



equinor

Equinor
MA – FWG Update
February 9, 2024

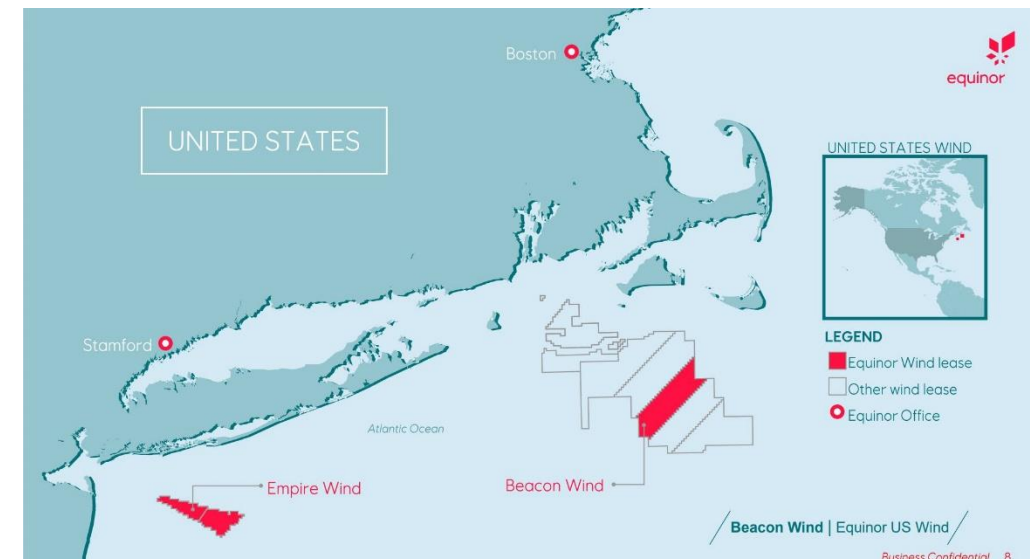
In the News.....

Empire Wind 2 and Beacon Wind 1 Offshore Wind Renewable Energy Certificate (OREC)

- Equinor has entered into an agreement with the New York State Energy Research Development Authority (NYSERDA) to terminate the OREC Purchase and Sale Agreement for EW2 and BW1
- EW2 is still an active project and planning continues

The Equinor/bp Joint Venture Swap Transaction

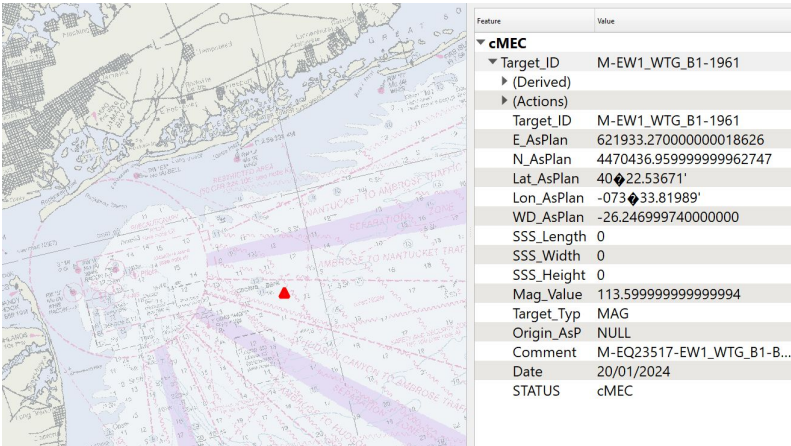
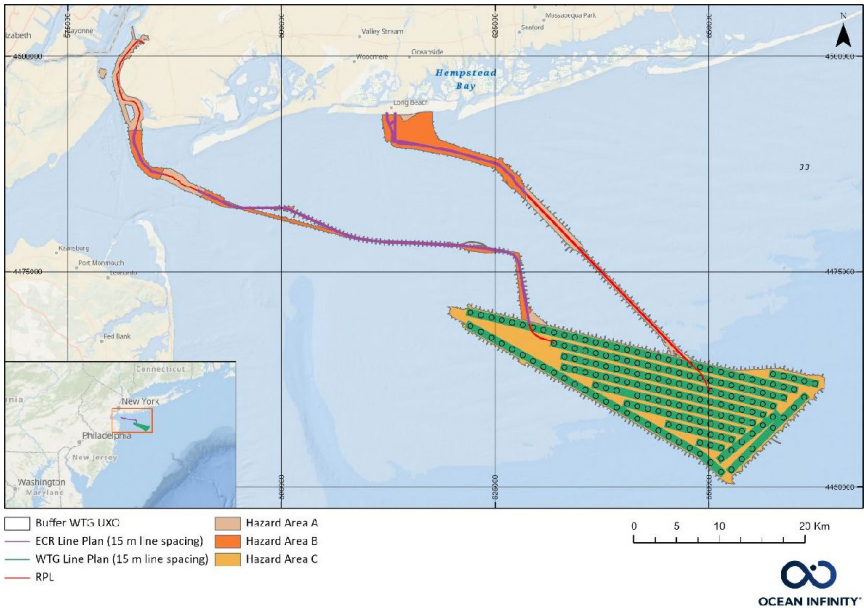
- January 2024 Equinor will take over Empire Wind and the SBMT lease 100%
- bp will acquire the Beacon Wind lease 100%
- January 2024 bp obligation to move forward Beacon Wind commitments that were announced last year
- Beacon Wind's fisheries stakeholders and contacts will be shared with bp
- Equinor and bp Beacon Wind transition to be completed by April 2024



