MAYFLOWER WIND

Appendix D1. Massachusetts Coastal Zone Management Act Consistency Certification – Falmouth

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MAYFLOWER WIND

Prepared for:
Mayflower Wind Energy LLC

Final Massachusetts Coastal Zone Management Act Consistency Certification – Falmouth POI

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Revision	Revision date	Details	Authorized	Name	Position
0	2/12/21	Submittal	Yes	Nancy Palmstrom	Project Manager
1	8/30/21	Revised to include updated Falmouth Project Design Envelope and in response to BOEM comments	Yes	Nancy Palmstrom	Project Manager

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Table of Contents

Tables

Figures (in Attachment 1)

Acronyms and Abbreviations

Abbreviation or Acronym	Definition
BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
CMR	Code of Massachusetts Regulations
COP	Construction and Operations Plan
CZMA	Coastal Zone Management Act
CZM	Massachusetts Office of Coastal Zone Management
DEP	Department of Environmental Protection
ECC	Export Cable Corridor
EEA	Massachusetts Executive Office of Energy and Environmental Affairs
ENF/EIR	Environmental Notification Form/Environmental Impact Report
ft	foot/feet
HDD	Horizontal Directional Drilling
ha	hectare
km	kilometer
kV	kilovolt
m	meter
Mayflower Wind	Mayflower Wind Energy LLC
MEPA	Massachusetts Environmental Policy Act
M.G.L.	Massachusetts General Laws
MHC	Massachusetts Historical Commission
mi	mile
nm	nautical mile
NRHP	National Register of Historic Places
O&M	Operations and Maintenance
OCS	Outer Continental Shelf
OMP	Ocean Management Plan
OSP	Offshore Substation Platform
POI	Point of Interconnection
ROW	Right of Way
SAV	Submerged Aquatic Vegetation
USC	United States Code
WPA	Wetlands Protection Act
WTG	Wind Turbine Generator

1.0 Introduction

Mayflower Wind Energy LLC (Mayflower Wind) proposes an offshore wind renewable energy generation project (the Project) located in federal waters off the southern coast of Massachusetts in the Outer Continental Shelf (OCS) Lease Area OCS-A 0521 (Lease Area). The Project will deliver electricity to the regionally administered transmission system via export cables with sea-to-shore transitions in Falmouth, Massachusetts, Portsmouth, Rhode Island (for overland crossing of Aquidneck Island), and Brayton Point in Somerset, Massachusetts as well as onshore transmission systems extending to the respective points of interconnection (POIs) in Massachusetts (Figure 1). This CZM Consistency Statement is specific to the Falmouth POI (Figure 2); the Brayton Point POI will be addressed in separate Statements for Massachusetts (Appendix D2) and Rhode Island (Appendix D3).

1.1 Project Objectives

The Project's objective is to provide Massachusetts, and the regional electricity grid, with clean, renewable wind energy in accordance with the Commonwealth of Massachusetts' Section 83C II of the Green Communities Act and Mayflower Wind's winning bid selected by the Electric Distribution Companies that serve Massachusetts customers. That bid was provided by Mayflower Wind in response to the 2019 Offshore Wind Energy Generation request for proposals ("Section 83C II RFP") and has now been memorialized in executed Power Purchase Agreements with the Electric Distribution Companies that were approved by to the Massachusetts Department of Public Utilities in November 2020.

There are several significant economic, environmental, and social benefits to offshore wind power, including the generation of electricity that does not emit air pollutants and that can replace other more environmentally costly forms of electricity generation. The Project is expected to help achieve mandatory Commonwealth environmental and clean/renewable energy goals, including by potentially eliminating at least 1.6 million metric tons of CO_2 emissions annually once in operation[1] — the equivalent of taking at least 347,968 cars off the road per year. These benefits also extend to coastal communities and to threatened and endangered species. The generation of clean renewable energy will reduce the need for greenhouse gas emitting electricity generation which will contribute to a reduction in the harmful effects of climate change such as sea level rise and ocean acidification both of which pose significant harm to the human and natural environment of the New England coastline. Additionally, the Project is expected to bring significant employment and other economic benefits to the south coast of Massachusetts and the region. It should be instrumental in creating a thriving, utility scale, domestic offshore wind industry.

In Energy Policy #2, a non-enforceable policy, of the Massachusetts Office of Coastal Zone Management (CZM) recognizes "energy conservation and renewable energy use are significant coastal management issues" and in turn "CZM strongly endorses efforts to conserve energy and to develop alternative sources of power."[2] The Project will produce a viable form of alternative energy for the Commonwealth and be a key addition to promoting the use of alternative energies in the region.

