

4.6-2 Fisheries Mitigation Plan for Liberty Wind North and Liberty Wind South

Response to New York State Energy Research and Development Authority
Request for Proposals ORECRFP22-1



**VINEYARD
OFFSHORE**

Fisheries Mitigation Plan
for
Liberty Wind North and Liberty Wind
South

Version 1.0

Prepared pursuant to [contract number, date (TBD)]

with

New York State Energy Research and Development Authority

Albany, NY

Prepared by

Vineyard Offshore

75 Arlington Street

10th Floor

Boston, MA 02116



January 26, 2023

Record of Revision		
Revision Date	Description of changes	Revision on pages
[date]	[Original issue]	[page(s)]

Communication Officers, Contact Information, Links		
Name/Title	Role	Contact Information
Rachel Pachter Chief Development Officer	Oversees project development activities	rpachter@vineyardoffshore.com
Juan Levesque Director of Environmental Affairs	Manages environmental activities	jlevesque@vineyardoffshore.com
Christian Scorzoni Head of External Affairs	Oversees government relations, community engagement, and communications activities	cscorzoni@vineyardoffshore.com
Nathaniel Mayo Director of Public Affairs	Manages community engagement activities	617-840-4045 nmayo@vineyardoffshore.com
Andrew Doba Director of Communications	Directs media relations, marketing, and event planning	203-850-7400 adoba@vineyardoffshore.com
Andrea Bonilla External Affairs Manager	New York liaison for communities, businesses, organizations, civic leaders, and other stakeholders	613-300-5138 abonilla@vineyardoffshore.com
Emily Rochon Analyst	Environmental Technical Working Group (E-TWG) representative	erochon@vineyardoffshore.com
Crista Bank Fisheries Manager	Lead fisheries contact, Fisheries Technical Working Group (F-TWG) representative	508-525-0421 cbank@vineyardoffshore.com
Travis Lowery Fisheries Liaison	Focuses on communications and engagement with the fishing industry	508-728-4529 TLowery@vineyardoffshore.com
Vineyard Offshore Fisheries Representatives	Represent the interests of different fisheries to Vineyard Offshore	See the Fisheries Communication Plans at: https://www.vineyardoffshore.com/fishermen
Jeannot Smith Marine Liaison Officer	Lead liaison for non-fisheries mariners	904-613-0134 jsmith@vineyardoffshore.com

Links to project information:

Project website: <https://www.vineyardoffshore.com/>

Fisheries website: <https://www.vineyardoffshore.com/fishermen>

Table of Contents

1	FISHERIES MITIGATION PLAN SUMMARY	1
1.1	Overall philosophy and principles	1
1.2	Overall approach to incorporating data and stakeholder feedback	1
1.3	Existing guidance and best practices that will be followed	2
2	COMMUNICATIONS AND COLLABORATION APPROACH	3
2.1	Overview and communication plan objectives.....	3
2.2	Communication officers/positions, responsibilities, and contact information	3
2.3	Identification of fishing industry stakeholders.....	4
2.4	Participation in stakeholder and technical working groups.....	4
2.4.1	Communication with F-TWG	4
2.4.2	Communication with other New York State agencies	5
2.4.3	Communication with other stakeholder and working groups	5
2.4.4	Communication and collaboration with other developers.....	6
2.5	Communication methods and tools.....	7
2.5.1	Methods by phase.....	7
2.5.2	Communication with vessels	7
3	MONITORING AND RESEARCH PRE-, DURING, AND POST-CONSTRUCTION	8
3.1	Identification of scope of monitoring activities/studies.....	8
3.2	Baseline data and characterization approach	8
3.2.1	Existing literature and data of benthic and fisheries resources.....	8
3.2.2	Data collected of benthic and fisheries resources	9
3.3	Monitor for potential impacts during each phase.....	9
3.4	Assess and quantify changes to fishery resources	10
3.5	Assess potential changes to commercial and recreational fishing activities	10
3.5.1	Current and historical usage	10
3.5.2	Changes in usage	11
3.6	Addressing data gaps	11
3.7	Data availability	12
4	SUPPORTING OTHER RESEARCH	12
4.1	Support of collaborative research	12
4.2	Handing/processing requests.....	13
4.3	Proposed restrictions	13
4.4	Financial commitment for third party research.....	13
4.5	Proposed or existing commitments/collaborations.....	14

5	PROPOSED MITIGATION OF IMPACTS TO BENTHIC/FISHERIES RESOURCES.....	14
5.1	Potential impacts/risks and mitigation measures by project stage	14
5.2	Coordination with F-TWG and other stakeholders	17
6	PROPOSED MITIGATION OF IMPACTS TO THE RECREATIONAL AND COMMERCIAL FISHING INDUSTRY.....	17
6.1	Potential impacts/risks and mitigation measures by project stage	17
6.1.1	General approach to avoiding and mitigating fishing gear loss	20
6.1.2	Processing claims for lost fishing gear	20
6.2	Coordination with F-TWG and other stakeholders	20
7	CONSIDERATIONS FOR SUBSEA CABLES	21
7.1	Mitigation strategies for subsea cables	21
8	PROJECT DECOMMISSIONING	22
8.1	Potential impacts based on available information and experience	22
8.2	Approach for developing plan and coordination with stakeholders.....	22
9	(OPTIONAL) FISHERIES COMPENSATION PLAN	22
9.1	Consideration of compensation plan	22
9.2	Approach to developing compensation plan.....	23
9.2.1	Coordination with stakeholders	23
9.2.2	Third-party administration	23
10	ADDITIONAL CONSIDERATIONS	23
10.1	Additional mitigation strategies and FMP refinement	23
10.2	Process for updating the FMP	24

1 Fisheries Mitigation Plan Summary

1.1 Overall philosophy and principles

This section should describe the overall philosophy and principles the developer will follow to avoid, minimize, restore, and off-set potential fisheries impacts.

Vineyard Offshore is developing up to two Offshore Wind Generation Facilities (OWFs) in Lease Area OCS-A 0522 (the “522 Lease Area”): Liberty Wind North (LW-N) and Liberty Wind South (LW-S). This Fisheries Mitigation Plan (FMP) covers both LW-N and LW-S (and their associated transmission systems), which are collectively referred to in this FMP as the “Projects.”

The Vineyard Offshore team has over a decade of experience working with commercial and recreational fishermen, vessel owners, fishing advocacy organizations, shore support services, and fisheries research institutions—first as Vineyard Wind and now as Vineyard Offshore. We have a demonstrated ability to forge productive working relationships with fishermen and are committed to developing, constructing, operating, and decommissioning well-sited offshore wind projects with minimal fisheries impacts. To do so, we employ project siting and design measures that are aimed at avoiding potential impacts from the outset. Where impacts are unavoidable, we work collaboratively with agencies, fishermen, and other stakeholders to identify appropriate and practicable solutions to further minimize and mitigate potential impacts.

1.2 Overall approach to incorporating data and stakeholder feedback

This section should describe how the developer will use research, data, and stakeholder feedback to update the FMP and support decision-making throughout the life cycle of the project (pre-construction, surveys, site design, construction, operations, and decommissioning).

Vineyard Offshore will rely on research, data, and stakeholder feedback to update this FMP and to develop, construct, and operate the Projects following the mitigation hierarchy. In line with this commitment:

- Vineyard Offshore will seek consultation and coordinate with relevant stakeholders.
- Vineyard Offshore will review existing research and data and seek input from stakeholders regarding data gaps to inform decisions made throughout the Projects’ life cycle.
- Vineyard Offshore will review and seek input from stakeholders on proposed and conducted survey rationales and methodologies as well as design, construction and operation, and decommissioning plans for the Projects.
- To the extent that the timeline allows, pre- and post-construction monitoring will be designed to improve the understanding of the impacts of offshore wind energy development and operations on fisheries.
- This FMP will be refined through an iterative and adaptive process that accounts for changing technologies, expanding information about potentially impacted species, and lessons learned from other offshore wind projects in the Northeast.
- Vineyard Offshore will update this FMP to reflect the Projects as they evolve.