Empire Wind Munitions and explosive of concern (MEC) Survey Update



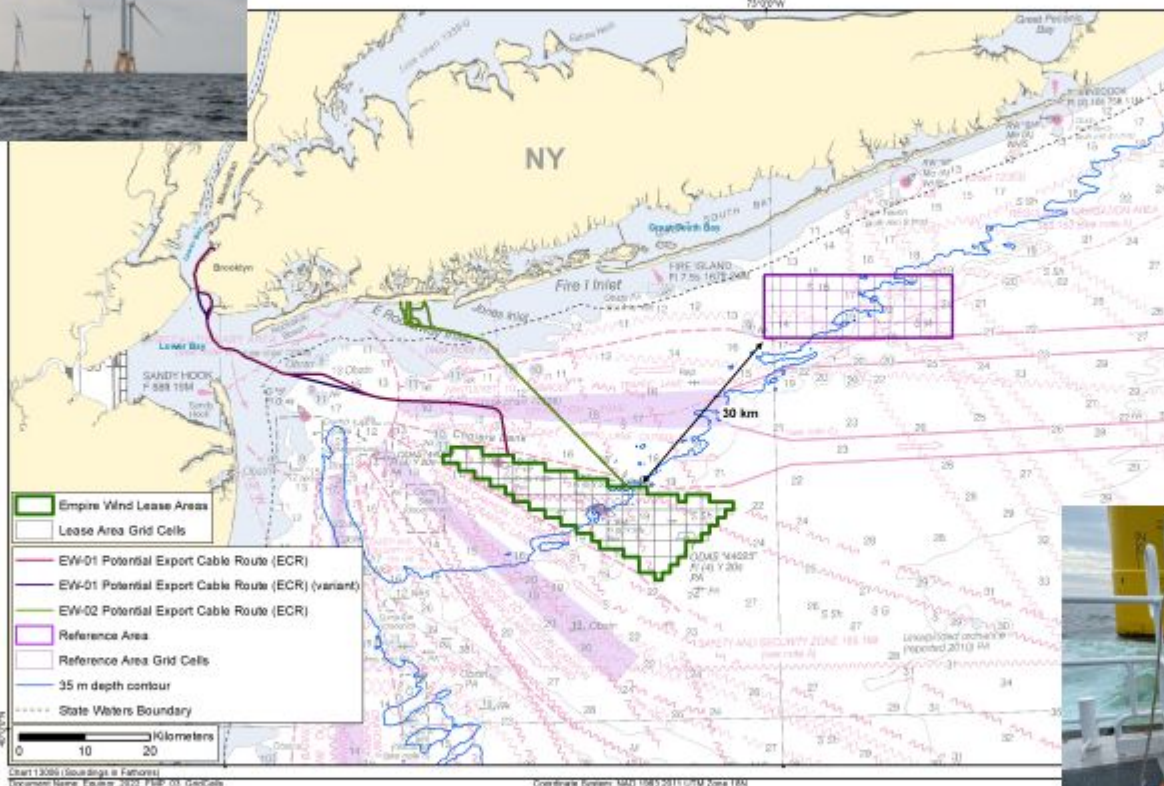
- The main objective of the Unexploded Ordnance (UXO) Survey involves a high-resolution gradiometer geophysical survey to locate and map any potential UXO targets (bombs, explosives, mines) in the Empire Wind lease and ECR area prior to any installation scope. Data is processed and any potential UXO's are then investigated with ROV and information is used to create ALARP certificates to show minimal risk is achieved.
- January 2024 – MV Deep Helder discovered and confirmed a munitions and explosive of concern : **Latitude: 40°22.2611282' N**
Longitude: 73°33.8253176' W
- First MEC confirmed MEC for Empire Wind and is part of an ongoing ROV investigation campaign of potential MEC as identified by prior geophysical survey.
- The ROV effort is an information gathering exercise only and the MEC will not be relocated during this campaign.
- The metallic object is cylindrical with parallel sides one visible flat end and a rounded nose. The item has been stripped of all marking from prolonged exposure to underwater sea conditions with marine build-up along the length of the object. Based on visual observation, the MEC is believed to be: **Size: 1.3m long.**
Dimensions: Length 1.3m
Width 0.3m, height 0.3m.
- Empire Wind has notified all the required authorities including a Local Notice to Mariners (LNM) application to the US Coast Guard. There are currently no plans to remove or relocate (“lift-and-shift”) the MEC. Empire Wind will inform mariners and the fishing community of any considerations for any further action.



