



# VINEYARD WIND

**Mid-Atlantic Fishery Management Council  
Meeting  
June 9, 2021**

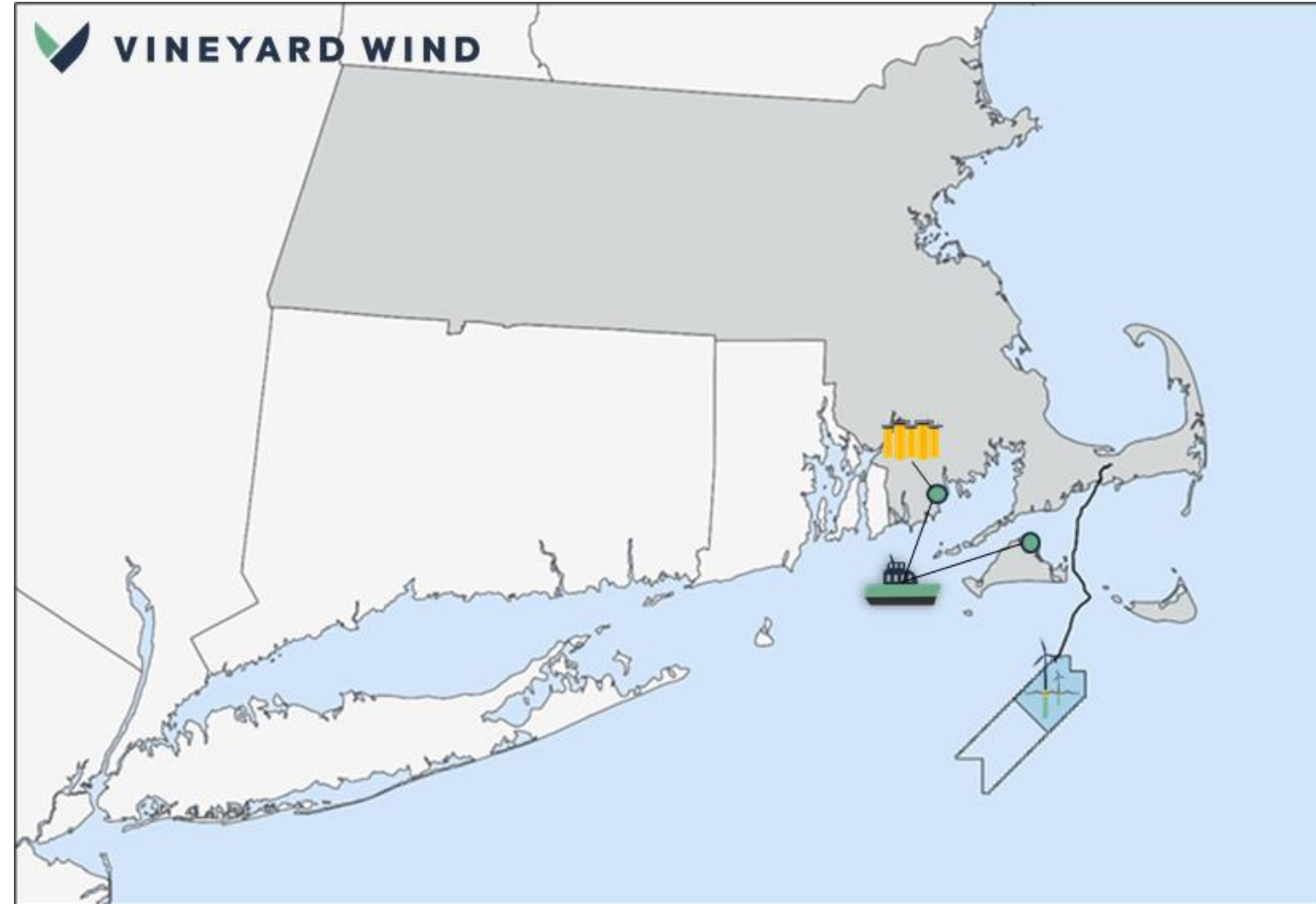
# Agenda

1. Vineyard Wind 1 Project Details
2. Compensatory Mitigation for Vineyard Wind 1
3. Fisheries Science
4. Cable Monitoring Plans
5. Vessel Opportunities
6. Fisheries Outreach
7. Future Development - Vineyard Wind South

# Vineyard Wind 1

## Overview

- **Capacity:** 800 MW
- **BOEM Permitting: Completed**
  - Construction & Operations Plan: December 2017
  - Draft Environmental Impact Statement: December 2018
  - Supplemental Environmental Impact Statement: June 2020
  - Final Environmental Impact Statement: March 12, 2021
  - Record of Decision: May 10, 2021
- **State Permitting: Completed**
- **Point of Interconnection:** Barnstable Substation
- **Power Purchase Agreements:** 20-year PPAs with Massachusetts utilities (approved)

