,167
Multispecies large mesh	0.00%	0.04%	0.28%	0.31%	0.32%	0.45%	0.45%	0.45%	0.45%	0.45%	0.45%	\$300,026
Multispecies small mesh	0.00%	0.39%	1.52%	2.36%	2.37%	4.20%	4.21%	4.22%	4.22%	4.22%	4.22%	\$442,456
Sea scallop	0.00%	0.01%	0.11%	0.29%	0.29%	0.51%	0.59%	0.75%	0.75%	0.75%	0.77%	\$3,538,272
Skate	0.00%	0.45%	4.26%	4.74%	4.77%	6.98%	7.03%	7.04%	7.04%	7.04%	7.08%	\$582,748
Spiny dogfish	0.00%	0.11%	1.33%	1.40%	1.67%	1.96%	2.10%	2.11%	2.11%	2.11%	2.13%	\$57,465
Summer flounder/scup/black sea bass	0.00%	0.16%	0.92%	1.38%	1.47%	2.39%	2.50%	2.56%	2.56%	2.56%	2.70%	\$991,601
Surfclam/ocean quahog	0.00%	0.20%	1.33%	1.48%	1.50%	2.34%	5.17%	5.20%	5.20%	5.20%	5.30%	\$3,329,762
None – Unmanaged (includes lobster and Jonah crab)	0.00%	0.05%	0.38%	0.50%	0.57%	1.03%	1.07%	1.08%	1.08%	1.08%	1.21%	\$1,476,467
Red crab	0.00%	0.00%	0.03%	0.11%	0.14%	0.23%	0.25%	0.25%	0.25%	0.25%	0.33%	\$10,381

Source: G. DePiper, Pers. Comm., 2018

FMP = Fisheries Management Plan; VTR = Vessel Trip Report

Notes: Data is in 2019 dollars. The data represents the revenue-intensity raster developed using fishery dependent landings' data. To produce the data set, VTR information was merged with data collected by at-sea fisheries observers, and a cumulative distribution function was estimated to present the distance between VTR points and observed haul locations. This provided a spatial footprint of fishing activities by FMPs. The percentages are expected to continue after 2030 until facilities are decommissioned. American lobster and Jonah crab fisheries are included in the "None – Unmanaged" row.

*This column represents the total average revenue exposed in 2030 in order to give a value reference to for the percentage of revenue exposed in 2030.

Cumulative Average Annual Commercial Fisheries Revenue Exposure by Port

Table 3.11-4: Average Annual Revenue from all Lease Areas for Exposed Port Groups, 2013-2018

State Landed	Port Landed	Average Annual Revenue from all Lease Areas	Average Percent of Port Revenue
Massachusetts	New Bedford	\$2,866,630	1%
Rhode Island	Point Judith	\$2,401,731	5%
New Jersey	Atlantic City	\$867,267	4%
New Jersey	Cape May	\$795,656	1%
Rhode Island	Little Compton	\$392,608	22%
New Jersey	Point Pleasant	\$358,783	2%
New York	Montauk	\$307,661	2%
Rhode Island	Newport	\$307,129	4%
New Jersey	Barneгат	\$224,674	1%
Massachusetts	Westport	\$175,404	16%
Massachusetts	Fairhaven	\$173,077	2%
Maryland	Ocean City	\$158,460	3%
New Jersey	Sea Isle City	\$144,291	8%
Virginia	Newport News	\$138,144	1%
Virginia	City of Seaford	\$126,244	1%
Connecticut	New London	\$98,615	2%
Virginia	Hampton	\$92,523	1%
Massachusetts	Chatham	\$88,490	1%
Connecticut	Stonington	\$71,916	1%
Rhode Island	Tiverton	\$70,402	5%
Rhode Island	Davisville	\$61,687	1%
Rhode Island	North Kingstown	\$53,545	1%
Delaware	Indian River	\$45,930	13%
North Carolina	Beaufort	\$43,292	1%
Massachusetts	Menemsha	\$41,284	10%

