



NYSERDA

NYS Fisheries Technical Working Group (TWG)

July 17, 2020

Basics of Teams

The bar at the bottom is your access to functionality in Teams. Select the ellipses (...) function for detailed options, a number to call in, device settings, and more.

The screenshot shows the Microsoft Teams meeting interface. At the top, there is a search bar and a navigation pane on the left with icons for Activity, Chat, Teams, Calendar, Calls, Files, and Planner. The main area displays a meeting chat window with messages from Benjamin (Parker) Jones and Ashley Arayas. At the bottom, a meeting control bar contains icons for screen sharing, video, audio, chat, and a red end call button. Annotations with arrows point to specific icons: 'Share your screen' points to the screen sharing icon; 'Turn your video on or off.' points to the video icon; 'Additional meeting options' points to the ellipsis icon; 'Mute and unmute as needed' points to the microphone icon; 'View participant list' points to the participant list icon; and 'Access the chat and type messages here.' points to the chat icon and the chat input field.

Share your screen

Turn your video on or off.

Additional meeting options

Mute and unmute as needed

View participant list

Access the chat and type messages here.

Meeting chat

Benjamin (Parker) Jones joined the meeting.

Benjamin (Parker) Jones resumed the meeting to Test (do not accept).

Ashley Arayas joined the meeting.

Type a new message

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**
- 10:15** **Program, Research and Science Update**
- 11:00** **Update on Navigation Studies – USCG**
- 11:30** **Cabling Project Update**
- 11:45** **Other Items, Issues, and Other NYSERDA Workstreams**
- 12:15** **Next Steps and Adjourn**

Program, Research and Science Updates

Program, Research and Science Update

- New York 2020 OSW Solicitation update – *NYSERDA*
- Status of various NYSERDA-funded fisheries research projects — -
 - *Fishermen's Knowledge Data Trust*
 - *Fishing Access within Turbine Arrays*
- Update on status and activities of the Responsible Offshore Science Alliance (ROSA)
- Review of MA-RI Fisheries Research Projects

Program, Research and Science Update – Fisheries Knowledge Trust



Fisheries Knowledge Trust

NY F-TWG

July 17th, 2020



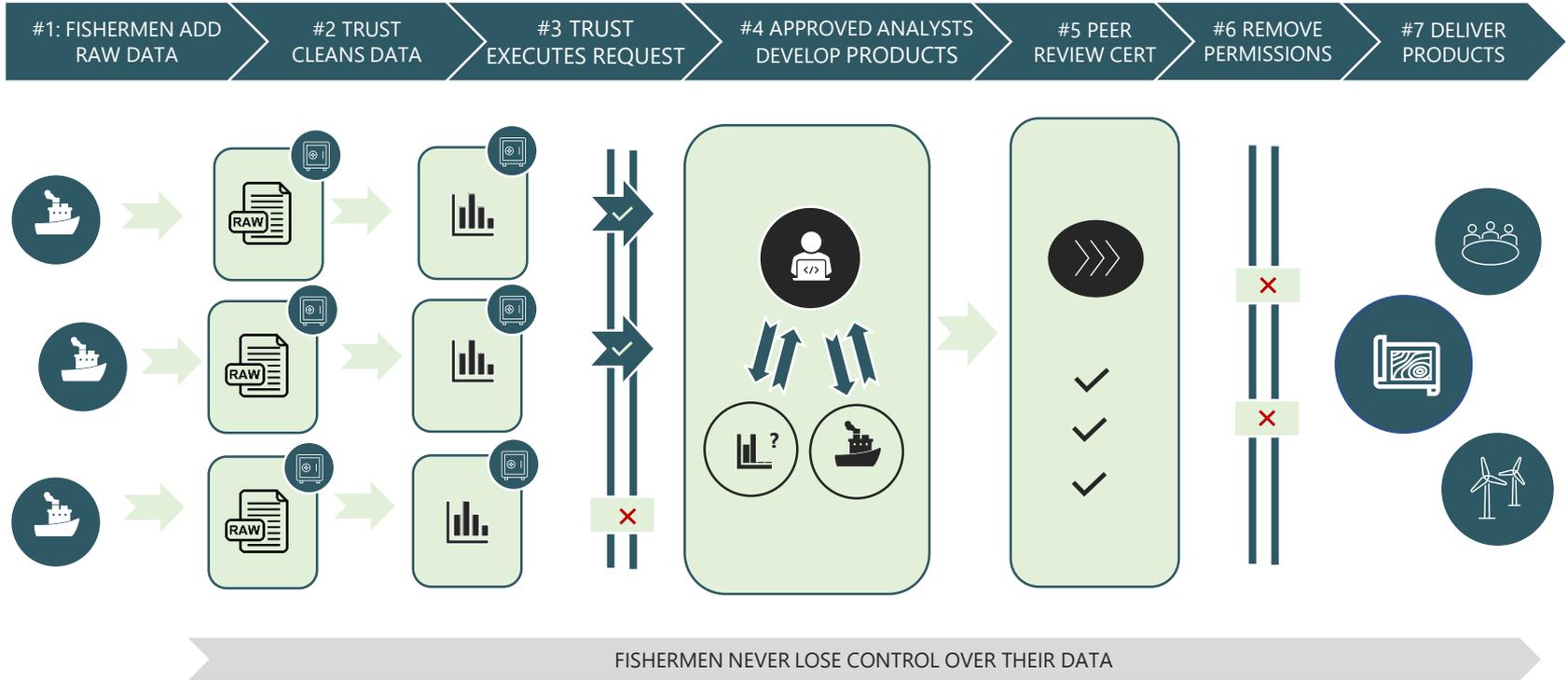
Where We Are Today

Trust has made progress on infrastructure, and is moving forward with “pilots”