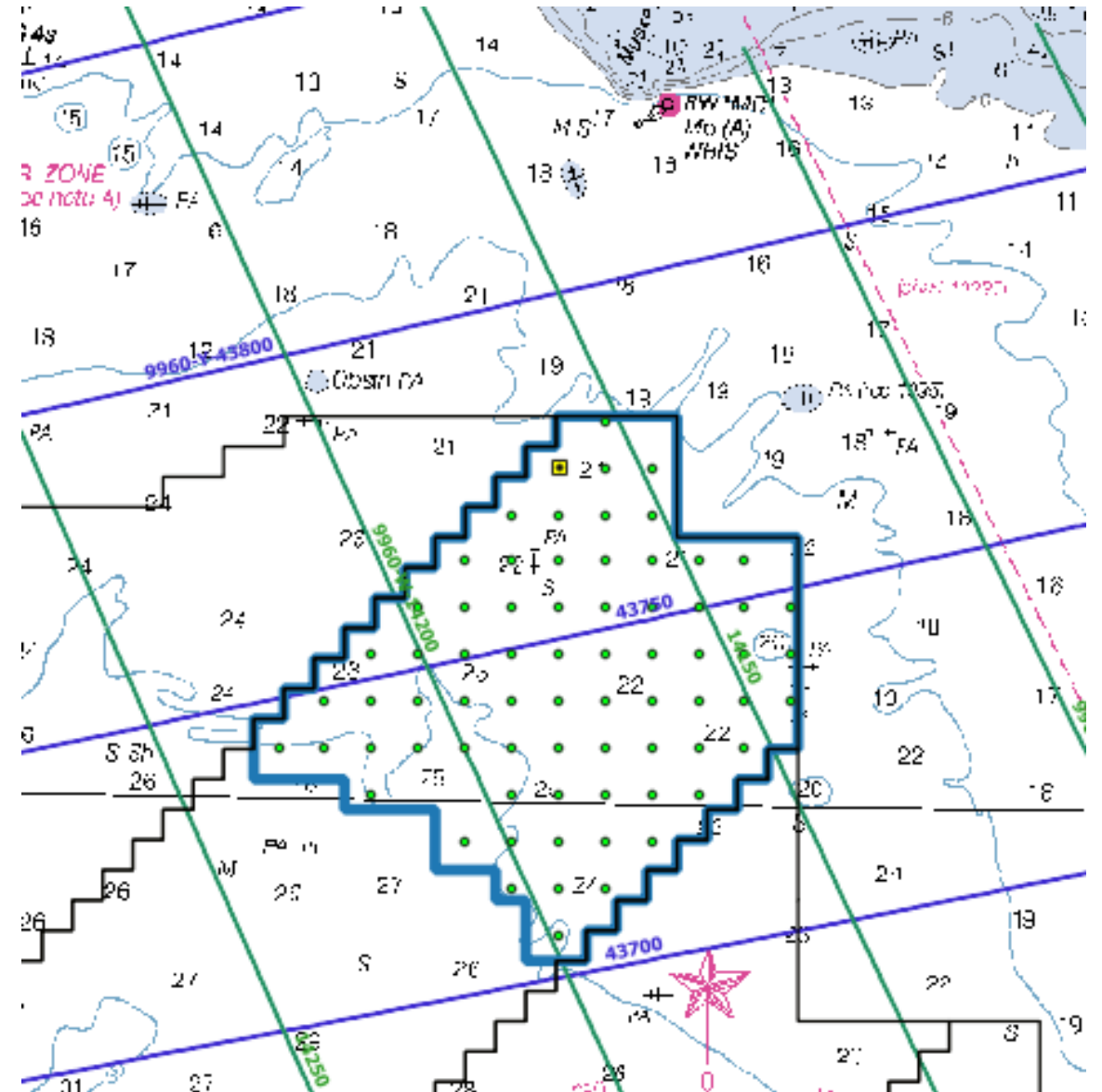


Vineyard Wind 1 construction and staging based in New Bedford with operations and maintenance based on Martha's Vineyard