Source: B. Galuardi, Pers. Comm., 2020



New Data in SEIS Supporting Impact Analysis to Commercial Fishing

- Polar histograms were developed for vessel orientation analysis in the SEIS
- Data set:
 - Is cumulative for 2014 to 2019
 - Shows directionality of fishing vessel activity
 - Is based on Vessel Monitoring System data
 - Includes all vessels, parsed into two speed categories (≥ 5 knots and < 5 knots) representing transiting and fishing activity
- Vessel positions inside 3 miles (state waters) were removed – ports are common crossing points for all vessels
- This analysis represents most, but not all, fishing/transit activity due to VMS requirements



VMS – Polar Histograms, All Southern New England Lease Areas, 2014-2019

Figure 3.11-1

VMS Activity by Course - Actively Fishing
All RI and MA Lease Areas
Jan 2014 - Aug 2019
All VMS Fisheries

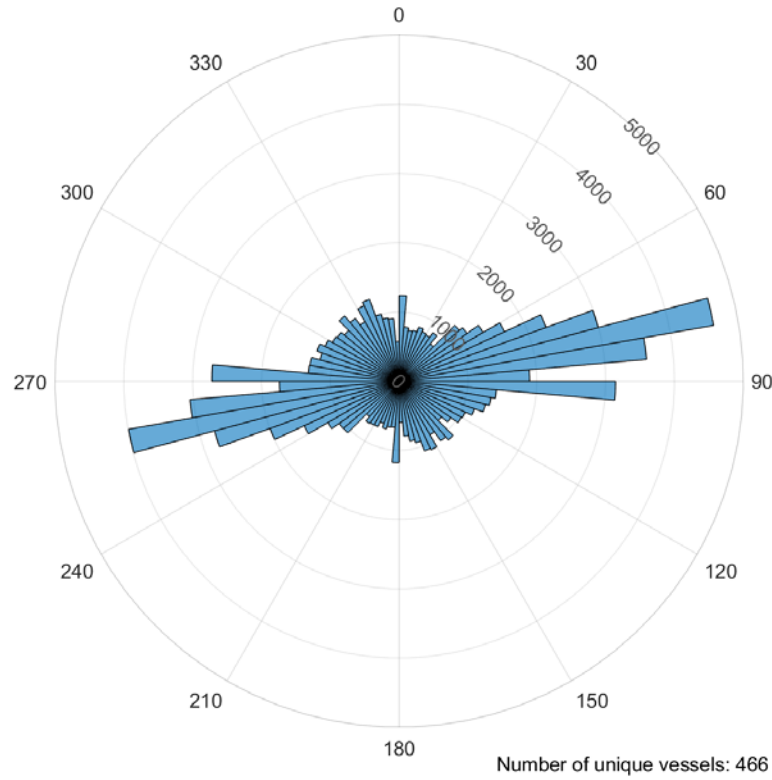
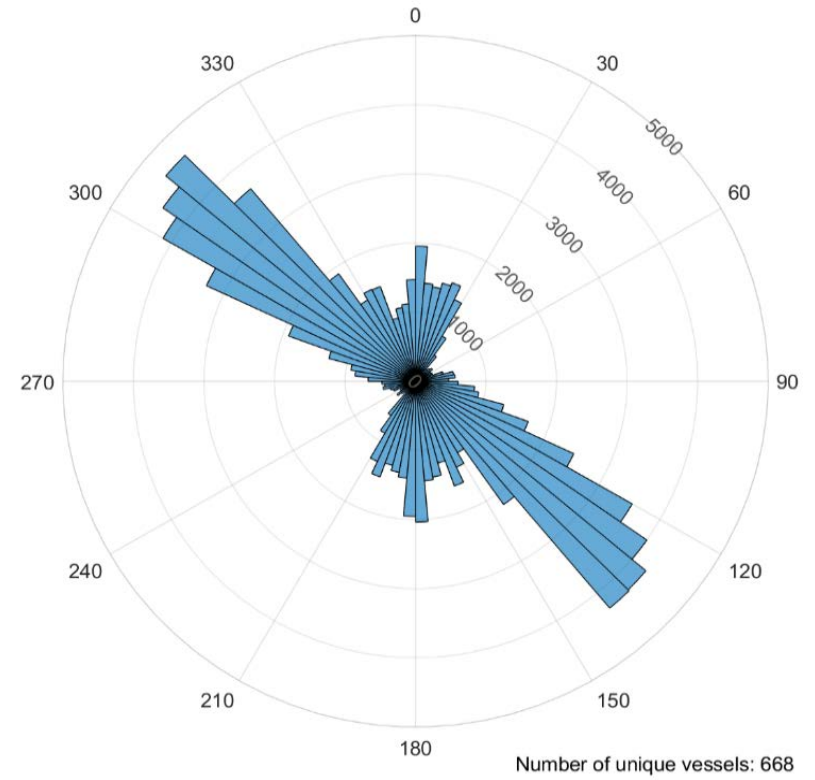