- The goal of the Trust is to provide data infrastructure that enables the industry to develop trusted science products in a secure, cost-effective way
- In November 2019, the Trust received funding from NYSERDA to build that infrastructure and conduct two “pilot” studies
 - Currently implementing pilots with herring and surfclam fleets
 - *In future, Trust will provide infrastructure – fleet & analysts will be responsible for developing products*
- Over past 6 months, Trust has made strides in building core infrastructure
 - Governance processes & documentations
 - Secure, data sharing platform
 - Data integration, cleaning processes & code
- Currently aggregating and processing data for both pilots

How are products created in the Trust?

Data are processed, cleaned and readied for analyses by the Trust with your input. These data are then made available to specifically-named analysts and only with your approval



Project Status

Key next steps for the Clam Fleet are to finalize project scoping, establish project team, and assemble & process data

✓ Complete ○ In Progress ✗ Needs addressing ✗ To be done in future

	Step	Task	Responsible
✓	Scope Project	Define the problem + scope products to be created	Trust + Fleet
✓	Create Project Team	Identify / Onboard Leads, Analysts, and Peer-Advisory Panel	Trust + Fleet
○	Aggregate Data	Collect data from Fleet and submit to the Trust	Leads + Trust
○	Process Data	Process Data	Trust
○	Share Data	Share data with analysts	Trust + Analysts
✗	Develop Products	Develop products	Analysts + Leads
✗	Review Products	Review by peer review	Analysts + Trust
✗	Delivery Products	Deliver to stakeholders	Leads / RODA

Program, Research and Science Update – Status and activities of the Responsible Offshore Science Alliance (ROSA)

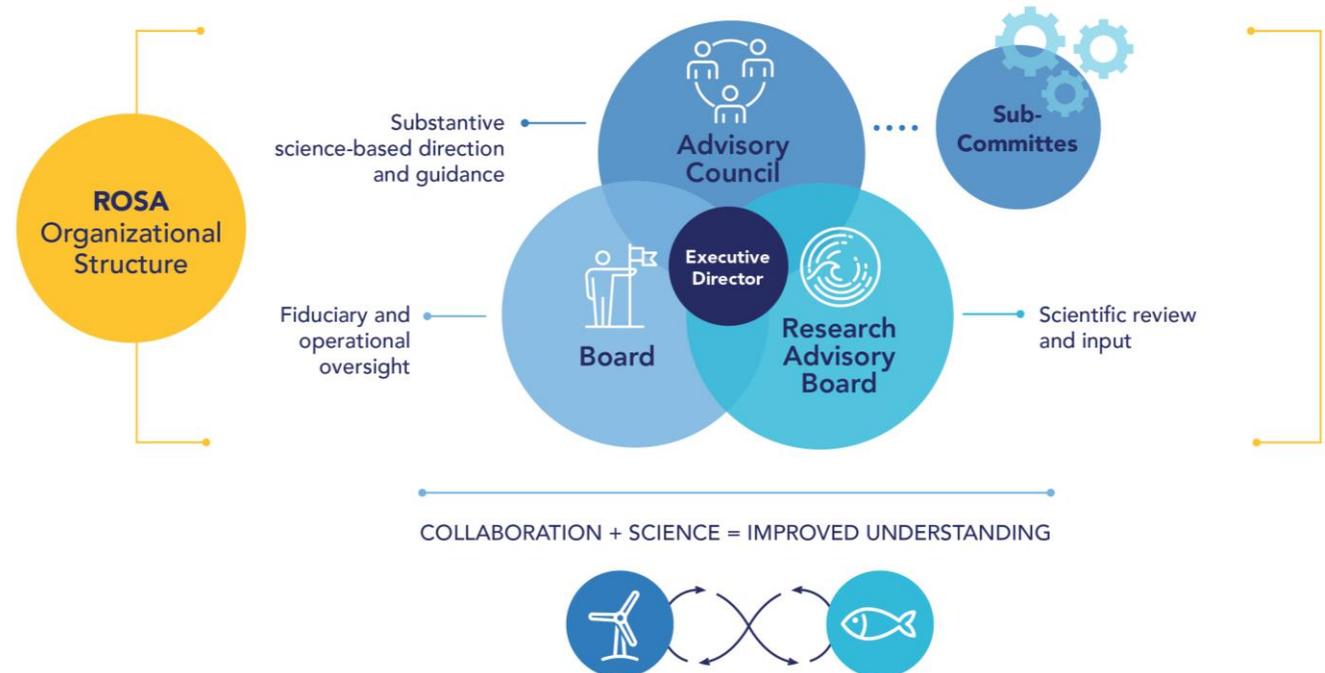


RESPONSIBLE OFFSHORE
SCIENCE ALLIANCE

Lyndie Hice-Dunton, PhD
Executive Director
New York State F-TWG Meeting
July 17, 2020

ROSA Objectives

- Identify **regional research** and **monitoring** needs
- Provide a forum for **coordinating existing programs**
- Advance regional understanding through **collaboration, partnerships, and cooperative research**
- Facilitate and improve **standardization** and **access to data**
- **Disseminate research** and **communicate findings**
- **Administer research**