# Vineyard Wind 1

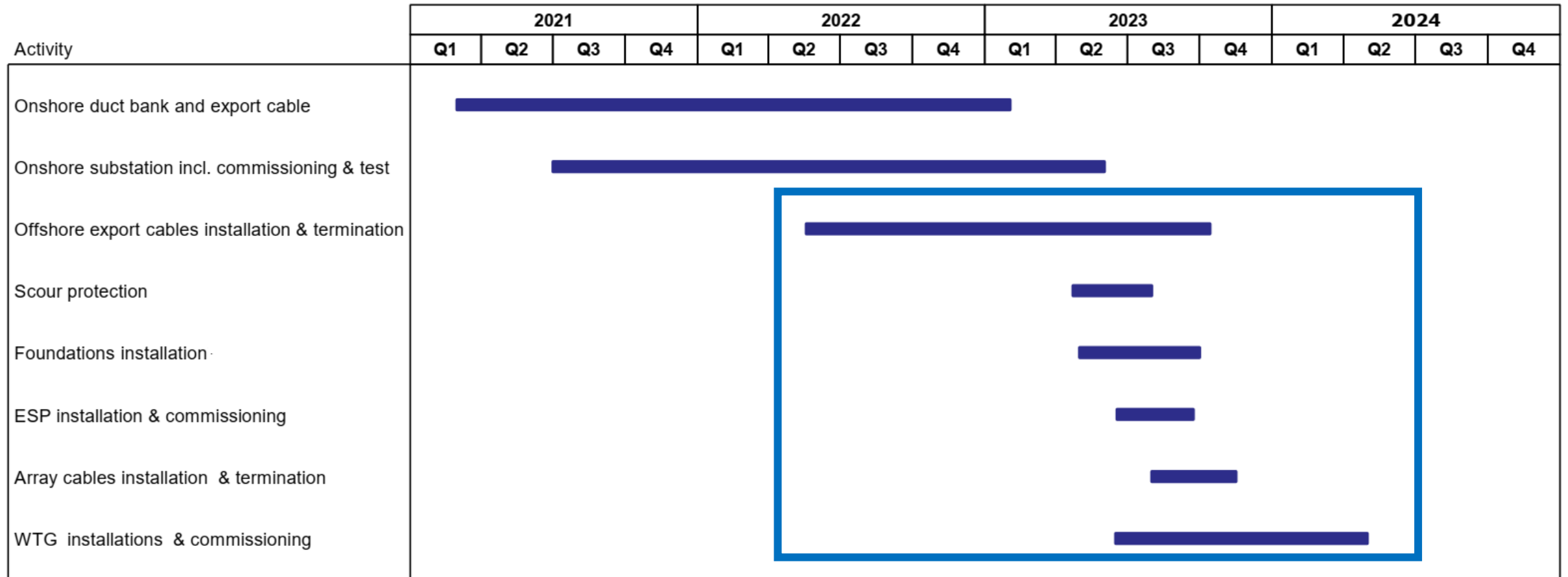
## Vineyard Wind 1 Layout

- 1 x 1 nautical mile spacing
- 13 MW GE Haliade-X turbine
- 62 turbines
- Reduced footprint
- Turbine locations on northern corners eliminated



# Vineyard Wind 1

## High-level Construction Schedule



# Compensatory Mitigation for Vineyard Wind 1

## Methodology for compensatory mitigation – MA approach

- Obtain best available up to date data on fishing activity within the project area and offshore export cable corridor
  - Livermore, 2017 : 2011 – 2016
  - NOAA 2021 : 2008 – 2019
  - Adjust for Lobster and Jonah Crab revenue
- Estimate **economic exposure** by state from the project area
  - **Economic exposure** = the value of fish landed from project
- Estimate **direct economic impact** by state from the project area taking into consideration costs associated with fishing (fuel, ice, crew)
- Estimate **indirect economic impacts to shoreside businesses**
  - **Upstream** = fishing inputs, e.g., fuel, ice, equipment, supplies
  - **Downstream** = processing and distribution after landing

# Compensatory Mitigation for Vineyard Wind 1

Estimated Annual Landings from Vineyard Wind 1 Project Area by State

## Compensatory Mitigation

- Compensatory mitigation for Rhode Island and Massachusetts was established through the Coastal Zone Management Act federal consistency review process
- NY/ NJ/ CT combined compensatory mitigation fund uses the same methodology employed for Massachusetts

State	Percent of Landings
Massachusetts	53.9%
Rhode Island	37.2%
New York	4.3%
Connecticut	3.2%
New Jersey	1.3%
Total Landings	100.0%

# Compensatory Mitigation for Vineyard Wind 1

## Mitigation Fund Summary

- **Massachusetts**
  - \$19 million in direct compensation fund
  - \$1.75 million for Fisheries Innovation Fund
- **Rhode Island**
  - \$ 4.2 million in direct compensation fund
  - \$12.5 million in Fishermen's Future Viability Trust
- **CT/ NY/ NJ**
  - \$3.3 million in direct compensation fund



## Survey Objectives

- Monitor the impact of offshore wind projects on fisheries
- Establish baseline pre-construction
- Document impacts post-construction