1.3 Existing guidance and best practices that will be followed

This section should present a list of existing guidance documents, publications, tools, and/or plans that will be followed to support the FMP. Include links, if available, for all references.

- Vineyard Offshore will continue implementing its Fisheries Communication Plan (FCP) for the 522 Lease Area, which outlines our proactive approach to fisheries communication to ensure effective and regular engagement with a wide range of fishermen and fisheries stakeholders. The FCP is based on best practice guidance and is updated regularly to incorporate feedback from fishermen and fisheries stakeholders as well as lessons learned. The FCP is available at: <https://www.vineyardoffshore.com/fishermen>.
- Vineyard Offshore will continue to follow and implement best practices that are appropriate and relevant to the Projects, such as:
 - [Bureau of Ocean Energy Management’s \(BOEM’s\) \(2020\) Information Guidelines for a Renewable Energy Construction and Operations Plan \(COP\)—Version 4.0](#)
 - [BOEM’s \(2018\) Draft Guidance Regarding the Use of a Project Design Envelope in a Construction and Operations Plan](#)
 - [BOEM’s \(2019\) Guidelines for Providing Benthic Habitat Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585](#)
 - [BOEM’s \(2019\) Guidelines for Providing Information on Fisheries for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585](#)
 - [BOEM’s \(2020\) Guidelines for Providing Information on Fisheries Social and Economic Conditions for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR. Part 585](#)
 - Other related BOEM guidelines/guidance documents found at: <https://www.boem.gov/about-boem/regulations-guidance/guidance-portal>
 - Best practice guidance tools that have been or may be developed by the New York State Energy Research and Development Authority’s (NYSERDA) Fisheries Technical Working Group (F-TWG) and Environmental Technical Working Group (E-TWG).
 - Guidelines developed by the Regional Wildlife Science Collaborate for Offshore Wind (RWSC), the Responsible Offshore Science Alliance (ROSA), and other regional monitoring organizations, such as ROSA’s (2021) [Offshore Wind Project Monitoring Framework and Guidelines](#).
- Vineyard Offshore anticipates consulting additional publications, tools, and plans for the Projects, including those listed in Section 3.2.
- Vineyard Offshore will also build on the lessons learned and critical hands-on experience gained from developing, permitting, constructing, and operating the Vineyard Wind 1 project.

2 Communications and Collaboration Approach

2.1 Overview and communication plan objectives

This section should provide an overview of the communication plan and objectives and its importance in fisheries mitigation.

Vineyard Offshore’s engagement with stakeholders interested in fisheries issues prioritizes information sharing, soliciting feedback on the design and execution of our projects and programs, supporting an efficient and timely permitting process, and promoting safety on the water. Towards that end:

- Vineyard Offshore will continue to seek methods and processes to allow for a two-way flow of information between key stakeholders and developers, highlighting how Vineyard Offshore uses this feedback to inform our decision-making.
- Vineyard Offshore will continue to provide updates to fishing industry stakeholders in an appropriate manner that can be easily accessed and widely distributed.
- Vineyard Offshore will continue to seek collaboration with the fishing industry to use technical applications to enhance communication and coordination for all on-water activities.
- Vineyard Offshore will continue to periodically update its FCP to ensure communication methods remain effective and useful.
- Vineyard Offshore will continue to actively engage and communicate with stakeholders; foster, build, and maintain trusted relationships; work to better understand and address concerns; and clearly communicate the reasons behind the decisions we make.
- Vineyard Offshore's communication plans and objectives will evolve throughout the life cycle of the Projects to ensure effective communication with a range of stakeholders and address stakeholder fatigue wherever possible.

2.2 Communication officers/positions, responsibilities, and contact information

This section should provide a list of communication officers, their role, and name and contact information. The list should provide stakeholders with an understanding of who should be called for a particular issue or question. It should also include links to the project website so readers know where to find additional information.

Name/Title	Role/Responsibilities	Contact Information
Rachel Pachter Chief Development Officer	Oversees project development activities	rpachter@vineyardoffshore.com
Juan Levesque Director of Environmental Affairs	Manages environmental activities	jlevesque@vineyardoffshore.com
Emily Rochon Analyst	E-TWG representative	erochon@vineyardoffshore.com
Crista Bank Fisheries Manager	Lead fisheries contact, F-TWG representative	508-525-0421 cbank@vineyardoffshore.com

Name/Title	Role/Responsibilities	Contact Information
Travis Lowery Fisheries Liaison	Focuses on communications and engagement with the fishing industry	508-728-4529 TLowery@vineyardoffshore.com
Vineyard Offshore Fisheries Representatives	Represent the interests of different fisheries to Vineyard Offshore	See the Fisheries Communication Plans at: https://www.vineyardoffshore.com/fishermen
Jeannot Smith Marine Liaison Officer	Lead liaison for non-fisheries mariners	904-613-0134 jsmith@vineyardoffshore.com

Project website: <https://www.vineyardoffshore.com/>

Fisheries website: <https://www.vineyardoffshore.com/fishermen>

2.3 Identification of fishing industry stakeholders

This section should describe the process by which stakeholders relevant to fisheries and the fishing industry will be identified and classified by stakeholder group.

Vineyard Offshore regularly communicates with a wide variety of fishermen and stakeholders relevant to fisheries and the fishing industry. Vineyard Offshore will continue to identify fisheries stakeholders relevant to the Projects by, among other things:

- participating in federal, state, and regional environmental and fisheries technical working groups, advisory boards, councils, and commissions, including E-TWG, F-TWG, RWSC, ROSA, and the New York Offshore Wind Alliance;
- conducting community and stakeholder engagement activities and engaging in project partnerships, particularly in New York;
- continuing and expanding fisheries engagement efforts and our network of Fisheries Representatives and Onboard Fisheries Liaisons to facilitate effective communication with commercial and recreational fishermen;
- continuing to consult with the relevant federal and state agencies; and
- continuing to implement other stakeholder engagement methods outlined in Vineyard Offshore’s Stakeholder Engagement Plan and Fisheries Communication Plan; and
- maintaining stakeholder lists, classifying stakeholders by stakeholder group where appropriate, and tracking communications on an internal basis.

2.4 Participation in stakeholder and technical workinggroups

2.4.1 Communication with F-TWG

This should describe the communication and collaboration approach with members of the F-TWG and consultations.

- Vineyard Offshore will continue to dedicate project-specific technical resources to and actively

participate in the F-TWG. Vineyard Offshore notes that our staff has been actively engaged in the F-TWG since its formation. Project updates will be provided at appropriate intervals.

- To the extent practicable, Vineyard Offshore will work with and attend future F-TWG meetings and sponsored conferences.
- Vineyard Offshore will identify specific individuals to serve at least one-year terms in the role of primary and secondary core members.

2.4.2 Communication with other New York State agencies

This should describe communication with New York State agencies during each phase of the project.

- Vineyard Offshore has already communicated with New York State agencies, including several Consulting State Agencies, during the development of the Projects to inform siting and design measures as well as permitting plans and timelines.
- Vineyard Offshore will continue to communicate with Consulting State Agencies about the Site Assessment Plan (SAP) and COP for the 522 Lease Area (the “522 COP”)¹ and as we prepare New York State permit applications, including meeting with Consulting State Agencies at reasonable times and intervals, in order to attempt to resolve any identified issues.
- Vineyard Offshore will engage with New York State agencies on evolving project design and potential mitigation and monitoring measures.
- Vineyard Offshore will continue to meet with New York State agencies, including Consulting State Agencies, at reasonable times and intervals, during the construction and operational phases of the Projects.