Work In Progress



Advisory Council

- Includes OSW developers, commercial & recreational fishermen, state agencies (ME to NC), NMFS, BOEM, NEFMC, MAFMC, ASMFC
- Applications for fishermen due July 15
- Agency and developer appointments due July 24
- Goal: First meeting September 2020

IFMWG

- Interim Fisheries Monitoring Working Group
- Includes state and federal agencies, academics/researchers, fishermen and RODA staff, OSW developer fisheries staff
- Goal: draft Interim Guidance by Fall 2020

Research Advisory Board

- Determining approach and criteria for Research Advisory Board
- Selection process will be through consult with Advisory Council
- RODA/NMFS/BOEM State of the Science workshop will help identify potential RAB members and research needs and priorities

Program, Research and Science Update – Review of MA-RI Fisheries Research Projects

Southern New England Regional Science Pilot

New York Fisheries Technical Working Group

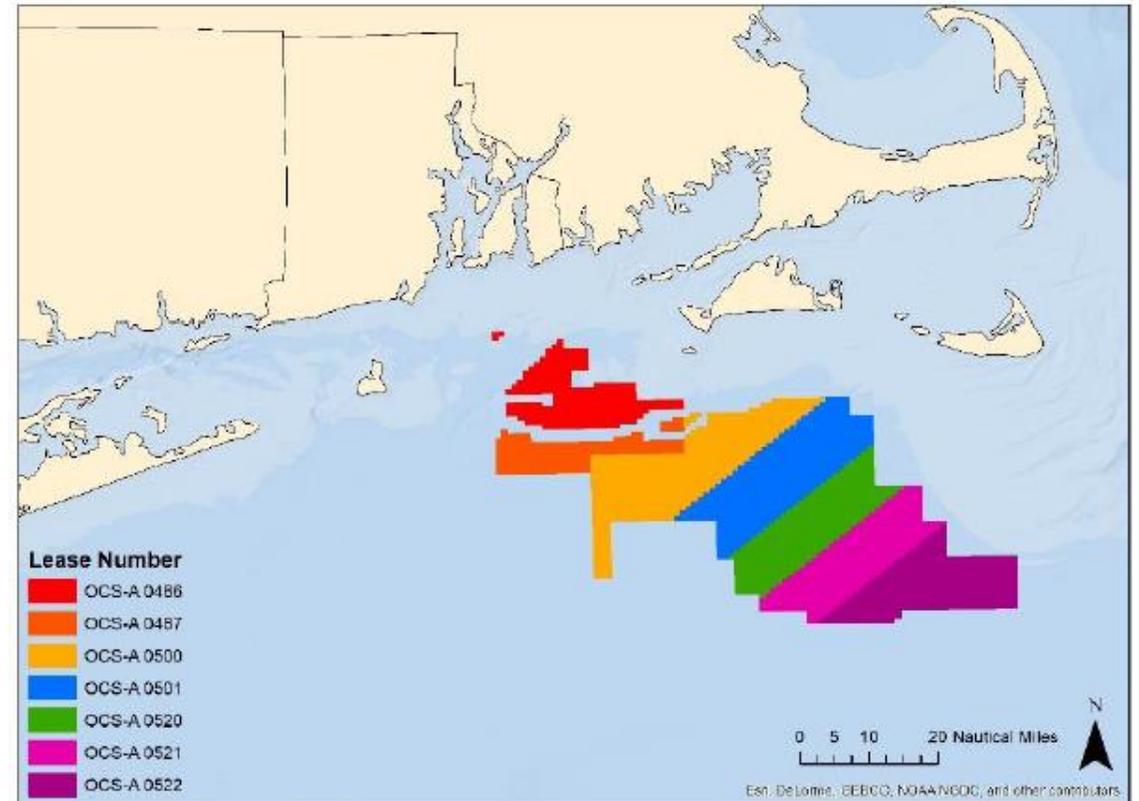
Julia Livermore

7/17/2020



Process

- Funding provided by BOEM (\$400,000), MassCEC (\$400,000) and RIDEM (\$200,000) = \$1,000,000 total
- RFP development involved funders and other agency input (e.g., NYDEC, NOAA)
- 3 topic areas: 1) Fishery Resource Studies, 2) Seafloor Habitat Studies, and 3) Technical Studies
- Study area restricted to Southern New England (figure at right)



Process

- RFP issued Aug. 30, 2019 and applications received through Oct. 17
- Project selection
 - Larger review team workshop in December 2019 (BOEM, MassCEC, RIDEM, NOAA, MassDMF, CFCRI, Mass Lobstermen's Association, Orsted, Vineyard Wind, Equinor, fishing industry representatives, etc.)
 - Input from workshop considered in final decision making by funding agencies (BOEM, MassCEC, and RIDEM)
 - 5 projects selected

Project 1: Passive Acoustic Telemetry as a Tool to Monitor The Baseline Presence and Persistence of Highly Migratory Fish Species in Popular Recreational Fishing Grounds within Southern New England Wind Energy Areas