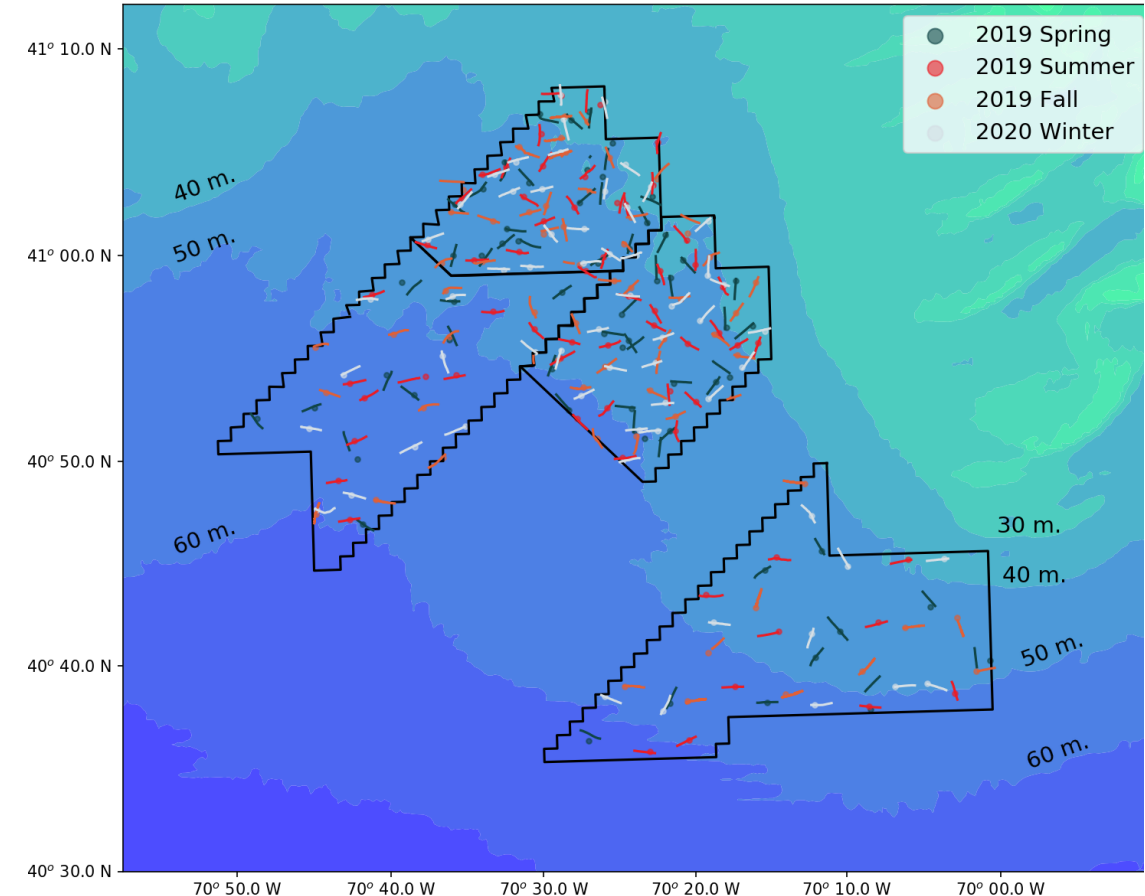
## Survey Design

- Before and After Control Impact (i.e., BACI) Design
- **Trawl Survey:** 4x year – 501 and 522
  - Finfish species
  - Follows NEAMAP protocols
- **Drop Camera Survey:** 2x year – 501 and 522
  - Macro invertebrates
  - Follows scallop survey protocols
- **Ventless Trap Survey:** May/June – October - 501N
  - Lobster, Jonah Crab, Black Sea Bass
  - Follows Atlantic State Marine Fisheries Commission and MA/RI state survey protocols
- **Plankton Survey:** May/June – October
  - Done in conjunction with Ventless trap survey
  - Neuston net – lobster larvae and ichthyoplankton

## Local Fishing Vessel Participation

- 9 fishing vessels have participated over the past 2 years

Tow Locations and Tow Tracks



## Highly Migratory Species

### Study Objective

- Collect baseline data on the timing, nature, and extent of recreational fishing effort in Southern New England

### Study Design

- Mine and analyze both direct (Large Pelagics Survey) and indirect (conventional tagging) data on recreational fishing effort for HMS over recent decades
- Survey of recreational fishermen from private and charter boat sectors to characterize their fishing effort for HMS over past 5 years

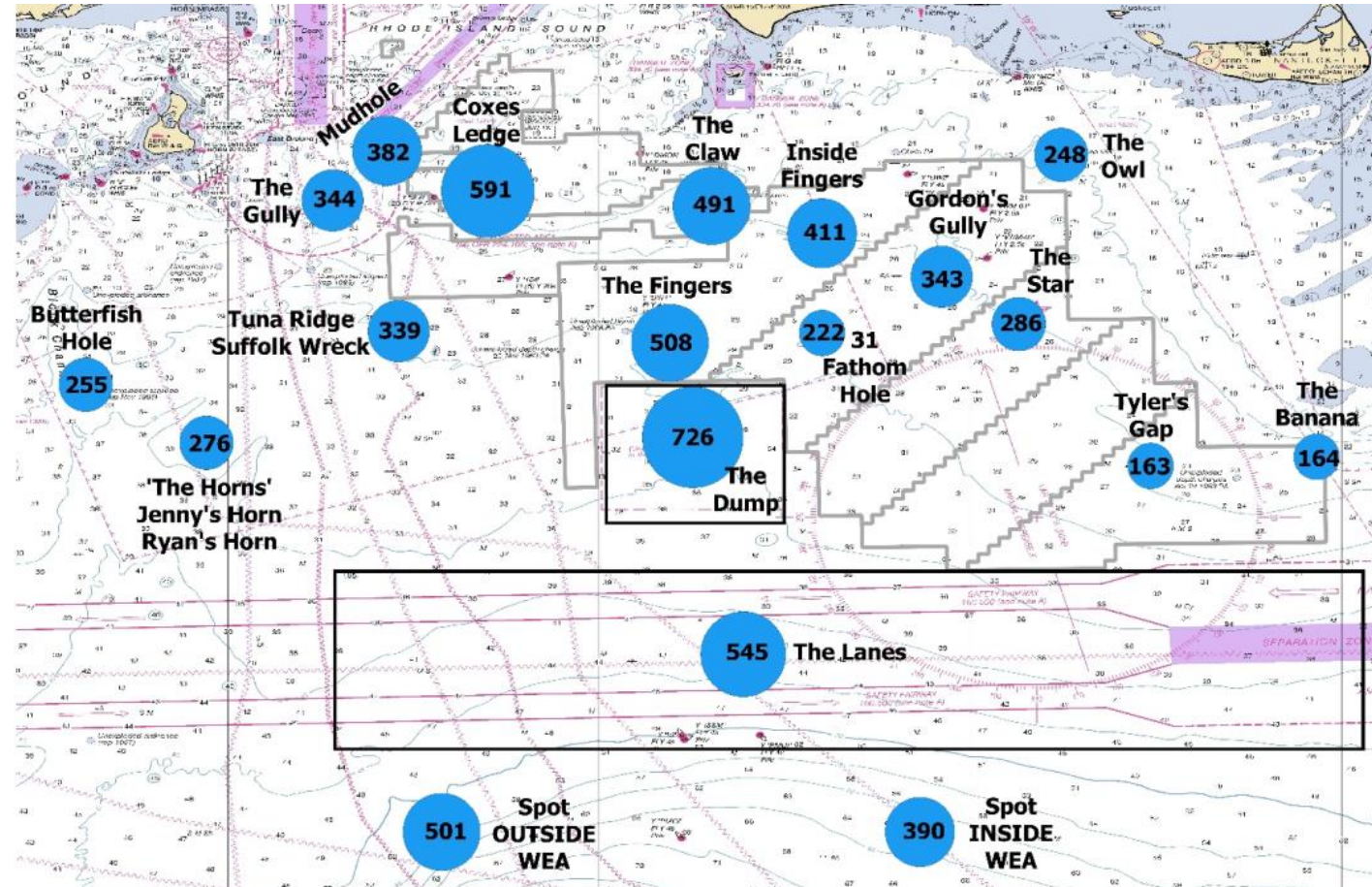


Figure 7 – The cumulative number of days (number inside each circle) the 170 survey respondents holding federal angling or charter/headboat highly migratory species (HMS) permits testified to fishing in each named area in a typical year. The Wind Energy Area (WEA) is outlined in gray. Note that circles for “spot INSIDE WEA” and “spot OUTSIDE WEA” are placed in random locations on the map and represent those broad categories of the survey.