2.4.3 Communication with other stakeholder and working groups

This should describe any relevant participation with other stakeholder groups, such as international fisheries groups, that would help inform the FMP.

- Vineyard Offshore will continue to collaborate with other regulatory agencies, academic and research institutions, environmental non-governmental organizations (eNGOs), and other stakeholder groups and will continue to maintain memberships and participate in such collaborative efforts. We are a member of, actively participate in, and/or attend meetings for the following technical working groups, advisory boards, councils, and commissions:
 - RWSC
 - ROSA
 - New York Offshore Wind Alliance
 - NYSERDA’s E-TWG
 - NYSERDA’s F-TWG

¹ Vineyard Offshore has submitted the 522 COP (also known as the “Vineyard Northeast COP”) to BOEM on behalf of the lease holder, Vineyard Northeast LLC.

- International Council on Exploration of the Seas (member of Working Group on Offshore Wind Development and Fisheries)
- Massachusetts Fisheries Working Group on Offshore Wind Energy
- Massachusetts Habitat Working Group on Offshore Wind Energy
- Mid-Atlantic Fishery Management Council
- New England Fishery Management Council
- Vineyard Offshore intends to maintain these relationships and develop new partnerships in connection with the Projects, particularly in New York.

2.4.4 Communication and collaboration with other developers

This should describe any relevant participation and collaboration with other developers in the offshore space, with a focus on communication and collaboration with adjacent leaseholders. This may include but is not limited to shared research efforts, coordination of survey methods, or standardization of navigational and safety protocols.

- Vineyard Offshore will continue to collaborate with other developers in relation to streamlining communications to reduce stakeholder fatigue, sharing data, and supporting the sustainable development of the offshore wind industry. We will also continue to participate in regional monitoring organizations (e.g., ROSA and RWSC) and agency-led efforts to standardize scientific methods, surveys, and monitoring plans across lease areas. Examples of our participation and collaboration with other developers include:
 - The fisheries surveys conducted in the 522 Lease Area followed the same protocols as the fisheries surveys conducted in Lease Area OCS-A 0501, thus contributing to the standardization of survey methods and data across lease areas.
 - Vineyard Offshore, along with other offshore wind developers, is supporting INSPIRE Environmental and the New England Aquarium’s study of highly migratory species across the MA WEA and RI/MA WEA by deploying acoustic receivers in the 522 Lease Area and funding tagging efforts.
 - Vineyard Offshore holds port hours in cooperation with other developers in order to provide information to fishing vessel crews who fish in or transit through multiple lease areas.
 - Vineyard Offshore led a collaborative effort among the developers of the MA WEA and RI/MA WEA lease areas to adopt a uniform grid layout with 1 x 1 nautical mile (NM) spacing between wind turbine generators (WTGs), to facilitate fishing and safe transit through the MA WEA and RI/MA lease areas.
 - Vineyard Offshore has developed a fishing gear loss compensation process that allows fishermen to be quickly and fairly compensated. We use a standard gear loss/damage compensation form that is based on the form previously developed for the Vineyard Wind 1 project through coordination with FRs, FLs, and other developers. This form has been adopted by other developers and provides a standard approach to fishing gear loss and compensation across several lease areas and projects.
- Vineyard Offshore will coordinate with other MA WEA and RI/MA WEA leaseholders on fisheries

outreach.

- Vineyard Offshore will seek to maximize the impact of research efforts such as data collection, methodology, analysis, and dissemination by collaborating with other developers, particularly those in adjacent lease areas, taking on similar initiatives.

2.5 Communication methods and tools

2.5.1 Methods by phase

This section should describe the communication and outreach methods and tools that will be employed for each stakeholder group during each phase of the project.

Recognizing that stakeholder groups have different needs when it comes to receiving information and participating in the project development process, Vineyard Offshore employs an array of methods to disseminate information and engage stakeholders. We will continually evaluate and adapt our approach to ensure the effectiveness of our efforts. The table below includes a subset of the communication methods and tools in our stakeholder engagement toolkit. Additional communication methods and tools are described in the Stakeholder Engagement Plan and FCP.

Proposed Outreach Methods/Tools	Phase*			
	1	2	3	4
Vineyard Offshore website	X	X	X	X
Social media, digital advertisements, newsletters, pamphlets and flyers, press releases, videos	X	X	X	X
Newspaper, radio, podcast, and television interviews	X	X	X	X
Participation in E-TWG, F-TWG, and similar federal, state, and regional fisheries technical working groups, advisory boards, councils, and commissions; responding to data and site access requests; collaborative fisheries research	X	X	X	X
Hiring specialized fisheries staff, consultants, and representatives (e.g., Fisheries Manager, Fisheries Liaisons, Fisheries Representatives, and Onboard Fisheries Liaisons) who will implement the FCP	X	X	X	X
Virtual and in-person meetings and events, port hours, phone calls, e-mails, text alerts, word of mouth	X	X	X	X
Dedicated outreach materials, FAQs, and charts; outreach to recreational fishing organizations and clubs; partnerships with fishing organizations and individual fishermen	X	X	X	X
Project partnerships, attending/sponsoring/tabling at marine expos and recreational fishing shows, formal and informal coalition building, site visits, focus groups, workshops, informal networking	X	X	X	X
Hiring specialized maritime staff (e.g., Marine Liaison Officer), publishing Offshore Wind Mariner Updates, working with USCG to issue Notices to Mariners, US Coast Guard consultation, engaging in Port Access Route Study processes and comment periods	X	X	X	X
<i>*Phase: 1: Survey/Design; 2: Construction; 3: Operation; 4: Decommission</i>				

2.5.2 Communication with vessels

This section should describe communication methods/tools with vessels actively fishing in areas in or adjacent to the Project area during site assessment and construction activities and facilitate proper notification to vessels and resource managers.

- Vineyard Offshore will implement the vessel communication tools and protocols included in the FCP

to facilitate communication with vessels actively fishing in or adjacent to the Projects during site assessment activities.

- To avoid fisheries conflicts, to the greatest extent practicable, Vineyard Offshore will seek to employ a fishing captain or other experienced fishing industry representative to be onboard vessels during key times/activities where potential conflicts could be greatest.

3 Monitoring and Research Pre-, During, and Post-Construction

3.1 Identification of scope of monitoring activities/studies

This section should provide an overview of the anticipated monitoring activities, including how the specific scope of monitoring activities will be identified and what types of scientific questions will be addressed.

- Vineyard Offshore has conducted several years of fisheries surveys in and around the 522 Lease Area to establish an ecological baseline (see Section 3.2.2). Vineyard Offshore plans to implement appropriate monitoring measures to assess potential changes to the ecological baseline established for the Projects in line with applicable permitting requirements (see Section 3.3).
- Monitoring methods and scientific designs will meet the highest scientific standards, and are expected to align with guidance mentioned in the [Offshore Wind Project Monitoring Framework and Guidelines](#) developed by ROSA, and will rely heavily on our experience and data obtained from developing and implementing monitoring plans for Vineyard Wind 1.
- To the greatest extent practicable, fisheries and related research will continue to be performed onboard commercial and recreational fishing vessels. These vessels will meet all appropriate regulatory safety and scientific standards prior to the beginning of any monitoring activity.