Figure 3.11-2

VMS Activity by Course - Actively Transiting
All RI and MA Lease Areas
Jan 2014 - Aug 2019
All VMS Fisheries



VMS – Polar Histograms, VW1 Wind Development Area Only, 2014-2019

Figure 3.11-4

VMS Activity by Course - Actively Fishing
OCS-A-0501 Vineyard Wind I
Jan 2014 - Aug 2019
All VMS Fisheries

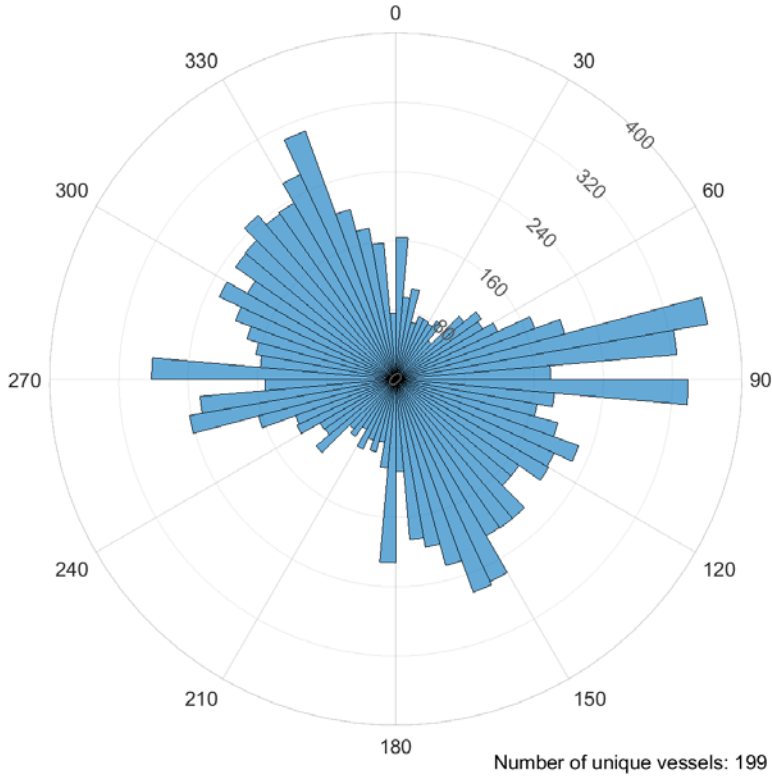
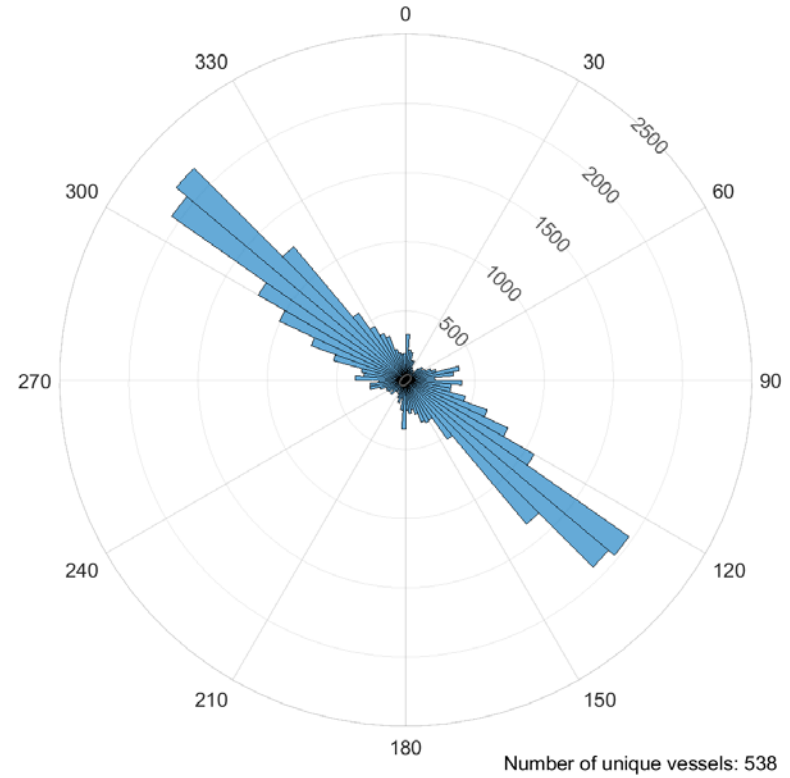