# Fisheries Science

## Fisheries Surveys Completed – 2019 / 2020

Data available: <https://www.vineyardwind.com/fisheries-science>

- Two years of pre-construction surveys
- Highly Migratory Species study completed

## Fisheries Survey Plan Review

### Public Virtual Meeting – June 3, 2021

Presentation and recording available:

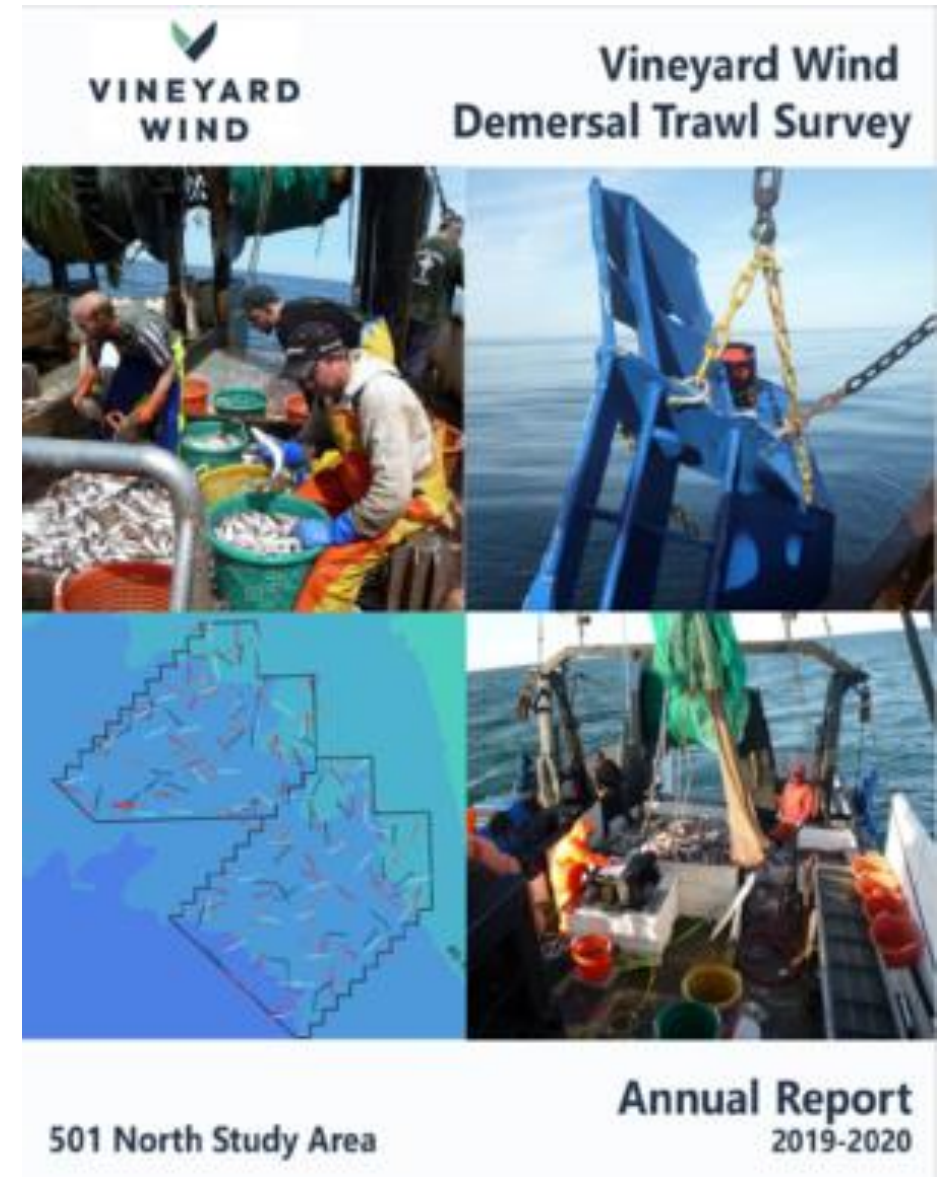
[SMAST Virtual Meeting for Fishermen: Review of Fisheries Surveys — Vineyard Wind](#)

- 2 fishermen reviewers for each survey (8 total)
  - Fishermen who fish in the lease area
  - Participated in planning workshops (2018)
- 3 academic reviewers
  - Experts in fisheries science
  - Stock assessment, benthic habitat, trawl survey design

## Fisheries Survey Plan Going Forward

An additional (3<sup>rd</sup> year) pre-construction, 1 year during construction, and three years post construction.

HMS tagging/acoustic array design discussions ongoing



# Cable Monitoring Plans

## Benthic Habitat Monitoring Plan (pre and post)

- A study of benthic habitats in and around seafloor areas that may be impacted by construction activities within the northern portion of Lease Area OCS-A 0501 and the offshore export cable corridor.