3.2 Baseline data and characterization approach

This section should describe how baseline data will be established on the spatial and temporal presence of fish and invertebrates in the proposed area of the Project at multiple life history stages included egg, larval, juvenile, adult, and spawning stages, as well as associated fish and invertebrate habitats.

3.2.1 Existing literature and data of benthic and fisheries resources

Describe key existing literature and datasets that are available for baseline characterization.

Numerous data sources characterize the temporal and spatial distribution, abundance, and community composition of fish, invertebrates, and their habitats potentially affected by Project activities. Key data sources include, but are not limited to:

- [Northeast Fisheries Science Center \(NEFSC\) multispecies bottom trawl surveys](#)
- [NEFSC Atlantic surf clam and ocean quahog surveys](#)
- [NEFSC Atlantic sea scallop dredge surveys](#)
- [Northeast Area Monitoring and Assessment Program \(NEAMAP\) trawl surveys](#)
- [SMAST 2019 drop camera surveys \(Bethoney et al. 2020\)](#)
- [SMAST 2003–2012 regional video survey data \(Bethoney et al. 2015\)](#)

- [Northeast Ocean Data Portal](#)
- [NYSERDA's \(2021\) Digital Aerial Baseline Survey of Marine Wildlife in Support of Offshore Wind Energy and Remote Marine and Onshore Technology \(ReMOTe\)](#)
- [NYSERDA's \(2017\) Fish and Fisheries Study](#)
- [NMFS' Fisheries and Endangered Species](#) and [Deep-Sea Coral Data Portal](#) databases
- [NMFS' Socioeconomic Impacts of Atlantic Offshore Wind Development website](#)
- [Habitat Mapping and Assessment of Northeast Wind Energy Areas \(Guida et. al 2017\)](#)
- [Southern New England Industry-Based Yellowtail Flounder Survey \(2003–2005\) \(Valliere 2007\)](#)

3.2.2 Data collected of benthic and fisheries resources

This section should describe survey activities undertaken or that will be undertaken by the developer that will inform the baseline characterization of benthic and fisheries resources.

- Vineyard Offshore has conducted several years of surveys to establish baseline data on the spatial and temporal presence of fish, benthic invertebrates, and their habitats in and around the 522 Lease Area. The fisheries survey protocols were developed with input from fishermen, fisheries scientists, and regulatory agencies, and the offshore work is conducted on fishing vessels. The surveys use a range of established survey methods to assess different facets of the regional ecology using accepted protocols that are designed to be compatible with previous data and ongoing regional surveys. These surveys include:
 - Multiple years of trawl surveys and drop camera surveys have been completed in the 522 Lease Area. The methodology for the trawl surveys closely emulates the NEAMAP nearshore trawl survey. This allows our data to be integrated with NEAMAP's annual spring and fall trawl surveys that have occurred regionally since 2006.
 - As part of our geophysical and geotechnical (G&G) surveys, we collected multibeam echosounder and side scan sonar data along with ground-truthing benthic grab samples, under video transects, and vibracores, which have been used to map I benthic habitat types within the 522 Lease Area.
- We previously partnered with the New England Aquarium's Anderson Cabot Center for Ocean Life to study highly migratory species presence across the Massachusetts Wind Energy Area (MA WEA) and Rhode Island/Massachusetts Wind Energy Area (RI/MA WEA). In continuance of this study, Vineyard Offshore, as well as other offshore wind developers, is supporting INSPIRE Environmental and the New England Aquarium's study of highly migratory species across the MA WEA and RI/MA WEA by deploying acoustic receivers in the 522 Lease Area and funding tagging efforts.
- Using data from our site-specific surveys and existing regional data, we have prepared a comprehensive assessment of the presence of finfish, invertebrates, and their habitats in the 522 Lease Area as part of the 522 COP.

3.3 Monitor for potential impacts during each phase

This section should describe how potential impacts will be monitored on these types of life history stages during each phase of physical work for the Project (site assessment, construction, operation, and

decommissioning) to inform mitigation planning for later phases of the Project as well as for future Projects.

- Surveys have been performed to assess baseline conditions of fish, invertebrates, and their habitats in the 522 Lease Area. The baseline survey data are expected to be utilized in future environmental assessments to assess changes attributable to development activities.
- Vineyard Offshore will develop a benthic habitat monitoring plan to monitor recovery after construction in areas with sensitive habitats where similar post-construction monitoring has not already been conducted for other projects.
- Vineyard Offshore is also likely to develop a fisheries monitoring plan to monitor key indicators before and after construction; such monitoring may be part of regional monitoring efforts. The need for a fisheries monitoring plan would be identified through the permitting process and in consultation with regulatory agencies and relevant stakeholders.
- Vineyard Offshore will seek to collaborate with other regulatory agencies and stakeholder groups (e.g., E-TWG, F-TWG, and ROSA) to identify research needs and opportunities.

3.4 Assess and quantify changes to fishery resources

This section should describe how changes to fisheries resources will be quantified using statistically sound methods.

- Vineyard Offshore will continue to gain valuable experience assessing changes attributable to project activities through the monitoring plans that are being developed and implemented for Vineyard Wind 1. For example, scientifically sound, statistically rigorous methods employed for Vineyard Wind 1 include a beyond Before-After-Control-Impact (BACI) framework to assess potential impacts to fish and a combination BACI-Before-After Gradient (BAG) sampling design to assess potential impacts to benthic resources.
- Ideally, specific questions and focal taxa will be chosen for the Projects either based on site-specific fisheries risk assessment, or in relation to broader regional efforts to assess variation between sites and understand cumulative impacts for sensitive species.
- Monitoring will, to the extent practicable, use appropriate study designs and methodologies to effectively analyze risk prior to construction and evaluate impacts during construction and operation by testing hypotheses and helping to assure statistical power for meaningful data analysis.
- Outside expertise will, if practicable, be consulted during study design and data analysis processes.
- Vineyard Offshore will continue to collaborate with other regulatory agencies and stakeholder groups to identify research needs and opportunities.

3.5 Assess potential changes to commercial and recreational fishing activities

3.5.1 Current and historical usage

This section should describe how the proposed Project area is used by commercial and recreational fisheries in the region, including current and historic usage as well as how associated transit routes will be determined.

- Vineyard Offshore has consulted a range of resources to quantify and inventory how the 522 Lease

Area is used by commercial fisheries in the region, including maps of fishing activity based on vessel monitoring system (VMS) data and vessel trip reports (VTRs) developed for the Northeast Regional Ocean Council (NROC) and the Mid-Atlantic Council on the Ocean (MARCO); VTR-based spatial representation of commercial fishing intensity and revenue developed by BOEM; and NMFS' estimates of commercial fisheries revenues. The 522 Lease Area does not contain exceptionally productive fishing grounds. Based on NMFS (2022) data, the 522 Lease Area has a very low total estimated economic exposure relative to other MA WEA and RI/MA WEA lease areas.

- For recreational fisheries, Vineyard Offshore partnered with the New England Aquarium Anderson Cabot Center for Ocean Life to study highly migratory species presence across the MA WEA and RI/MA WEA, based on a desktop review and input from the pelagic recreational fleet. The study determined that recreational effort for highly migratory species is widespread, with the highest levels of recreational fishing activity occurring to the west of the 522 Lease Area.
- Vineyard Offshore has assessed historical and existing fishing vessel traffic in and adjacent to the 522 Lease Area using 2016–2021 Automatic Identification System (AIS) data as part of a Navigation Safety Risk Assessment for the 522 Lease Area. The analysis indicated that historical vessel traffic levels within the 522 Lease Area are relatively low.
- Vineyard Offshore has proposed a preliminary Project layout with 1 x 1 NM spacing between WTGs to facilitate fishing and safe transit through the 522 Lease Area.