Figure 3.11-3

VMS Activity by Course
OCS-A-0501 Vineyard Wind I
Jan 2014 - Aug 2019
All VMS Fisheries



Note: Six years of VMS point counts (activity) on Y axis varies in each plot

Summary of Impacts to Commercial and For-Hire Recreational Fishing

Commercial and For-Hire Recreational Fishing	Proposed Action	Alternative B	Alternative C	Alternative D1	Alternative D2	Alternative E	Alternative F
Direct and Indirect Impacts	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Cumulative Impacts	Major	Major	Major	Major	Major	Major	Major

Note: Impact levels assume only voluntary mitigation measures included in the Construction and Operations Plan by the Lessee and best management practices



Where to Read More About Potential Impacts

- **Section 3.11:** Narrative of Commercial and For-Hire Recreational Fishing Impacts
- **Tables 3.11-1 to 3.11-5:** Tables of Impact Producing Factors and Cumulative Revenue Exposure
- **Figures 3.11-1 to 3.11-6:** Histograms of Commercial Fishing Vessel Activity by Course through Southern New England Lease Areas (VMS data)
- Private recreational angling impacts can be found in **Section 3.10** – Recreation and Tourism



Bureau of Ocean Energy
Management

BOEM.gov

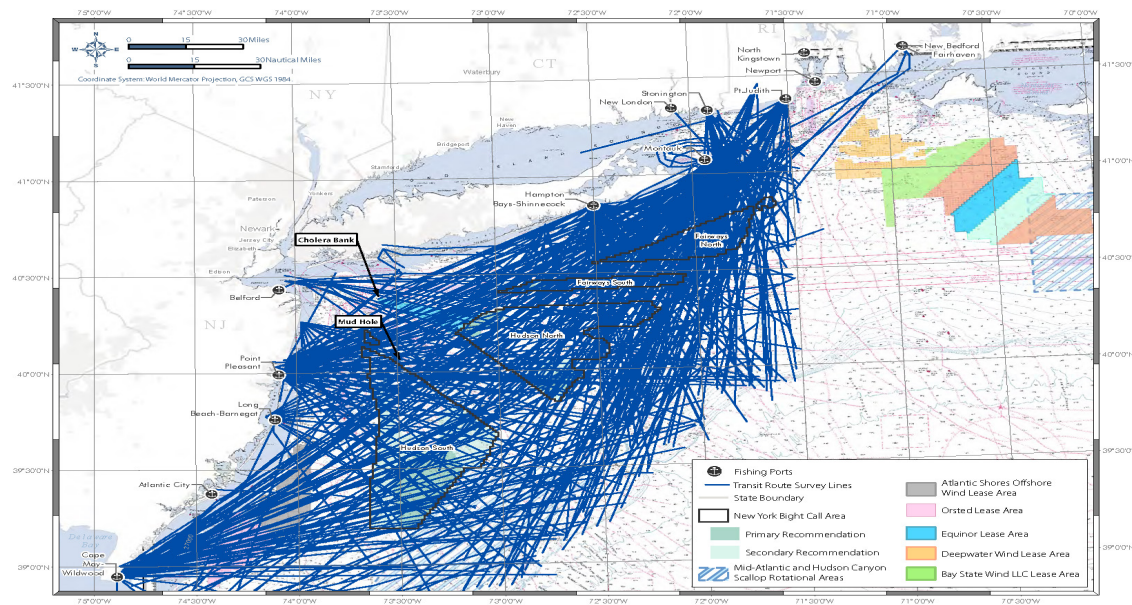


<https://www.boem.gov/vineyard-wind>



NY Bight Transit

Fishermen Survey Data



Transit Lanes Should . . .

- To avoid or minimize conflict among various users, including but not limited to commercial fishing, as well as avoid or minimize potential collision impacts to wildlife;
- Early, be enforceable, and preferably be established before developers have submitted bids and made financial commitments based on assumptions about the amount of lease area available for development;
- To provide connection and consistency across lease areas and projects throughout the New York Bight (and to adjacent areas such as lease areas off of New Jersey) to allow for safe, regular, and coherent travel across the region;

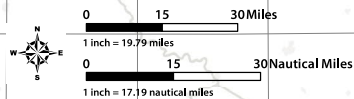
And . . .

- To ensure commercial fishing economic opportunities for all ports, not just some or a few; and
- To allow for transit to and from various ports and fishing grounds in the straightest and most direct route possible to minimize transit time, associated costs, and economic impacts on the commercial fishing industry.