## Cape Poge Eel Grass Survey (pre and post)

- A monitoring study of eelgrass beds around Cape Poge off Martha's Vineyard

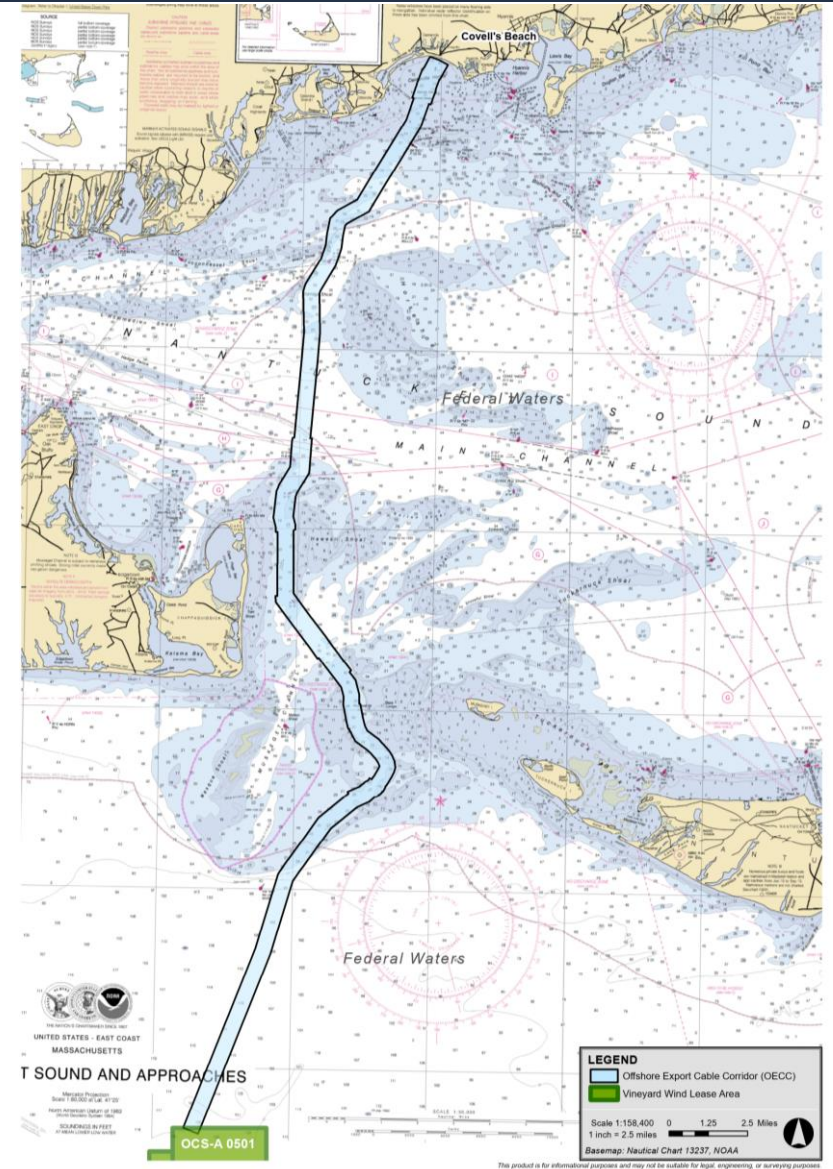
## Cable burial (post)

- Geophysical surveys - compare bathymetry data sets to look for changes in the seafloor
- Cable temperature is monitored constantly – changes in temp may indicate changes in burial

## EMF (post)

- Measure EMF from cable at full capacity to ground truth model outputs

Potential opportunities for local fishing vessel(s) to participate in surveys



Vineyard Wind Project

VINEYARD WIND

This product is for informational purposes and may not be suitable for legal, engineering, or surveying purposes.

Figure 1  
Vineyard Wind Offshore Export Cable Corridor (OEEC)



VINEYARD WIND

# Geological Surveys and Fishermen Opportunities

## Onboard Fishery Liaisons

- Fishermen onboard geophysical and geotechnical survey vessels to help communicate with fishing vessels in area
- Help survey vessel locate and navigate around gear
- Documentation of gear/vessels in area
- Survey season 2020 – 10 fishermen on 6 vessels

## Scout Vessels

- Opportunity to use fishermen/fishing vessels
- Work ahead of survey vessel locating fixed gear
- Help communicate with fishermen working in area of survey vessel's plans
- 2021 survey season will utilize scout vessels



# Vessel Request for Information



## VESSEL REQUEST FOR INFORMATION

### TELL US ABOUT YOUR VESSEL

Vineyard Wind is looking to hire local vessels to work on offshore wind projects. If you are at all interested in participating in the development of offshore wind, please fill out the form to the best of your ability.

**Vessel owners: Please fill out one form per vessel.** Complete the form below or download a PDF copy and submit to [info@vineyardwind.com](mailto:info@vineyardwind.com) or mail to Vineyard Wind, 700 Pleasant Street, Suite 510, New Bedford, MA 02740.



New Bedford F/V Encourager conducted surveys of lobster, plankton, and scabass populations in the wind energy lease areas.

[Download a copy of the form](#)

[Subscribe to our Mariner Updates](#)

### Questions?

+Contact us at [info@vineyardwind.com](mailto:info@vineyardwind.com).

+Fishing vessel owners, contact Crista Bank at [cbank@vineyardwind.com](mailto:cbank@vineyardwind.com).