3.5.2 Changes in usage

This section should describe how changes in commercial and recreational fishing patterns will be calculated post-construction using statistically sound methods.

- We will continue to collect qualitative information on how the 522 Lease Area and the offshore export cable corridors (OECCs) are used by commercial and recreational fisheries in the region through our fisheries outreach described in Section 2.
- Vineyard Offshore will continue working with agencies (including Consulting State Agencies), commercial and recreational fishermen, academia, and industry economists to quantify commercial and recreational fishing activities, assess the potential economic exposure of the fishing industry to offshore wind development, and evaluate how best to assess changes in commercial and recreational fishing patterns post-construction.
- Vineyard Offshore will apply experience gained through Vineyard Wind 1 as well as other projects that will be constructed and operational prior to the Projects.

3.6 Addressing data gaps

This section should describe how data gaps will be addressed.

- The MA WEA, which includes the 522 Lease Area, is well-studied. Numerous studies already exist to characterize fish and invertebrate assemblage and their habitats in the 522 Lease Area and the surrounding region, which we have supplemented with several years of site-specific fisheries and benthic habitat surveys.
- To help address data gaps in the recreational fishing sector, Vineyard Offshore previously partnered with the New England Aquarium's Anderson Cabot Center for Ocean Life to study highly migratory

species presence across the MA WEA and RI/MA WEA and is supporting INSPIRE Environmental and the New England Aquarium’s study of highly migratory species in the region. For Vineyard Wind 1, funding was provided to support a false albacore tagging study by the American Saltwater Guides Association and the Anderson Cabot Center for Ocean Life.

- Vineyard Offshore will continue to work with fishermen, fisheries stakeholders, and agencies to identify data gaps that may be addressed through surveys or permitting applications.

3.7 Data availability

This section should describe how fisheries data will be made available in accordance with Section 2.2.8 of the RFP.

- Vineyard Offshore has made or intends to make non-proprietary environmental and fisheries data publicly available in a format and manner best suited for efficient distribution.
 - Much of the data will be publicly available through the federal and state permitting processes, as well as reports or academic publications that result from survey or monitoring work, and will be readily accessible to stakeholders. We proactively publish our fisheries research on our website at: <https://www.vineyardoffshore.com/fishermen>.
- Where practicable, we will disseminate raw environmental data to the most appropriate database(s), such as those recommended in NYSERDA’s (2021) [Wildlife Data Standardization and Sharing: Environmental Data Transparency for New York State Offshore Wind Energy](#), as soon as feasible following internal quality assurance and quality control (QA/QC).
- Vineyard Offshore will continue working with agencies, stakeholders, and other offshore wind developers to find cost-effective and user-friendly ways to streamline and standardize available data across lease areas.
- Vineyard Offshore will provide a Data Management and Availability Plan to NYSERDA detailing how Site and Environmental Data will be made available for use by third parties on an ongoing basis as soon as practicable after collection and QA/QC.

4 Supporting Other Research

4.1 Support of collaborative research

This section should describe how opportunities for developing or investing in collaborative research with the fishing industry to collect ecological and/or fishing data will be identified and undertaken. The description must account for the need to coordinate with members of the F- TWG during data gathering and assessment.

- Vineyard Offshore is committed to being an active member of regional monitoring organizations (e.g., RSWC, ROSA).
- Vineyard Offshore is committed to supporting collaborative research to collect ecological data and we will continue to work with regional monitoring organizations and a wide array of stakeholders, including members of the F-TWG, to identify collaborative research opportunities.
- Vineyard Offshore will continue to identify opportunities to support collaborative research through

the engagement processes described above and below.

- Vineyard Offshore will build on the collaborative research efforts already underway among adjacent MA WEA and RI/MA WEA developers. This will occur through ROSA, the RWSC, and in partnership with leading academic and research institutions, subject matter experts within agencies, and other engaged parties. These parties are well-represented within the F-TWG, and Vineyard Offshore anticipates consulting with the F-TWG as part of this commitment.

4.2 Handing/processing requests

This section should describe how requests for coordination with third-party supported scientists will be processed - including providing reasonably requested Project data and access to the Project area for independent scientists examining environmental sensitivities and/or the impacts of offshore wind energy development on fish, invertebrates and fisheries for the purpose of publication in peer-reviewed journals or other scientifically vigorous products.

- We have previously coordinated with third-party scientists to support regional data collection programs and studies, such as working with New England Aquarium and INSPIRE Environmental to deploy acoustic receivers in the 522 Lease Area and supporting tagging efforts.
- Vineyard Offshore has already responded to environmental data requests for the 522 Lease Area and will continue to do so.
- With the exception of temporary safety buffer zones established around work areas, third-party research vessels will be permitted to transit through and within the 522 Lease Area.
- Vineyard Offshore will continue to coordinate with third-party scientists regarding the provision of data and site access, and we will review any requests on a case-by-case basis. All requests will be considered and discussed with the requestor and will not be unreasonably denied.

4.3 Proposed restrictions

This section should describe any restrictions on data provision or access that may be required to protect trade secrets or maintain site security.

- Vineyard Offshore will seek to explain why identified data types are considered commercially sensitive.
- In certain instances, Vineyard Offshore may impose restrictions on data provision or the deployment of research equipment (e.g., buoys, environmental sensors, telemetry receivers, cameras) within the 522 Lease Area, OECCs, and on our facilities to protect proprietary and/or competitively sensitive information, maintain site security, ensure safety, etc.
- Vineyard Offshore notes that some data, while not proprietary, may be time-consuming or costly to produce depending on the specific request and the primary format it was collected in. Vineyard Offshore will work to advance such requests, but also hopes that regional monitoring organizations will make accessing data from all developers easier and more standardized to, at least in part, address this issue.

4.4 Financial commitment for third party research

This section should provide a level of financial commitment, if elected, that will be appropriated to

leverage third-party environmental research funding related to fish, invertebrates and fisheries, including federal or State-supported research. Or, if elected, provide the level of commitment to a general fund for supporting third-party research into relevant fish and invertebrate communities and associated commercial and recreational fisheries and the effects of offshore wind energy development.

- Vineyard Offshore plans to carefully consider all funding opportunities that arise through regional monitoring organizations (e.g., RWSC and ROSA). These groups will be raising funds from other entities and, with support from offshore wind developers, will be able to expand the scope and impact of their efforts to better understand the potential environmental effects of offshore wind energy development.

4.5 Proposed or existing commitments/collaborations

This section should describe proposed or existing commitments and collaborations with third-party researchers in support of monitoring activities and assessing impacts.

- Vineyard Offshore is firmly committed to supporting regional studies and other independent environmental research. Examples of previous commitments and collaborations with third-party researchers include:
 - The trawl and drop camera survey protocols for the 522 Lease Area were developed in collaboration with the Massachusetts School for Marine Science and Technology (SMAST) and the surveys were conducted by SMAST scientists onboard commercial fishing vessels.
 - Vineyard Offshore, as Vineyard Wind, previously partnered with the New England Aquarium’s Anderson Cabot Center for Ocean Life to study highly migratory species presence across the MA WEA and RI/MA WEA. In continuance of this study, Vineyard Offshore, as well as other offshore wind developers, is supporting INSPIRE Environmental and the New England Aquarium’s study of highly migratory species across the MA WEA and RI/MA WEA by deploying acoustic receivers in the 522 Lease Area and funding tagging efforts.
- Vineyard Offshore plans to develop new partnerships in connection with the Projects, particularly in New York, with an expected focus on supporting independent research and regional studies.