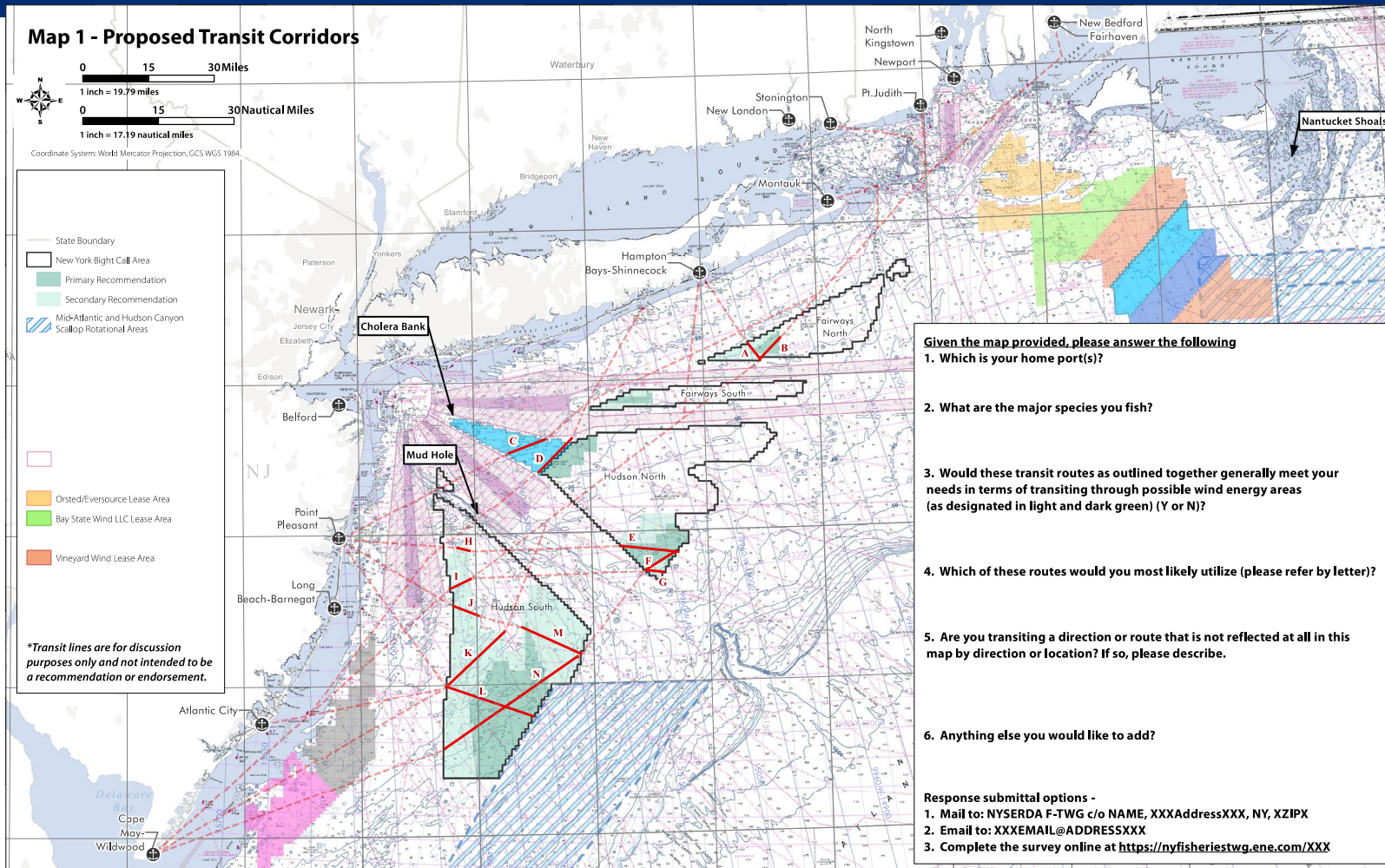
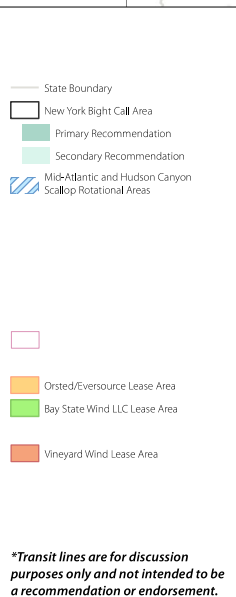
And . . .

- Above all provide safe passage of vessels in a range of sea conditions;
- Be established between lease areas in the final BOEM lease areas;
- Be limited in number, based on data provided, to not overburden any one proposed lease area while ensuring sufficient transit across such areas for different purposes and needs (varying by port and fishery);
- Have designations that are data-informed to the greatest extent possible, utilizing a shared and widely accepted methodology, and include risk analysis for both calm seas and storm conditions; and
- Follow a process for determining lanes that is broadly inclusive of the commercial fishing industry.

Map 1 - Proposed Transit Corridors



Coordinate System: World Mercator Projection, GCS WGS 1984