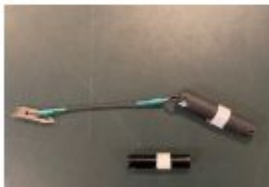


Empire Wind Fisheries Monitoring Surveys

- Assess change in relative biomass, size structure of squid and community composition
- Bottom otter trawl
- 20-minute tows
- BACI design using reference area
- 4 survey events per year, 2x each in July and August, 16 tows in each area each total
- Each area stratified by depth: "shallow" < 35m, "deep" > 35m
- Paired with eDNA sampling
- Beginning Summer 2024



Acoustic Telemetry

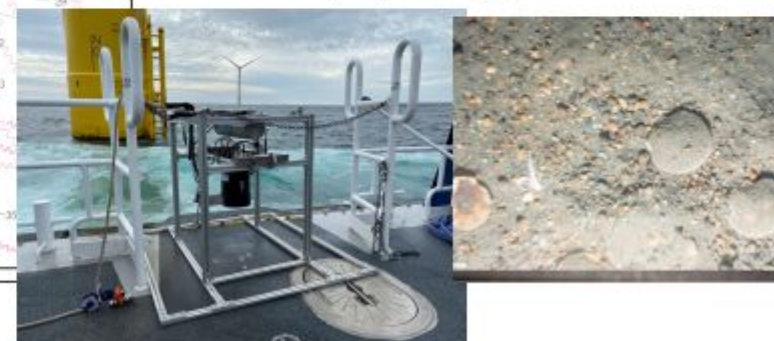


- Monitor species presence, persistence, and movements
- 48 Receivers (23 in lease area, 9 export cable fed waters, 16 state waters)
- Even Distribution to maximize coverage within the Lease Area and along export cable routes
- Building upon work of Stony Brook/Monmouth from 2017-2018
- 325 tags per year: Atl. Sturgeon, black sea bass, striped bass, winter fl., summer fl.
- Year-Round, receivers downloaded 2x per year
- Beginning June 2023