- **INSPIRE Environmental** (Brian Gervalis/Jeanine Boyle) and Anderson Cabot Center for Ocean Life (ACCOL) at the New England Aquarium
- The objectives of the study are to use passive acoustic telemetry to monitor the presence and persistence of bluefin tuna, blue shark, and shortfin mako shark (three of the most commonly captured and targeted species in southern New England within the three most popular recreational HMS fishing areas in the southern New England).
- The survey plan includes the deployment of 15 receivers in 2020 and 2021 and work with the recreational fishing community to conduct for-hire tagging trips to target and tag up to 20 bluefin tuna, 20 blue shark, and 20 shortfin mako shark with acoustic transmitters.
- Presence and persistence of these HMS in and around the primary study sites will be monitored. We will also share data and coordinate receiver deployment with a BOEM-funded study that will be occurring concurrently and will use acoustic receivers to monitor Atlantic cod presence and spawning activity on Coxes Ledge. The resulting 'detection' data obtained from acoustic receivers will be merged with regional data and analyzed to meet study objectives with the overall goal of establishing baseline information on HMS presence and persistence in the popular recreational fishing areas and establishing a long-term monitoring strategy to evaluate the impacts of wind energy projects on key HMS in the southern New England WEAs.

Project 2: Larval Lobster and Fish Neuston Net Survey for Regional Fisheries Monitoring in Southern New England Offshore Wind Development

- **University of Massachusetts Dartmouth** (Kevin D. E. Stokesbury, PhD. / Michelle Plaud) and Mass. Lobstermen Assoc.
- Estimate the relative abundance and distribution of larval lobster and fish using a towed neuston net
- Sampling at 30 stations that are randomly selected and distributed based on the proportional total area within each ten-meter depth contour of the 3670 km² study area
- 1) estimate distribution of larval species in the areas of concern, 2) correlate abundance data with environmental factors (temperature, salinity, PH, and dissolved oxygen), and 3) determine the seasonal variations of larval species in the wind energy lease areas. This work will create a strong baseline of data to be use in future studies and analysis as the planned windfarm projects continue.

Project 3: Developing Standard Approaches to Synthesizing, Visualizing, and Disseminating High-Resolution Acoustic and Imagery Data to Advance Benthic Habitat Mapping in the Wind Energy Areas of the Northeast

- **INSPIRE Environmental** (Marisa Guarinello/ Jeanine Boyle)
- There is a substantial need to characterize and visualize the distribution of the benthic habitats in wind farm and cable route areas.
- The project will develop best practices for
 - 1) integrating acoustic data and high-resolution imagery to map benthic habitats, and
 - 2) making those habitat data available to federal and state regulators and stakeholders in a vetted and established forum (Northeast Ocean Data Portal)
- INSPIRE will synthesize existing high-resolution acoustic and imagery data previously generated from the numerous offshore wind development benthic assessment studies in the region, along with publicly available data, across a gradient of habitat types to develop a standard means of classifying benthic habitats that will be amenable to regional habitat mapping.
- INSPIRE will collaborate with the Northeast Ocean Data Portal to ensure these habitat data products are compatible with existing mapping standards. The Northeast Ocean Data Portal team will also aid in convening stakeholders to elicit input regarding specific benthic habitat mapping needs as well as coordinating review and vetting by stakeholders of the developed habitat data products.

Project 4: A Comparative Analysis of Europe and Japan's Approaches to the Regulation of Offshore Wind Farms

- **New Bedford Port Authority** (Edward Anthes Washburn/Abigail Hevey)
- Through this project, the New Bedford Port Authority (NBPA) proposes to hire a qualified contractor to complete this analysis.
- The contractor will develop an objective inventory of existing wind farms in Europe and their respective policies in regards to coexistence with the commercial fishing industry.
- The contractor will also analyze the emerging policies as being developed in Japan regarding the coexistence of commercial fishing and offshore wind as the offshore wind industry begins to grow.

Project 5: Fishing Status of Vessels Using the AIS: A Big Data and Machine Learning Approach

Topic Area 3: Technical

- **University of Rhode Island** (Thomas Sproul, Ph.D./ Ted Myatt) and Rhode Island DEM (Julia Livermore)
- Goal of this study is to improve estimates of where/when fishing vessels are actually fishing, and to generate improved maps of fishing effort and landings values at sea. Improved mapping of fishing activity can be used to limit conflicts between wind development and commercial fishing, and because our approach will form a baseline that can be used to assess changes in fishing practices after wind farm development.
- Deliverables: i) fishing activity maps, to be available on the Northeast Ocean Data Portal, ii) publicly available, open source computer code for replication by other scientists, iii) measurement of improvements of landings estimates relative to existing approaches
- Methods:
 - Merge AIS, VMS, VTRs, dealer reports, United States Coast Guard registry records, and the NOAA Observer data
 - Develop a machine learning approach to modeling the probability of fishing based on vessel activity at the FMP level
 - Enhance “feature engineering” by obtaining information on key vessel behavior patterns directly from the fishing industry and commercial fishing research organizations (CFCRI, Mass Fishermen’s Partnership, RI CFRF, and ROSA)
 - The model will then be trained using merged NOAA Observer Program data where fishing status of vessels is known, and fishing activity maps will be generated by extrapolating the fitted model to the full non- observer data set.