Given the map provided, please answer the following

1. Which is your home port(s)?
2. What are the major species you fish?
3. Would these transit routes as outlined together generally meet your needs in terms of transiting through possible wind energy areas (as designated in light and dark green) (Y or N)?
4. Which of these routes would you most likely utilize (please refer by letter)?
5. Are you transiting a direction or route that is not reflected at all in this map by direction or location? If so, please describe.
6. Anything else you would like to add?

Response submittal options -

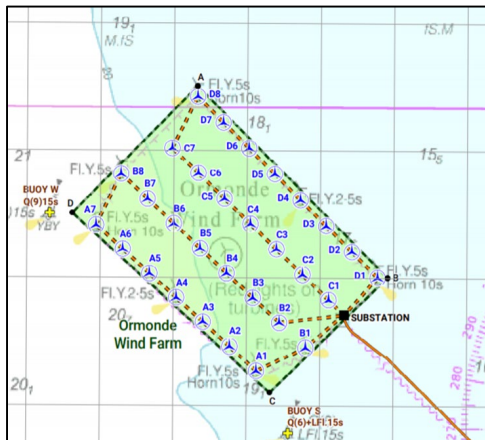
1. Mail to: NYSDERDA F-TWG c/o NAME, XXXAddressXXX, NY, XZIPX
2. Email to: XXXEMAIL@ADDRESSXXX
3. Complete the survey online at <https://nyfisheriestwg.ene.com/XXX>