- BRUV utilizing stereo video
- Assess change in abundance of individual species or assemblage composition in respect to distance from turbine foundation
- BAG survey design
- 4 BRUV's at distance intervals from planned turbine location
- 8 locations sampled seasonally (4x per year)
- 60-minute deployment
- Paired with eDNA sampling
- Beginning June 2023

Sea Scallop Drop Down Imaging



- BACI design using reference area
- Plan view camera uses a trigger wire, collects image prior to hitting the seafloor
- 60 stations at each area (lease, reference)
- Beginning June 2023

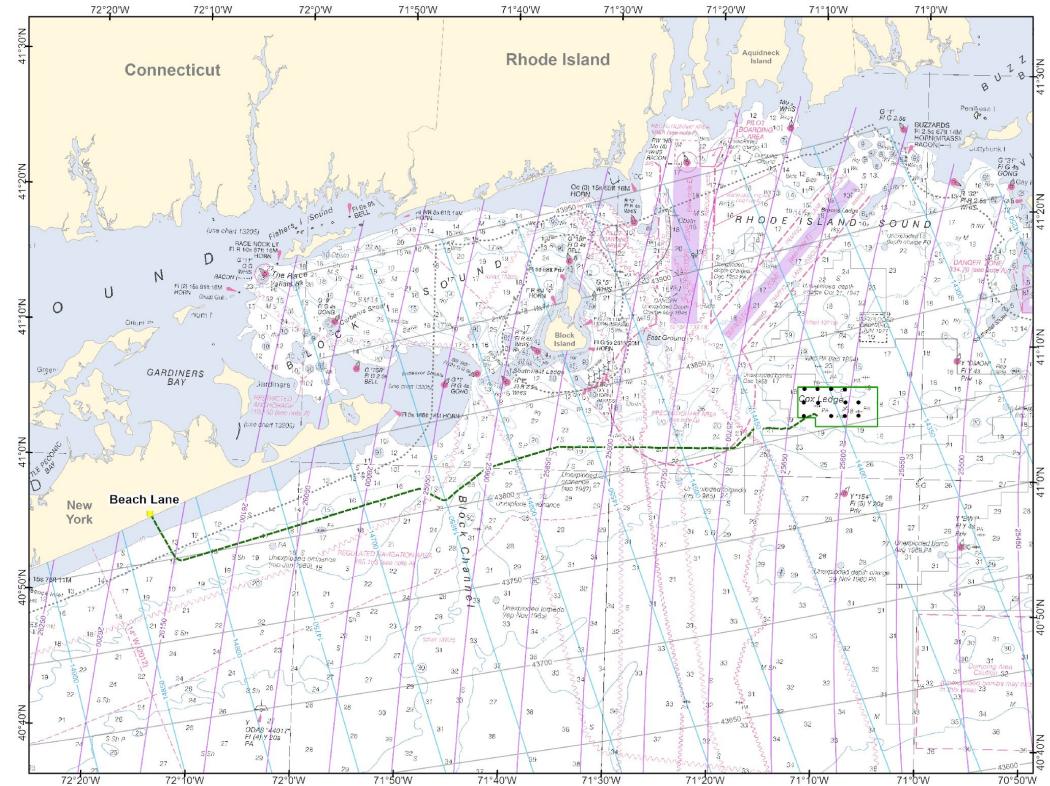


South Fork Wind

Compensation program update for MA FWG
2-9-2024

Overview

- South Fork Wind is relatively small, 132 MW project consisting of 12 turbines and one substation off the coast Rhode Island and Massachusetts
- Point of interconnect is East Hampton, NY
- Construction started in mid-2023 and first power was delivered on 11-29-2023
- 10 turbines plus the substation are currently installed
- Remaining two turbines are scheduled to be installed by the end of February



Fisheries Mitigation Overview

- Driven primarily through the state permitting processes
 - Coastal Zone Consistency- MA and RI
 - Article VII- NY
- Processes for SFW started in 2020
 - One of the first projects/leading edge
 - State-specific but not exclusive and simultaneous
 - Valuable stakeholder feedback: formal and informal
- In Massachusetts, fisheries compensation plan was developed through the Commonwealth's coastal zone management (CZM) process
 - Overseen by MA EEA
 - Input from MA DMF
 - Facilitated input from charter/for-hire specific input
 - Inclusion of the MA FWG
 - Establishment of baselines vis Woods Hole Oceanographic Institute economic impact study
- General themes around mitigation
 - Fair, flexible, transparent, independently managed, replicable
- Agreement with the Commonwealth finalized in July of 2021
- Very similar program in Rhode Island and serving as a basis for 11-state initiative