Update on Navigation Studies – USCG

United States Coast Guard



PORT ACCESS ROUTE STUDY (PARS) PRESENTATION FOR NYSERDA FISHERIES TECHNICAL WORKING GROUP

Mr. George Detweiler, Coast Guard Headquarters, Washington, DC
LT Rebecca Blanchflower, First Coast Guard District, Boston, MA
Mr. Jerry Barnes, Fifth Coast Guard District, Portsmouth, VA



Homeland
Security



AGENDA

- Port Access Route Study 101
- Atlantic Coast Port Access Route Study ANPRM
- Northern NY Bight Port Access Route Study
- Seacoast of NJ Port Access Route Study
- Q&A



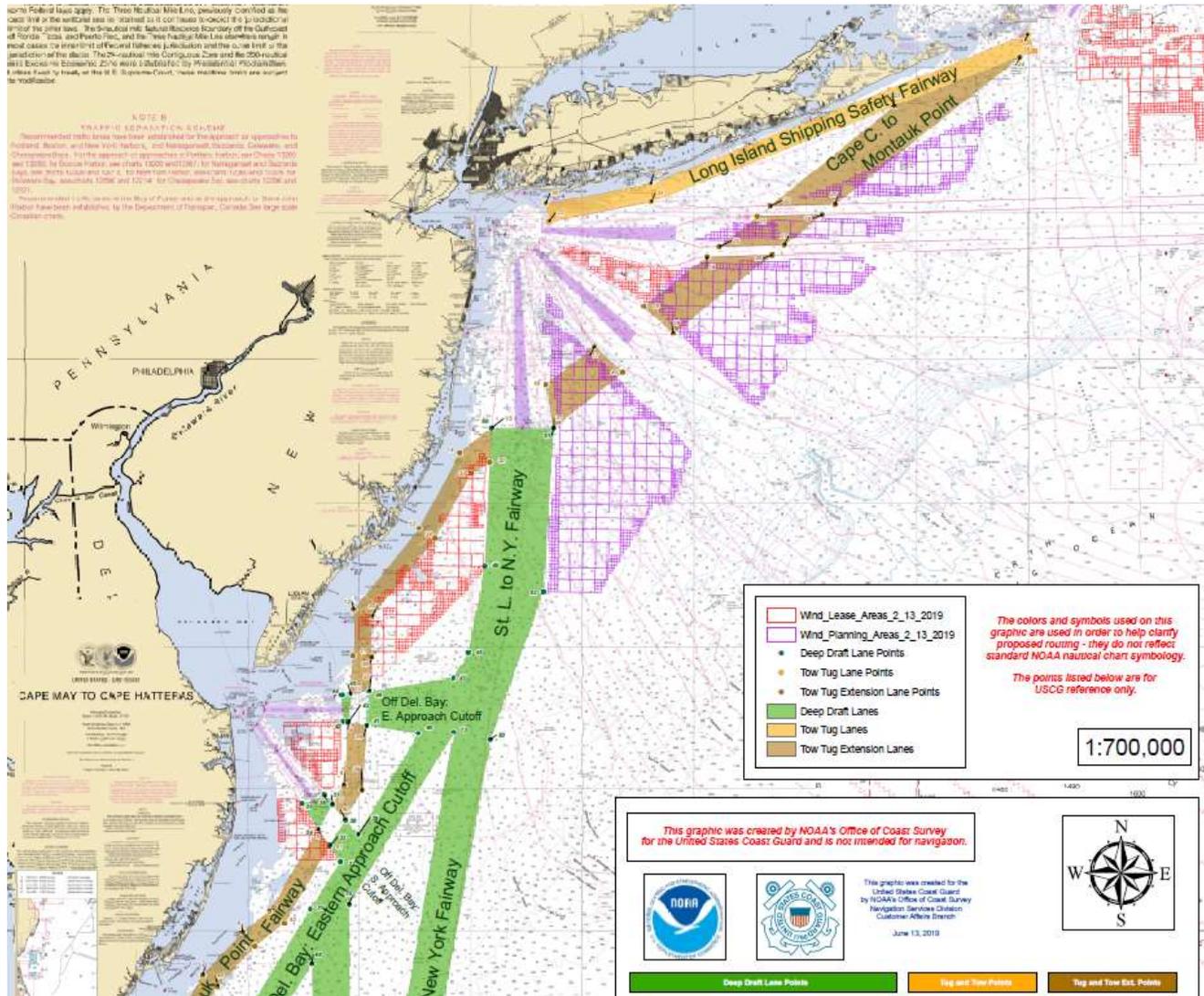
PORT ACCESS ROUTE STUDY (PARS)

- Coast Guard is required (by law) to conduct a PARS before establishing new or adjusting existing Traffic Separation Schemes (TSSs) or fairways.
- Consult / coordinate with Federal, State, and foreign state agencies (as appropriate) and maritime community representatives, environmental groups, and other interested stakeholders.
- Primary purpose of this coordination is, to the extent practicable, to reconcile the need for safe access routes with other reasonable waterway uses.
- PARS (complete or modified) may be used to determine and justify if safety zones, security zones, recommended routes, regulated navigation areas and other routing measures should be created

ATLANTIC COAST PORT ACCESS ROUTE STUDY

- Study conducted study between 2011 – 2017
- Identified navigation safety corridors along the Atlantic Coast
 - Corridors included deep draft routes and coastal tug and barge routes
- Report recommended developing these navigation safety corridors into shipping safety fairways (fairways)
 - Must be created vis the Federal Rulemaking Process
 - 1st Step was to publish an Advance Notice of Proposed Rulemaking (ANPRM) on June 19, 2020,
 - Docket # USCG – 2019 – 0279
 - Solicits comments about the establishment of fairways via a suite of questions in the notice
 - Provides a comment period ending August 18, 2020
 - Identifies the fairways by name and geographical position