### Vessel Request for Information

#### \* 1. Contact Information

Name \*

Company

Address \*

City/Town \*

State/Province \*

ZIP/Postal Code \*

Country \*

Email

Address \*

### Local Vessel Request for Information



#### CONTACT INFORMATION

Name:  Phone Number: (  ) -

Email:

Address:

City/Town:  State:  ZIP Code:

Months of Availability (Circle all that apply): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec

#### VESSEL INFORMATION

Vessel Name:  Length of Vessel:  ft

Vessel Type (circle one): Trawler/Dragger, Scalloper, Longline, Dredge, Pots/Traps, Gillnet, Charter Fishing, For-Hire Fishing, Workboat

Year Built:  Beam:  ft Draft:  ft Engine Make:

Engine Model:  Horsepower:  hp Average Steaming Speed:  kts

Number of Propeller Shafts (circle one): 1, 2, 3, 4, Jet Drive Is Vessel equipped with a winch: Y/N

Generator Capacity (kW):  Normal Crew Size:  Rated Passenger Capacity (If Rated):

Additional Bunk Space (in addition to crews' quarters): Y/N If "yes", please specify how many bunks:

Lifting Capacity (Deadweight Tons):  Towing Capacity (Deadweight Tons):

Equipment on the Bridge (Circle all that apply): Radar, GPS, AIS, Chart Plotter, Compass, Satellite Phone, Marine Radio (Fixed), Marine Radio (Handheld)

#### SAFETY EQUIPMENT ON BOARD

(Select all that apply)

PFDs (1-6)  PFDs (6+)  Life Raft (1-4)  Life Raft (4-6)  Life Raft (6+)

Immersion Suits  Flares  Search & Rescue Transponder (SART)

Personal Locator Beacon (PLB)  Emergency Position Indication Radio Beacon (EPIRB)

#### CAPTAIN / CREW INFORMATION

	Yes	No
1. Is Captain licensed by USCG?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is Captain Standards of Training, Certification and Watchkeeping (STCW) Certified?	<input type="checkbox"/>	<input type="checkbox"/>
3. Has Captain/crew undergone cold water safety training?	<input type="checkbox"/>	<input type="checkbox"/>
4. Would Captain/crew be willing to participate in a random drug screening program?	<input type="checkbox"/>	<input type="checkbox"/>
5. Is at least one crewmember CPR certified?	<input type="checkbox"/>	<input type="checkbox"/>
6. Does Vessel have a Formal Safety Management System?	<input type="checkbox"/>	<input type="checkbox"/>
7. Are all proper pollution disposal standards visibly posted?	<input type="checkbox"/>	<input type="checkbox"/>



# Fisheries Outreach

## Fisheries Representatives

Fisheries Representatives are independent fishermen organizations that represent their fisheries/port interests, not Vineyard Wind's interest. They help facilitate two-way communication between the industries.

- Massachusetts Lobstermen's Association
- New Bedford Seafood Consulting
- New Bedford Port Authority
- Martha's Vineyard Fishermen's Preservation Trust
- Commercial Fisheries Center of Rhode Island
- Coastal Asset Management - Connecticut



**COMMERCIAL FISHERIES**  
CENTER OF RHODE ISLAND



# FISHERIES OUTREACH



**MONTHLY PORT HOURS**

FISHERIES LIAISONS FROM EQUINOR, ØRSTED/EVERSOURCE, MAYFLOWER WIND AND VINEYARD WIND WILL BE AVAILABLE DURING MONTHLY PORT HOURS FOR COMMERCIAL AND RECREATIONAL FISHING INQUIRIES, COMMENTS AND FEEDBACK FOR THE RI/MA WIND ENERGY AREAS



## VINEYARD WIND

Dear Fishermen,

UMass Dartmouth's School for Marine Science and Technology (SMAST) is hosting a virtual meeting for fishermen to provide an overview of Vineyard Wind's fisheries survey methods and results to date, feedback from the fishermen and scientific review groups, and survey plans going forward. There will be time for questions and discussion. Details [here](#).



When: Thursday, June 3rd, 9:00am-11:00am

Where: <https://umassd.zoom.us/j/93892755419?pwd=dFBudzc2bDlqUzZkajJmR0tMTkFDdz09>

Meeting ID: 938 9275 5419

Passcode: 859402

Mobile: 646-876-9923

Who: Fishermen, and open to the general public.

This meeting will be recorded.

Survey Reports being discussed:

[Trawl Survey](#)

[Drop Camera](#)

[Ventless Trap](#)

[Highly Migratory Species](#)

If you have any questions please contact the Vineyard Wind Fisheries Liaisons:

Crista Bank: [cbank@vineyardwind.com](mailto:cbank@vineyardwind.com), 508-525-0421

Caela Howard: [choward@vineyardwind.com](mailto:choward@vineyardwind.com), 508-386-9832



## SIGN UP FOR UPDATES

Vineyard Wind sends out mariner updates about vessel survey activity in the lease areas.

### VINEYARD WIND

## OFFSHORE WIND MARINER UPDATE NO. 23 WINTER FISHERIES TRAWL SURVEY PLAN

During the month of February, 2020 the University of Massachusetts Dartmouth School for Marine Science and Technology (SMAST) is conducting a fisheries trawl survey following the Northeast Area Monitoring Assessment Program (NEAMAP) protocols within the Vineyard Wind Lease Areas (501 North; 501 South; 522) and a control area (see attached chart).

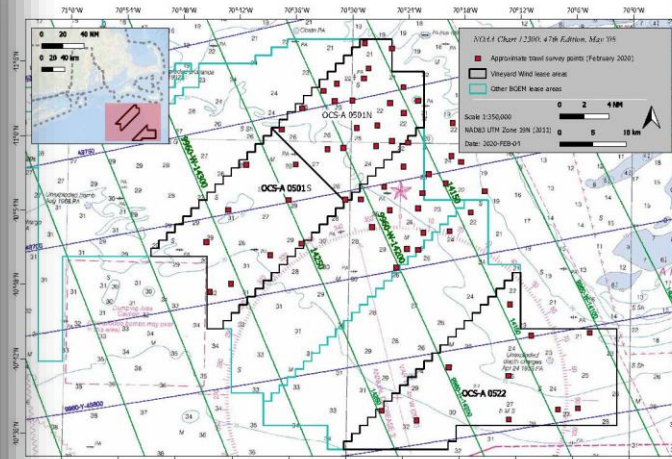
The first trip will survey in lease area 501 North with 20 tows inside the lease area and 20 tows in the adjacent control area. Subsequent trips will survey in lease areas 501 South and 522 with 10 tows in each.