5 Proposed Mitigation of Impacts to Benthic/Fisheries Resources

5.1 Potential impacts/risks and mitigation measures by project stage

The table below should list the potential impacts and risks to benthic/fisheries resources and proposed mitigation measures. To this end, a description of how the potential adverse impacts of infrastructure design elements (e.g., turbine spacing and layout, turbine foundation type, cable burial and protection methods, and cable crossing designs) on fishing in the proposed Project area will be considered in mitigating impacts should be included. The mitigation measures should also demonstrate that the Project area and proposed site design allows for reasonable flexibility in the site layout (e.g., orientation of turbine lines, distance between turbines, and navigation areas) to accommodate changes that may be needed in the future. The section should also describe the planned operational protocol to avoid, minimize, and

mitigate impacts to fish, invertebrates and fisheries during Project construction and operation phases, such as vessel transit routes, designation and monitoring of safety zones, gear monitoring and retrieval, and communication with fishing vessels and resource managers.

Vineyard Offshore has performed an in-depth assessment of potential impacts to fish, benthic resources, and fisheries from the development of the 522 Lease Area and identified preliminary measures to avoid, minimize, and mitigate those potential impacts. However, it is premature to finalize monitoring and mitigation measures at this stage of the permitting process, which necessarily entails a thorough assessment of potential impacts and subsequent finalization of appropriate and practicable mitigation measures to address impacts. This is a multi-year iterative and adaptive process that accounts for changing technologies, expanding information about marine species, and lessons learned from other offshore wind projects in the Northeast.

Potential Impacts	Proposed Mitigation Measures ¹	Phase*			
		1	2	3	4
Micro-siting conflicts with habitats and fishery resources	<ul style="list-style-type: none"> BOEM sited the 522 Lease Area through a public, multi-year process to avoid and minimize potential impacts to fish, invertebrates, and fisheries from offshore wind development. Vineyard Offshore has and will continue to seek input from regulatory authorities, the fishing industry, and the maritime industry to locate foundations and cable routes in the least impactful manner that is practicable. The WTGs are widely spaced so that their foundations (and associated scour protection), along with cable protection for inter-array cables (if needed), only occupy a minimal portion of the 522 Lease Area, leaving the vast majority of the site undisturbed. To the greatest extent feasible, Vineyard Offshore will site the offshore cables to avoid and minimize impacts to sensitive habitats. Vineyard Offshore will continue to conduct geophysical, geotechnical, and environmental surveys to inform the Project’s design and layout. 	X			
Temporary, Alteration of the seabed and localized increases in noise and turbidity	<ul style="list-style-type: none"> Vineyard Offshore will use noise attenuation technologies to reduce sound from pile driving of foundations (if such methods are used). Pile driving noise will be mitigated through a soft-start, which allows fish time to move away from the area. Scour protection may be installed around foundations, where necessary, to minimize scouring and sediment suspension around foundations. The use of mid-line anchor buoys will be considered, where feasible and safe, as a potential measure to reduce impacts from anchor line sweep. 	X	X	X	X

Potential Impacts	Proposed Mitigation Measures ¹	Phase*			
		1	2	3	4
Long-term changes to seabed habitat	<ul style="list-style-type: none"> Vineyard Offshore will, to the extent possible, avoid sensitive benthic habitats. Vineyard Offshore’s goal is to minimize the use of cable protection to the greatest extent possible through a careful routing assessment and the selection of the most appropriate cable burial tool(s) to achieve a sufficient burial depth, taking into account site-specific environmental conditions and cable properties. The addition of foundations, scour protection, and cable protection (if required) may act as an artificial reef and provide habitat previously absent from the area. 	X	X	X	X
EMF Impacts	<ul style="list-style-type: none"> Vineyard Offshore will use proper shielding to reduce EMF. This can be achieved through sheathing and burial of cables; where sufficient burial depth cannot be achieved, the cables will be covered by cable protection (which would shield EMF). Vineyard Offshore conducted EMF modeling and assessments as part of the 522 COP that will be used to identify potential mitigation requirements if needed. 	X	X	X	
Cable Burial	<ul style="list-style-type: none"> Vineyard Offshore will bury export and inter-array cables to an appropriate minimal depth to reduce exposure risk. If depth cannot be reached, Vineyard Offshore will add protective materials over the cable. Cable burial techniques will be selected to maximize the likelihood of achieving sufficient cable burial, minimize the need for cable protection, and minimize suspended sediments during installation. Vineyard Offshore will conduct routine surveys or inspections of sub-sea cables and will conduct a survey or inspection to ensure and correct for cable exposure following a hurricane or other major events causing disturbance to the seabed. 		X	X	
Turbine Scour Protection	<ul style="list-style-type: none"> Vineyard Offshore will seek collaboration with federal and state regulatory authorities and key stakeholders to assess the use of ecological enhancements for turbine scour protection to provide offsets from potential adverse impacts. 	X	X	X	X
<p><i>*Phase: 1: Survey/Design; 2: Construction; 3: Operation; 4: Decommission</i></p> <p><i>1. The proposed measures described in this table are preliminary in nature and subject to review and approval from jurisdictional agencies in accordance with regulatory and permitting requirements. Final mitigation measures will be determined pursuant to applicable permitting processes and may vary from the list provided herein.</i></p>					

5.2 Coordination with F-TWG and other stakeholders

This section should describe how the developer will engage with stakeholder groups such as the F-TWG and other regional fishermen that address stakeholder concerns related to benthic and fisheries resources. Specifically, describe the key types of information and design decisions where feedback will be solicited from stakeholders.

- Vineyard Offshore will coordinate with the F-TWG and will work with fishermen and other stakeholders through our dedicated fisheries staff to address concerns and mitigate impacts to benthic/fisheries resources.
- Throughout the Projects’ multi-year permitting phase, Vineyard Offshore will continue to consult with relevant agencies, fishermen, and fisheries stakeholders regarding siting measures and design adjustments that could reduce potential impacts to fisheries.
- Vineyard Offshore’s staff have been actively engaged in F-TWG since its formation. Vineyard Offshore will continue to actively participate in the F-TWG and provide Project updates at appropriate intervals.
 - Vineyard Offshore will incorporate lessons learned from Vineyard Wind 1 to facilitate stakeholder consultations related to benthic and fisheries resources along with design decisions for the Projects.

6 Proposed Mitigation of Impacts to the Recreational and Commercial Fishing Industry

6.1 Potential impacts/risks and mitigation measures by project stage

The table below should list the potential impacts and risks to recreational and commercial fisheries and proposed mitigation measures. To this end, this section should describe of how the potential adverse impacts of infrastructure design elements (e.g., turbine spacing and layout, turbine foundation type, cable burial and protection methods, and cable crossing designs) on fishing in the proposed Project area will be considered in mitigating impacts. The mitigation measures should also demonstrate that the Project area and proposed site design allows for reasonable flexibility in the site layout (e.g., orientation of turbine lines, distance between turbines, and navigation areas) to accommodate changes that may be needed in the future. The section should also describe the planned operational protocol to avoid, minimize, and mitigate impacts to fisheries during Project construction and operation phases, such as vessel transit routes, designation and monitoring of safety zones, gear monitoring and retrieval, and communication with fishing vessels and resource managers.