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Cabling

Submarine Cables in New York Bight

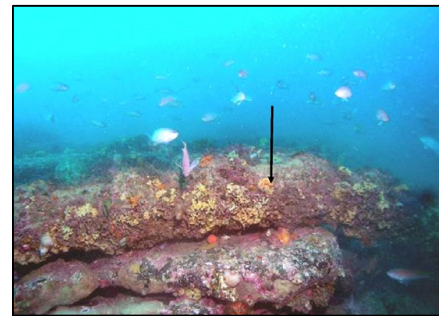
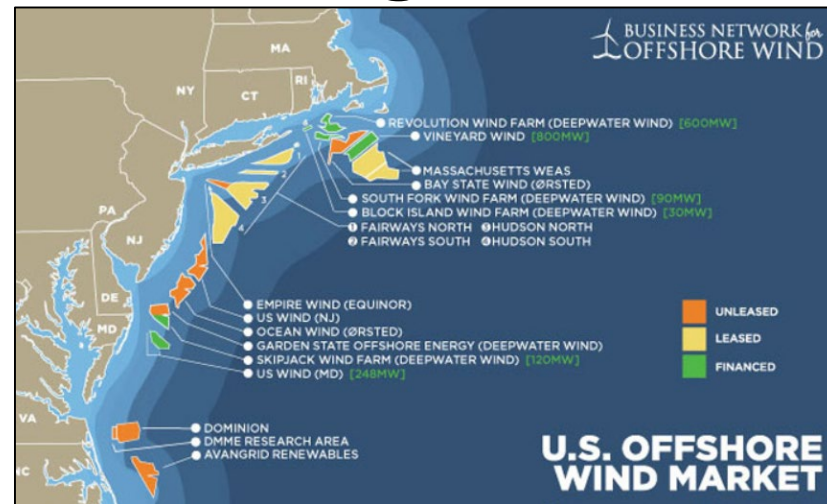
Example of inter-array cables and export cable layout



- Submarine Cables from Offshore Wind will soon be installed from Massachusetts to Virginia – many in NY Bight
- Export Cables to shore and Inter Array Cables between turbines and substations inside of lease areas are the key components
- Cable Burial Document will discuss:
 - The planning process, surveys and when and how any stakeholder participation occurs.
 - What is likely to be installed? where and by what means? How does that differ by location within these projects (beach landing, export cable, array field)?
 - Crossings of existing assets known fishing areas & dredged channels.
 - The Operations and Maintenance phase - what if intervention is required post-installation? What might cause this need to occur?

Submarine Cables in New York Bight

- Environmental Impacts – What is known? What is not? What is being studied and what isn't?
- Federal and State Studies? Developer studies?
- EMF impacts with HVAC export cables? HVDC? Array? Noise impacts? Addition of structure and hard ground – foundation and scour protection?
- Burial impacts – standard v. deep burial, by technique and if done repeatedly over time?
- Cumulative Impacts to habitats? Fish assembly? Ecosystem-wide? How to know what the impact really is during a time of ongoing change.



What else is key to this audience?

- This document is an opportunity for research and explanation of YOUR key questions.
- PLEASE participate and help modify this effort to meet your needs



July Topics

July Draft Agenda

10:00 Welcome, Listing of Participants, Orientation to the On-Line Platform

10:15 Program, Research and Science Update

- New York 2020 OSW Solicitation update
- Status of various NYSERDA-funded fisheries research projects
- Update on status and activities of the Responsible Offshore Science Alliance
- Review of MA-RI Fisheries Research Projects

TBD Cabling Project Update

TBD Potential Other NYSERDA Workstreams

11:45 Summary and Next Steps

12:00 Adjourn