Massachusetts Fisheries Compensation Plan

- Based on input and feedback received, there are three components:
- A Coastal Community Fund (CCF)
 - \$200,000
 - A grant program guided by an advisory council appointed by Commissioner of Fish and Game with input from CZM
 - For any approved purpose except litigation, regulatory work, or petitioning activities
- A Navigation Enhancement and Training Program
 - \$300,000
 - Open to vessels eligible to receive direct compensation
 - Commercial vessels receive \$10k for upgrades plus \$2k for training
 - For-hire/charter vessels receive \$5k for upgrades plus \$2k for training
 - Unspent funds revert to CCF
- A Direct Compensation Fund
 - \$2.1 million for Construction/Operations/Decommissioning
 - 3rd-party managed by Technical Assistance Provider (TAP)
 - Covers Massachusetts commercial fishing and for-hire/charter fishing
 - Eligibility determined by fishing history in project footprint
 - Must demonstrate loss to receive compensation
 - Claim amounts are based on actual impact to maintain fairness
 - Assessed every 5 years. Excess may be diverted to CCF
 - Unspent funds at the end of the project revert to CCF

Breakdown of Funding

Direct Compensation Program \$2.6 M

\$2.3 M
Held in escrow

\$300 K
Managed by SFW

Direct Compensation Fund
\$2.1 M

Coastal Community Fund
\$200 K

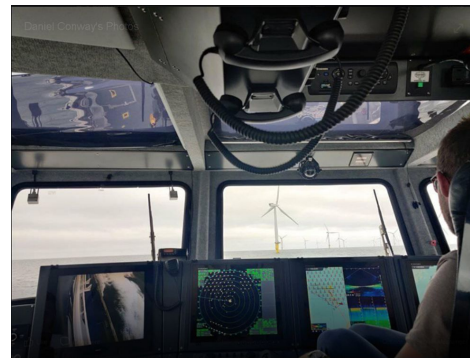
Navigational Enhancement and
Training
\$300K

Management of Funds

SFW Massachusetts Direct Compensation Program \$2.6 M			
\$2.3 M Held in escrow			\$300 K Rolling basis
	Coastal Community Fund \$200 K	Direct Compensation Fund \$2.1 M	Navigational Enhancement and Training \$300K
Overseen by	Advisory Council	TAP	SFW
Eligibility	Advisory Council	TAP	TAP
Claim Approval/Processing	Advisory Council	TAP	SFW
Funds Issued	Escrow Agent	Escrow Agent	SFW

Navigation Enhancement and Training Program (NETP)

- Voucher program administered by South Fork Wind but based on eligibility determined by TAP
- Only way to qualify for NETP, is to apply for and receive an eligibility determination for direct compensation fund
- Once eligibility is determined, TAP will share contact information with NETP program manager
- NETP program manager will reach out to eligible party and go over desired upgrades and/or training
- Eligible parties will be able to choose from a list of approved vendors and products
- Current equipment vendors are:
 - Chris Electronics Corporation
 - Point Judith Electronic Service Corporation
 - RC Marine Electric
 - Seaport Communications
- Current training facilities are
 - Narragansett Bay Maritime Training
 - Northeast Maritime Institute
 - US Maritime Resource Center
- More information at <https://us.orsted.com/mariners>