ATLANTIC COAST PORT ACCESS ROUTE STUDY

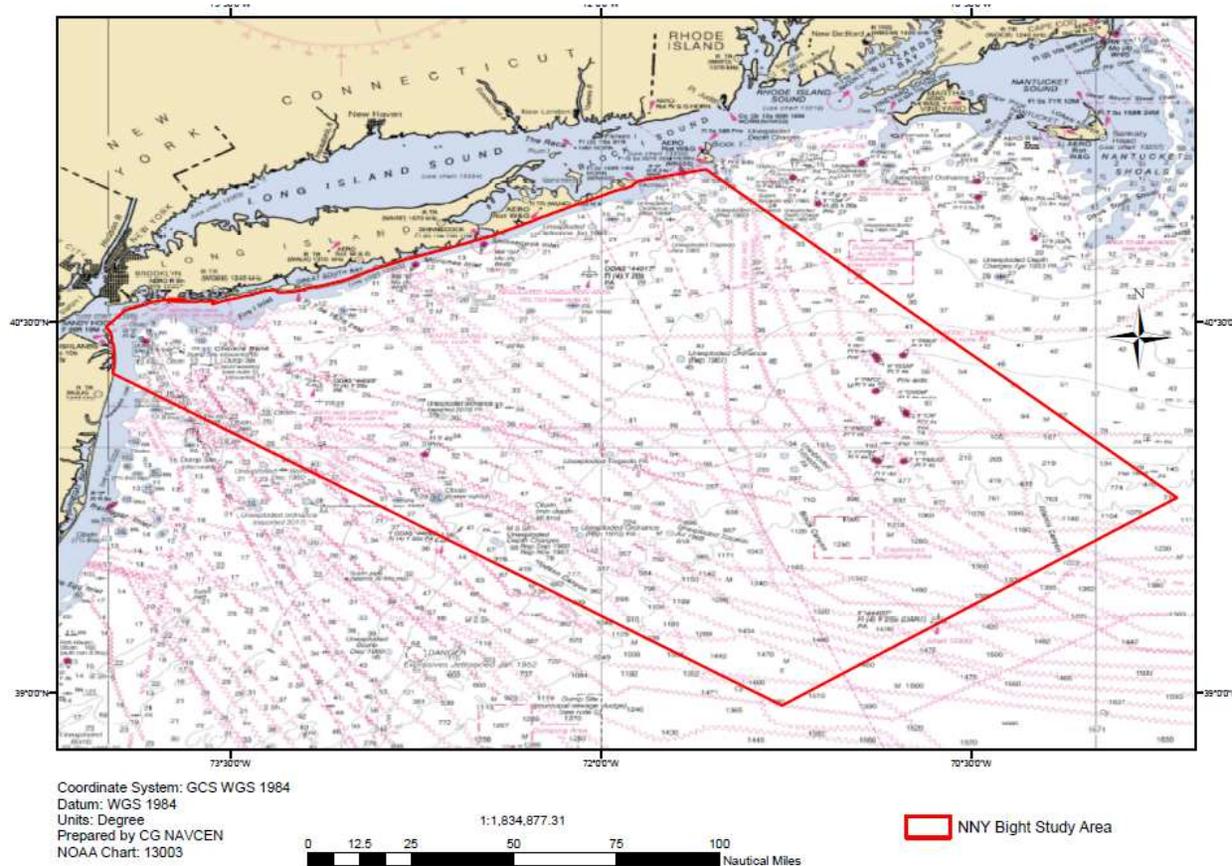


ACPARS SUPPLEMENTAL

- ANPRM also reminded readers that USCG had announced potential studies of port approaches and international entry and departure areas published on March 15, 2019 (84 FR 9541)
- These studies have been announced separately by the respective District conducting the PARS.
 - 1) The Areas Offshore Massachusetts and Rhode Island (Docket # USCG – 2019 – 0131) Announced complete in the Federal Register May 27, 2020
 - 2) Northern New York Bight (Docket # USCG – 2020 – 0278). Comment period closes August 28, 2020
 - 3) Seacoast Of North Carolina including Offshore Approaches to the Cape Fear River and Beaufort Inlet, NC (Docket # USCG – 2020 – 0093) Comment period closed May 18, 2020.
 - 4) Seacoast of New Jersey including Offshore Approaches to the Delaware Bay, DE (Docket # USCG – 2020 – 0172) Comment period closed July 6, 2020.
 - 5) Approaches to the Chesapeake Bay, VA (Docket # USCG – 2019 – 0862) Comment period closed January 27, 2020.



NORTHERN NY BIGHT PORT ACCESS ROUTE STUDY



The Notice of Study was published on June 29, 2020. It is available at Federal Register docket number USCG-2020-0278, on the federal portal at <https://www.regulations.gov/docket?D=USCG-2020-0278>.

The comment period is open until August 28, 2020.