Potential Impacts	Proposed Mitigation Measures ¹	Phase*			
		1	2	3	4
Fishing gear loss	<ul style="list-style-type: none"> • The FCP includes tools and protocols to facilitate communication with vessels actively fishing or preparing to fish in or near the 522 Lease Area and OECCs. • Vineyard Offshore employs Onboard Fisheries Liaisons onboard our survey vessels and/or hires local fishing vessels to serve as scout vessels (where appropriate) to improve communication with the fishing industry and 	X	X	X	X

Potential Impacts	Proposed Mitigation Measures ¹	Phase*			
		1	2	3	4
	<p>help avoid gear interactions during our offshore surveys.</p> <ul style="list-style-type: none"> Vineyard Offshore has developed and implemented a fishing gear loss compensation process that allows fishermen to be quickly and fairly compensated. 				
<p>Navigational safety concerns</p>	<ul style="list-style-type: none"> Vineyard Offshore will develop a Navigational Enhancement Plan in consultation with regulatory authorities, fishermen, and fisheries stakeholders.² The plan may include payments to enable the acquisition of navigation equipment, the development of appropriate training for use of navigation equipment or other navigational aids, or the creation of other programs to enable fishermen to safely continue effective navigation and fishing activities to encourage coexistence with the Projects. Vineyard Offshore will seek consultation with appropriate regulators, F-TWG, and the fishing community to minimize the overall area of temporarily closed areas. Temporary safety buffer zones would be adjusted as active work sites change within the 522 Lease Area or along the OECCs, allowing fishermen and other stakeholders to use areas not under construction or maintenance. Vineyard Offshore will incorporate best practices and lessons learned from Vineyard Wind 1 into construction and operational protocols for the Projects. Consistent with the recommendations of the MARIPARS and the layout adopted by other developers throughout the MA WEA and RI/MA WEA, we have proposed a 1 x 1 NM WTG/ ESP layout to facilitate safe navigation.³ Each WTG and ESP will be maintained as a Private Aid to Navigation (PATON). Vineyard Offshore will coordinate with USCG and NOAA to ensure that the location of the WTGs, ESPs, and as-built cable alignments are included on nautical charts. 	X	X	X	X
<p>Displacement/loss of access to traditional fishing grounds during survey and construction activities</p>	<ul style="list-style-type: none"> Vineyard Offshore will coordinate with fishing stakeholders to determine spatial and temporal use. Vineyard Offshore will, to the extent practicable, avoid heavily fished areas. Vineyard Offshore will endeavor to minimize potential disruptions to fishing activities from site assessment and construction activities. Except for temporary safety 	X	X	X	X

Potential Impacts	Proposed Mitigation Measures ¹	Phase*			
		1	2	3	4
	buffer zones established around work areas, fishing vessels will be permitted to transit through and within the 522 Lease Area and OECCs.				
EMF Impacts	<ul style="list-style-type: none"> Vineyard Offshore will use proper shielding to reduce EMF. This can be achieved through sheathing and burial of cables; where sufficient burial depth cannot be achieved, the cables will be covered by cable protection (which would shield EMF). Vineyard Offshore conducted EMF modeling and assessments as part of the 522 COP that will be used to identify potential mitigation requirements if needed. 	X	X	X	
Cable Burial	<ul style="list-style-type: none"> Vineyard Offshore will bury export and inter-array cables to an appropriate minimal depth to reduce exposure risk. If depth cannot be reached, Vineyard Offshore will add protective materials over cables. Cable burial techniques will be selected to maximize the likelihood of achieving sufficient cable burial, minimize the need for cable protection, and minimize suspended sediments during installation. Vineyard Offshore will conduct routine surveys or inspections of sub-sea cables. 		X	X	
Impacts to sensitive areas	<ul style="list-style-type: none"> Vineyard Offshore will collaborate with state regulatory authorities and key stakeholders to collect data and avoid sensitive areas to the extent that is reasonably practicable. The WTGs are widely spaced so that their foundations (and associated scour protection), along with cable protection for inter-array cables (if needed), only occupy a minimal portion of the 522 Lease Area, leaving the vast majority of the site undisturbed. Vineyard Offshore will continue to conduct geophysical, geotechnical, and environmental surveys to inform the Projects' design and layout. 	X	X		X
Turbine Scour Protection	<ul style="list-style-type: none"> Vineyard Offshore will seek collaboration with federal and state regulatory authorities and key stakeholders to assess the use of ecological enhancements for turbine scour protection to provide offsets from potential adverse impacts. 	X	X	X	X
<p><i>*Phase: 1: Survey/Design; 2: Construction; 3: Operation; 4: Decommission</i></p> <p><i>1. The proposed measures described in this table are preliminary in nature and subject to review and approval from jurisdictional agencies in accordance with regulatory and permitting requirements.</i></p>					

Potential Impacts	Proposed Mitigation Measures ¹	Phase*			
		1	2	3	4
<p><i>Final mitigation measures will be determined pursuant to applicable permitting processes and may vary from the list provided herein.</i></p> <p><i>2. This commitment is contingent upon Vineyard Offshore receiving information from NYSERDA on the precise nature and required components of the Navigational Enhancement Plan.</i></p> <p><i>3. Where necessary, WTGs and ESP(s) may be micro-sited to avoid unfavorable seabed conditions, maintain facilities within the Lease Area boundaries, and/or for other unexpected circumstances.</i></p>					

6.1.1 General approach to avoiding and mitigating fishing gear loss

This section should describe how potential loss of fishing gear due to snags on turbine structures, associated cables or cable mattresses, or related structures installed or deployed as a result of offshore wind energy development, will be minimized.

- Vineyard Offshore will endeavor to bury export cables to a sufficient depth to minimize exposure risk. If the “appropriate depth” cannot be reached, Vineyard Offshore will add protective materials over the cable that, to the extent practicable, allow for fishing to continue to occur.
- Vineyard Offshore has proposed a preliminary Project layout with 1 x 1 NM spacing between WTGs to facilitate fishing and safe transit through the 522 Lease Area.²
- Vineyard Offshore will coordinate with USCG and NOAA to ensure that the location of the WTGs, ESPs, and as-built cable alignments are included on nautical charts.
- Vineyard Offshore will use our experience from Vineyard Wind 1 to inform our approaches to avoiding gear interactions during the construction and operation of the Projects.

6.1.2 Processing claims for lost fishing gear

This section should describe how the developer will approach claims of lost gear in the event of a snag that provides for a fair and timely review and appeals of the claim and appropriate compensation of impacted parties.

- Vineyard Offshore has developed and implemented a fishing gear loss compensation process that allows fishermen to be quickly and fairly compensated. We use a standard gear loss/damage compensation form that is based on the form previously developed through coordination with FRs, FLs, and other developers for the Vineyard Wind 1 project. This form has been adopted by other developers and provides a standard approach to fishing gear loss and compensation across several lease areas and projects.
- Vineyard Offshore will consider the use of a third-party reviewer to assess claims and appeals when practicable and necessary to facilitate the quick review and satisfaction of valid claims.

6.2 Coordination with F-TWG and other stakeholders

This section should describe how the developer will engage with stakeholder groups such as the F-TWG and other regional fishermen and shipping and navigation to determine Project layouts that address

² Where necessary, WTGs and ESP(s) may be micro-sited to avoid unfavorable seabed conditions, maintain facilities within the 522 Lease Area boundaries, and/or for other unexpected circumstances.

stakeholder concerns. Specifically, describe the key types of information and design decisions where feedback will be solicited from stakeholders. Describe how changes to environmental resources will be quantified using statistically sound methods.

- Vineyard Offshore led a collaborative effort among the developers of the MA WEA and RI/MA WEA lease areas to adopt a uniform grid layout with 1 x 1 NM spacing between WTGs, which provides 1 NM wide corridors in the east-west and north-south directions as well as ≥ 0.6 NM wide corridors in the northwest-southeast and northeast-southwest directions to facilitate safe fishing and transit through the lease areas. Consistent with the recommendations of the MARIPARS and the layout adopted by other developers throughout the MA WEA and RI/MA WEA, we have proposed a 1 x 1 NM WTG/ESP layout for the 522 Lease Area.
- As part of the Projects' permitting process, Vineyard Offshore will engage with the F-TWG, regional fishermen, and other maritime stakeholders such as maritime experts, consultants, and marine safety committees to discuss Project layouts.
- Upon request, Vineyard Offshore will provide a detailed, step-by-step breakdown of the process used to create the Projects' layout.
- Vineyard Offshore will continue to work with fishermen and other stakeholders through Vineyard Offshore's dedicated fisheries staff to help address key concerns such as navigation, vessel access, and safety.