Vineyard Wind Innovation Fund Update

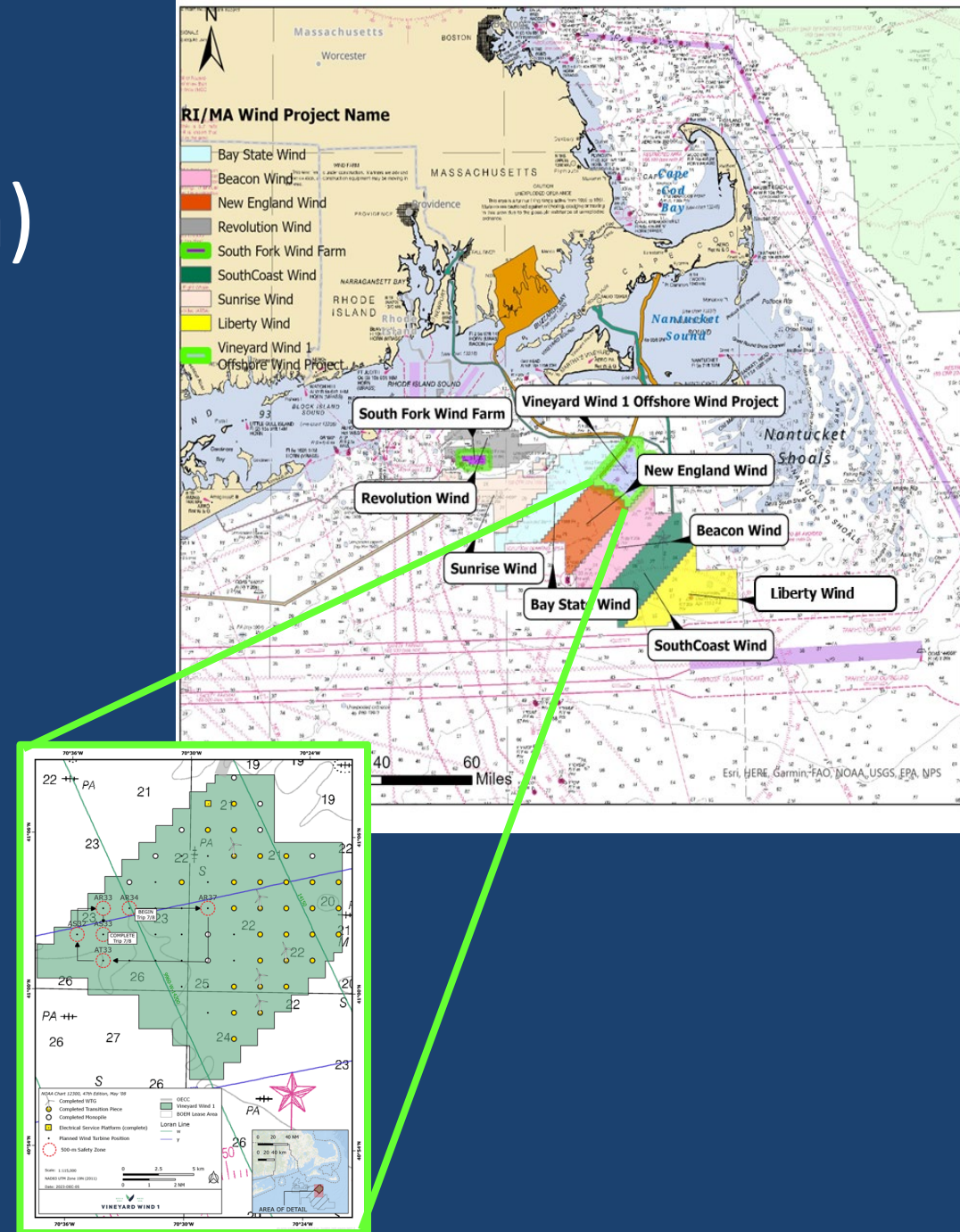
MA Fisheries Working Group Meeting
February 2024

Justin.j.bopp@mass.gov

Vineyard Wind Fisheries Innovation Fund (\$1.75 Million)

Overview:

- Purpose: To support programs and projects that ensure safe and profitable fishing continue as Vineyard Wind and future offshore wind projects are developed in Northern Atlantic waters.
- Administration: DMF chairs the Offshore Wind Fisheries Research, Innovation, and Science advisory panel to review and approve Fund expenditures.