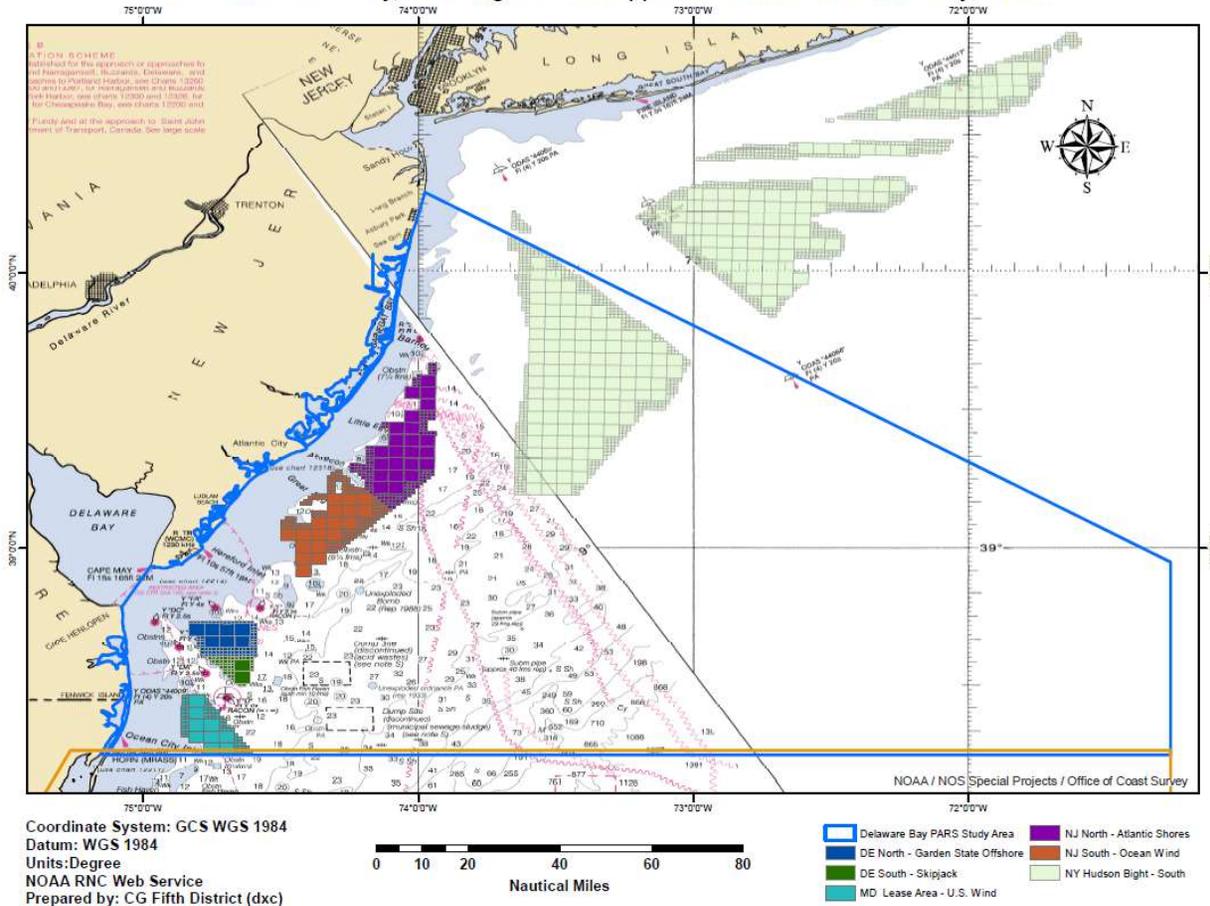
The Coast Guard is hosting two virtual public meetings:

- Thursday, July 30th, 9 a.m. EST
- Tuesday, August 11th, 6 p.m. EST

To submit your comment online, go to <https://www.regulations.gov>, and insert "USCG-2020-0278" in the "search box." Click "Search" and then click "Comment Now."

SEACOAST OF NEW JERSEY PORT ACCESS ROUTE STUDY

Seacoast of New Jersey, Including Offshore Approaches to the Delaware Bay, Delaware



This supplemental PARS will analyze navigation routes to and from the seacoast of NJ, DE, and MD connecting to the ANPRM's proposed shipping safety fairways including international routes to and from the United States.

The notice of study published and comment period opened on May 5 and closed on July 6, 2020.

In the coming months, the Coast Guard will re-open the comment period and hold one or more in-person or virtual public meetings. These meetings will be announced in the Federal Register.

The Coast Guard has partnered with MARCO's Mid-Atlantic Ocean Data Portal team to facilitate public participation, analysis and comment. See "USCG Proposed Areas and Studies" under the Maritime portion of the Data Layers section at <http://portal.midatlanticocean.org/visualize/>

Q&A

Thank you!

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Cabling Project Update

Submarine Cables in New York Bight

What is the timeline to date?

June 12th 2020; F-TWG meeting took place introducing the proposed submarine cabling informational document

- Feedback received from participants during the meeting and afterwards by all parties including RIDEM, Mid-Atlantic Fishery Management Council, NYSDEC, NYSDOS & Atlantic Shores OWF

June 17th; Document Kick-off

July 1st; Update call between NYSERDA & Tetra Tech

- Stakeholder feedback discussed to ensure that all raised points have been or will be captured within the document
- Feedback tracker completed (excerpt to the left)