7 Considerations for Subsea Cables

7.1 Mitigation strategies for subsea cables

This section should describe any additional fish and fisheries mitigation strategies for proposed subsea cable routes that support the offshore wind project.

- Vineyard Offshore has and will continue to design the OECCs in consultation with agencies and stakeholders to avoid or minimize the length of cable through sensitive habitats (e.g., mapped hard and complex bottom, artificial reefs, submerged aquatic vegetation, etc.) as well as areas of high commercial and recreational fishing density, to the extent feasible.
- To further minimize impacts, Vineyard Offshore will micro-site individual offshore export cable alignments within the OECCs to avoid sensitive habitats (where feasible) using the extensive geophysical survey data that we collect, but avoidance of all sensitive habitats is not always possible.
- Vineyard Offshore will bury offshore cables to an appropriate minimal depth to reduce exposure risk. If depth cannot be reached, Vineyard Offshore will add protective materials over the cable.
- Vineyard Offshore will require our cable installation contractors to prioritize the least environmentally impactful cable installation methods(s) and tool(s) that are practicable for each segment of cable.
- Vineyard Offshore's goal is to minimize the use of cable protection to the greatest extent possible. If cable protection is used, fishermen will be informed of exactly where cable protection exists by labeling them on charts and raising awareness through our fisheries outreach network.
- Vineyard Offshore will endeavor to consolidate the Projects' cables with existing infrastructure,

where possible.

- The proposed landfall sites were selected to minimize onshore and offshore cable length (and correspondingly, minimize impacts) and avoid and minimize potential impacts to sensitive habitats.

8 Project Decommissioning

8.1 Potential impacts based on available information and experience

This section should describe potential impacts to benthic/fisheries and the fishing industry from decommissioning the project, based on available information and relevant experience (if any).

- Vineyard Offshore’s waste handling processes during decommissioning will focus on re-use or recycling, with disposal as the last option.
- Vineyard Offshore will collaborate with regulatory authorities, fishermen, and key fisheries stakeholder groups to better understand the effects and potential impacts associated with decommissioning.

8.2 Approach for developing plan and coordination with stakeholders

This section should describe how a decommissioning plan will be developed to identify and mitigate potential impacts, including coordination with fisheries stakeholders, and any elements of its contemplated decommissioning plan that can be identified at this stage.

- Vineyard Offshore will decommission the Projects in accordance with all necessary laws and regulations and generate a detailed Project-specific decommissioning plan
- Vineyard Offshore will seek input on the detailed Project-specific Decommissioning Application from regulatory agencies, fisheries and marine stakeholders, and local communities.
- Vineyard Offshore will use lessons learned from the construction and operation activities as well as other offshore wind projects and apply them (when appropriate) to the decommissioning plan.

9 (Optional) Fisheries Compensation Plan

9.1 Consideration of compensation plan

If a fisheries compensation plan is being considered to offset impacts, this section should describe how it will determine instances where all reasonable attempts to avoid and minimize Project impacts, or restoration to predevelopment conditions are not feasible and some type of fisheries compensation plan is warranted.

- At this early stage of the Projects, Vineyard Offshore is focused on refining environmental assessments, further evaluating potential design changes to avoid and/or minimize impacts, and consulting with stakeholders early and often to identify mitigation and monitoring measures.
- The need for financial compensation to offset impacts to commercial fishing will be established through the Projects’ permitting process.
- Vineyard Offshore will consider the guidance being developed as part of [BOEM’s Fisheries Mitigation Guidance Process](#).

9.2 Approach to developing compensation plan

9.2.1 Coordination with stakeholders

This section should describe how a fisheries compensation plan was or will be developed; how the developer will coordinate with the F-TWG and other entities in the design or review of the fisheries compensation plan.

- To the extent compensatory mitigation is deemed necessary as part of the Projects' permitting process, our objectives will be to: (1) create a fair, simple, and transparent data-driven program; (2) limit the administrative burden for all parties; (3) reduce potential gaming and fraud opportunities; and (4) resolve uncertainties and data limitations in fishermen's favor. As with Vineyard Wind 1, the process to develop such programs will include significant input from potentially impacted commercial fishermen, agencies, and other stakeholders. Vineyard Offshore will also consult with the F-TWG as part of this process.
- Vineyard Offshore will work as needed to evolve the guidance being developed as part of [BOEM's Fisheries Mitigation Guidance Process](#).

9.2.2 Third-party administration

This section should describe how the compensation plan will be administered by a non-governmental third-party to provide reasonable and fair compensation for impacts that cannot be sufficiently addressed through other means.

- Vineyard Offshore believes that fisheries compensation is best addressed at a regional scale.
- If a fisheries compensation plan is deemed necessary and appropriate, as part of the Projects' permitting process, Vineyard Offshore will work with relevant federal and state agencies and potentially impacted user groups to develop a fisheries compensation plan that provides reasonable and fair compensation for impacts that cannot be sufficiently addressed through other means.
- In developing the fisheries compensation plan, Vineyard Offshore will evaluate and consider different funding mechanisms and approaches, including the use of a non-governmental third-party to administer any plan.
- Vineyard Offshore will work with the state, federal, and fishing industry members to assess the most appropriate entity for the administration and disbursement of fisheries mitigation funds.

10 Additional Considerations

10.1 Additional mitigation strategies and FMP refinement

This section should describe any additional mitigation strategies not otherwise described herein that would improve the Plan and reduce impacts on the fishing community. In addition, describe how the FMP will be updated and refined based on additional information and stakeholder feedback.

- Vineyard Offshore is committed to ensuring that we employ measures that afford the highest levels of environmental protection while maintaining project viability. Throughout the Projects' multi-year permitting process, we will continue to assess potential risks to species as well as commercial and recreational fishermen and identify measures to avoid, minimize, or mitigate potential impacts in line with applicable permitting requirements as well as regional monitoring efforts. Stakeholder input as

well as lessons learned from Vineyard Wind 1 and other offshore wind projects will inform this effort.

- Vineyard Offshore will support collaborative research on potential mitigation strategies in coordination with other developers, agencies, and stakeholders.
- Vineyard Offshore will implement a Navigational Enhancement Plan that is designed with engagement from the F-TWG, fisheries organizations, and regulatory authorities.³

10.2 Process for updating the FMP

This section should describe how feedback from fisheries stakeholders, F-TWG, and other agencies and working groups will be incorporated and updated in the FMP.

- Vineyard Offshore will update the FMP to reflect the results of iterative exchanges with members of the F-TWG, E-TWG, working groups, agencies, and other relevant stakeholders.
- Vineyard Offshore will continue engaging with the F-TWG, fishermen, and fisheries organizations and use feedback from these discussions to evolve the FMP in the same way we use feedback to evolve our FCP.
- Vineyard Offshore will update the FMP in a timely manner that reflects changes made based on key regulatory project deliverable dates.
- Vineyard Offshore expects that additional guidance and information will become available throughout the planning and regulatory process and as such, will continue to consider its relevance to the FMP at the appropriate intervals.

³ This commitment is contingent upon Vineyard Offshore receiving information from NYSERDA on the precise nature and required components of the Navigational Enhancement Plan.