Offshore Wind Fisheries Research, Innovation, and Science Advisory Panel

Advisory Panel Members:

- Michael J. Pierdinock, Marine Fisheries Advisory Commission
- Shelley Edmundson, Marine Fisheries Advisory Commission
- John Regan, New Bedford Port Authority
- Beth Casoni, MA Lobstermen's Association
- Seth Rolbein, Cape Cod Commercial Fishermen's Alliance
- John Whiteside, Seafood Processor Representative
- Geri Edens, Vineyard Wind, LLC
- Drew Minkiewicz, Fishery Survival Fund
- Ed Barrett, MA Fishermen's Partnership
- Eric Hansen, Hansen Scalloping, Inc.

Vineyard Wind Fisheries Innovation Fund

Provide support to programs and projects through grants:

- To conduct studies on the impacts of offshore wind development on fishery resources and the recreational and commercial fishing industries.
- For technology and innovation upgrades for fishery participants (and vessels) actively fishing within a wind energy area.

Vineyard Wind Fisheries Innovation Fund

These programs and projects may include, but are not limited to:

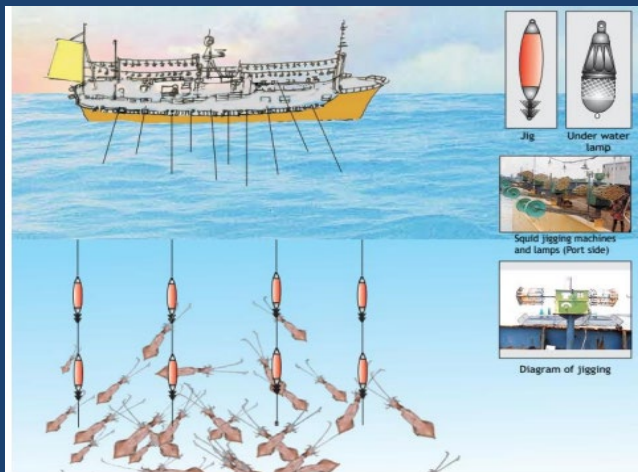
- Studies on the impacts of offshore wind development on fishery resources and the recreational and commercial fishing industries
- Improvements in fishing vessels and gear
- Development of new technology to improve navigation in and around the wind farm area
- The development of alternative gear and fishing methods
- Optimization of vessel systems, technology and innovation upgrades for fishery participants (and vessels) actively fishing within a wind energy area
- General fishing vessel safety improvements; and
- Marketing and promotion of locally landed seafood.

Current innovation fund ideas heard from the fishing community

SlinkyPots™

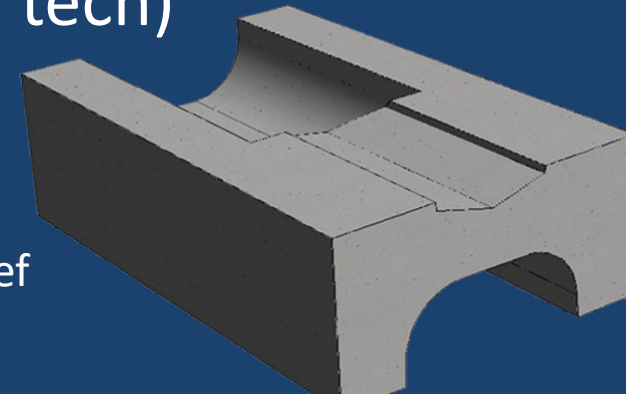


Automated Squid Jigging



- Sea survival training and USGC 100 GT captain's license training
- PFDs with AIS and PLBs
- Upgrades to safety rafts and gummy suits
- Upgrades for all-in-one VTR logbooks
- Home'ster lobster artificial habitat testing
- Testing alternative gears
- High-quality processing techniques to increase seafood value
- Other training programs (radar and tech)
- Pulse-compression radar testing

Home'ster™ lobster reef



Next Steps

- Plan to meet with science and Offshore Wind Fisheries Research, Innovation, and Science advisory panel to prioritize where and how monies should be spent
- Phased spending
 - Expend funds that avoid redundancy with what developers are offering (e.g. navigation upgrades).

Questions?