Page Number	Document Text	Comments	Comment By	NYSERDA Direction	To Response	
Document: NYSERDA Draft CableBurial Summary-TOC 20200617						
44 total comments received.						
16	1	...technology used to rebury a cable that has been exposed by storms, erosion, etc.	Ensuring there is enough slack to rebury the cable in the event of erosion? This has been an issue with the BUIAF and they have to spike in a new section of cable as a result.	Jake Livemore (RIDEM)	this will be covered. HDD vs. open cut methods	
17	2	2.5 Cable Armoring Options	Propose to mention at the meeting last week, but monitoring of the cable mattresses on the BFTS did not show calculation of the mattresses after a year. No idea why this occurred (maybe chemical in the concrete) but it would be helpful to include discussion of monitoring surrounding habitats if possible.	Jake Livemore (RIDEM)	worth addressing, but not subcritical detail.	look into EPA preferences for local/native materials for mattressing. Distinguish between cable armoring vs. cable protection.
18	2	3.3 Fishing (Commercial and Recreational)	I know the active vessel firms will prevent the NOAA trawl survey and larval surveys from accessing certain areas. Is there any possibility of the cable routes further limiting trawl survey areas if they create new traps? Obviously, this would affect any mobile gears that contact the bottom too.	Jake Livemore (RIDEM)	don't focus on the NOAA trawl survey, specifically.	will be addressed in the context of this section (but not specific to the NOAA survey). Include discussion about "recoverable" haul depth.
19	1	...strate engineering and survey best practices...	Change to route engineering, risk assessments, and survey best practices. Recommend providing an overview of cable burial risk assessment (CRA) process, include this in communications, and if industry is willing to make publicly available.	NYSOS	include in general terms, but not determine if public/proprietary, here in this doc.	methods are public, detail may be proprietary.
20	1	...functional description of typical cable sizes and characteristics for cables used as offshore wind export cables and inter-array cables...	Suggest including information on cable spacing requirements, particularly since many of the 800-MW wind farms require 2 cables to share.	NYSOS	address in general terms.	will include discussion about spacing limitations (heating, induced currents, maintenance accessibility, etc.); refer to BEMP guidance doc.
21	1	...description of how export and inter-array cables will likely be installed from base/offshore substation to beach...	Suggest reorganizing this to discuss cable laying separate from RCD that typically occurs at the landfall (beach-to-shore transition). For example, description of typical site readiness tasks, surveys, and installation sequence for export and inter-array cables, description of typical equipment and the installation sequence for the beach-to-shore transition (including RCD at beach).	NYSOS	see response for comment #16	see response for comment #16

Document Update

Table of Contents;
Complete

Introduction and US Wind
market summary;
Complete

Sn 3, 4 & 5 – In progress.

CBRA, regulatory requirements
etc complete.

Cable manufacturers contacted
& have provided cable
datasheets.

Cable installation & burial
overview in progress.

Risk to & from cables and
mitigation measures in progress.

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Highlighted Areas

What Cable Types are likely to be encountered?

- Export Cables: 3-Core HVAC ~ 220kV
- Array Cables: 3-Core HVAC ~ 66kV

Export Cables

~ 12" Outside Diameter
~100kg/m or 70lbs/foot
Between 2 and 4 per project
Spaced parallel along cable corridor, approx. 1.5 – 2x water depth apart
Burial depth determined by CBRA as well as regulatory requirements



Array Cables

~ 4 - 6" Outside Diameter
~22 - 50kg/m or 16 – 35 lbs/foot
Connect wind turbines together
& connect turbine strings to the offshore substation
Conductor diameter & therefore cable size determined by position in the string
Burial depth determined by CBRA as well as regulatory requirements

Highlighted Areas

How are cables buried?

Simultaneous Lay & Burial



Towed Plough
~3m/10' burial depth
15m long, 6.5m wide
Weighs approx. 50T



Tracked Trencher
~3m/10' burial depth
Has a chain cutter & water
jetting

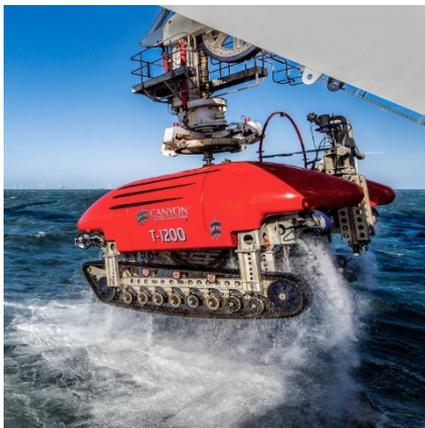


Towed jetting sled
~3m/10' burial depth
For shallower water & softer
soils

Highlighted Areas

How are cables buried?

Post Lay Burial



Jetting ROV
Up to approx. 1400hp
Up to 3m burial in sandy
conditions



Tracked Trencher
~3m/10' burial depth
Has a chain cutter for hard
ground & water jetting



Free-flying jetting ROV
Used if the soil is too soft for
tracks

Highlighted Areas

How are cables buried?

Other Protection Methods

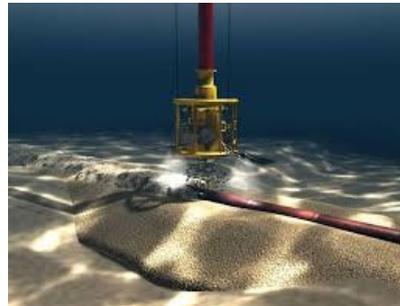
Pre-cut trench



Dredging



Rock dumping



Controlled flow excavators

Highlighted Areas

How are cables buried?

Other Protection Methods,
continued

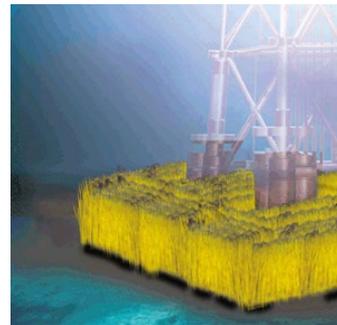
Concrete Mattresses



Grout/Rock Bags



FronD Mattresses



Other Items, Issues, and Other NYSERDA Workstreams

Next Steps and Adjourn – Next meeting dates?