Date(s)  
(Multiple Trips throughout the month of February)

Location(s)  
All Lease areas: 0501 North; 0501 South; 522 and a control area.



Vessel: F/V HEATHER LYNN  
Port: Point Judith, RI  
Boat Contact Info:  
SAT Phone: 1-254-460-4763  
Boatrac: [Heatherlynn@boatrac.com](mailto:Heatherlynn@boatrac.com)  
Standing by on VHF channel 16 & 13

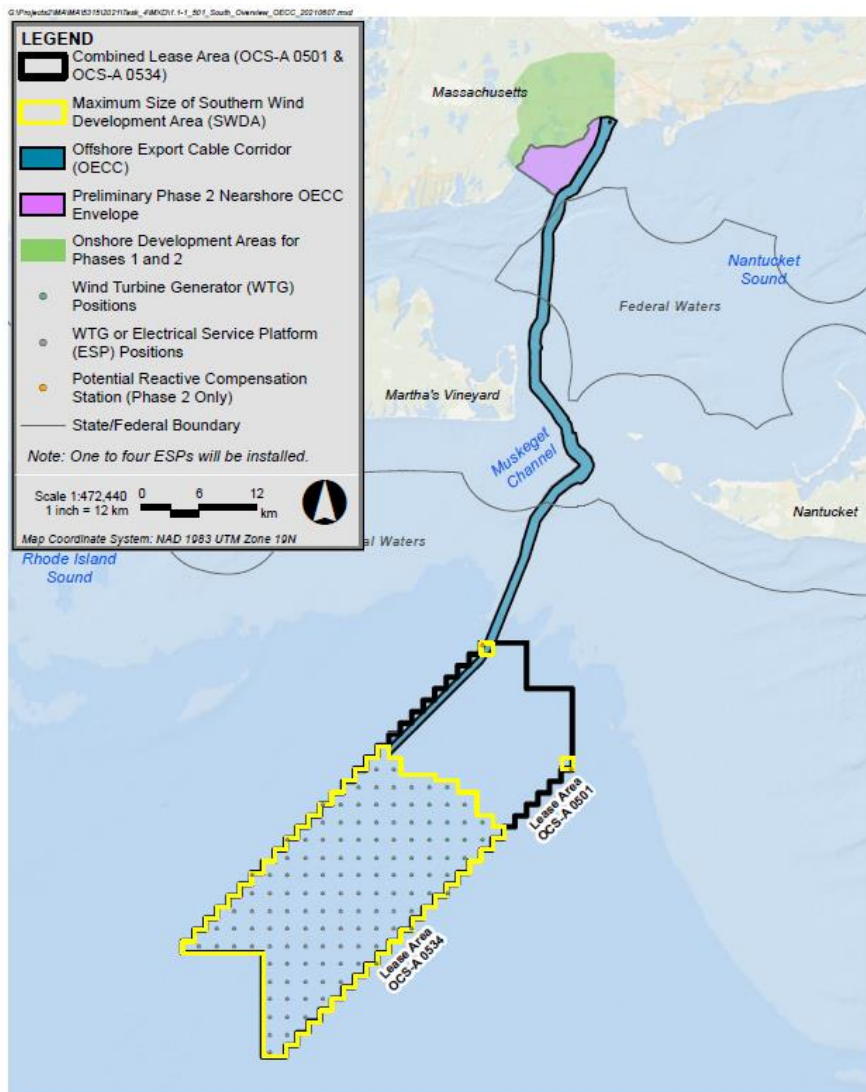


Please contact Crista Bank, Fishery Liaison, for latest information.  
Cell: 508-525-0421 • Email: [cbank@vineyardwind.com](mailto:cbank@vineyardwind.com)

VineyardWind.com • [info@vineyardwind.com](mailto:info@vineyardwind.com) • 508-717-8964  
700 Pleasant Street, Suite 510 • New Bedford, MA 02740



# Future Development - Vineyard Wind South



## Overview

- **Location:** Vineyard Wind South is located immediately to the south of Vineyard Wind 1.
- **Two Phases:** Maximum of 130 Turbines and up to 5 Electric Service Platforms
  - **Phase 1** is Park City Wind – 804 MW for CT
  - **Phase 2** is Rest of Zone/Future Project – 1200 -1500 MW
- **Federal Permitting:**
  - Construction & Operations Plan submitted June 2020
  - Issuance of Notice of Intent to prepare an Environmental Impact Statement anticipated June 30, 2021
- **Development:** Each Phase has its own Project Design Envelope
- **Size:** SWDA approximately 410-455 km<sup>2</sup>
- **Landfall sites and grid interconnection:** Town of Barnstable for each Phase
- **Offshore export cables:** Up to five offshore export cables within the same corridor as VW 1



Contact us:

Crista Bank, Fisheries Liaison

[cbank@vineyardwind.com](mailto:cbank@vineyardwind.com)

Caela Howard, Fisheries Liaison

[choward@vineyardwind.com](mailto:choward@vineyardwind.com)

Sign up for EMAIL Updates OR  
TEXT ALERTS

[www.vineyardwind.com/fisheries](http://www.vineyardwind.com/fisheries)

QUESTIONS?