Specific environmental and socioeconomic benefits that the Project will provide include:

1. The Project is expected to be the Commonwealth's single greatest contributor to achieving the emissions reduction goals outlined in the 2008 Global Warming Solutions Act, the 2010 Clean Energy and Climate Plan for 2020 (updated in 2015), and the Massachusetts 2050 Decarbonization Plan[3] (released in December 2020), helping to achieve Massachusetts' Green House Gas targets for 2030, 2040, and 2050.
2. The Project is expected to bring significant employment and other economic benefits to Massachusetts, including creation of more than 14,310 full time equivalent jobs throughout the

[1] Daymark Energy Advisors. (2021). *Massachusetts 83C-III Benefits Report: Mayflower Wind Proposal A.* Prepared for Mayflower Wind Energy, LLC. (2021, September 16).
[2] Coastal Zone Management, Policy Guide, 35-36.
[3] Massachusetts 2050 Decarbonization Roadmap, published in December 2020 (Link: https://www.mass.gov/info-details/ma-decarbonization-roadmap)

Project lifecycle from both direct, indirect, and induced employment opportunities. From employment creation, it is estimated that $1.1 billion of gross earnings will be made in Massachusetts.[4]

3. The Project will collaborate with the Massachusetts Clean Energy Center to make investments that make Massachusetts a hub for offshore wind through ports and infrastructure improvements, innovative technologies and applied research, and workforce training and development. Under the Massachusetts Clean Energy Center's administration, these investments will build on the efforts of existing institutions, including the Massachusetts Research Partnership in Offshore Wind, as well as workforce development programs, such as those with Bristol Community College and the Massachusetts Maritime Academy, to train and equip the Massachusetts offshore wind workforce.

1.2 Regulatory Applicability

In compliance with the Federal Coastal Zone Management Act (CZMA, 16 United States Code [USC] 1451 et seq.), Mayflower Wind has prepared this consistency certification for the Bureau of Ocean Energy Management (BOEM) to demonstrate compliance with the provisions identified as enforceable by the coastal zone management policies of the Commonwealth of Massachusetts.[5] Federal Consistency Regulations (15 Code of Federal Regulations [CFR] 930.00) require all Federal Actions that involve reasonably foreseeable effects on any land or water use or natural resource of a state's coastal zone to be consistent with all enforceable policies of the state's Coastal Zone Management Program. Federal Actions include the permitting of actions by private entities. This Project involves the installation of energy facilities on the OCS and therefore meets the definition of a Coastal Energy Activity under the CZMA (16 USC 1453 (5)(i)). The Project will require approval of the Construction and Operations Plan (COP) by BOEM and, subsequently, a Record of Decision issued by BOEM under the National Environmental Policy Act in response to a Final Environmental Impact Statement, and a permit from the United States Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899.

Within Massachusetts, the CZMA is administered within the coastal zone by the Massachusetts Office of CZM within the Executive Office of Energy and Environmental Affairs (EEA). The Ocean Act of 2008 required MA Executive Office of Energy and Environmental Affairs (EEA) to develop a comprehensive Ocean Management Plan. The first OMP was finalized in 2009 which was subsequently revised in 2015. OMP outlines a comprehensive approach to manage ocean and coastal resources that can be implemented through existing state programs and regulations. The plan also informs siting priorities, locations, and standards for allowed uses, facilities and activities. The management is based on an approach that directs new development away from special, sensitive, or unique (SSU) resources, and areas important for water dependent uses that are identified and mapped in the planning process.[6][1] The 12 important SSUs that are foundation of OMP include: north Atlantic right whale core habitat, Humpback Whale core habitat, Fin whale core habitat, Roseate Tern core habitat, special concern (Arctic, least, and common) Tern core habitat, Sea Duck core habitat, Leach's Storm-Petrel important nesting habitat, Colonial Waterbirds important nesting habitat, hard/complex seafloor, eelgrass, intertidal flats, and important fish resources.

In Massachusetts, the Coastal Zone includes the lands and waters within an area defined by the seaward limit of the state's territorial sea, extending from the Massachusetts-New Hampshire border south to the Massachusetts-Rhode Island border, and landward to 100 feet (ft) (30 meters [m]) inland of specified major roads, rail lines, other visible rights-of-way, or in the absence of these, at the coordinates specified by CZM. The Massachusetts Coastal Zone includes all of Cape Cod, Nantucket, Martha's Vineyard, and the Elizabeth Islands. Project facilities to be located within the coastal zone, and thus within the jurisdiction of the CZM, include the offshore export cables within State waters, associated landfall location(s), onshore underground export cables, onshore substation, and alternate underground transmission cables (Figure 1).

[4] BVG Associates. (BVGA). (2021). *Economic Benefits. A Technical Report to Support Mayflower Wind's Bid for Long-Term Contracts for Offshore Wind Energy Projects.* (2021, August).

[5] Massachusetts Office of Coastal Zone Management. 2011. Policy Guide, October 2011. Executive Office of Energy and Environmental Affairs. Boston, MA. Available URL: https://www.mass.gov/files/documents/2016/08/qc/czm-policy-guide-october2011.pdf [Accessed July 28, 2020].

[6] Massachusetts Ocean Management Plan (2015). Volume 1: Management and Administration.

https://www.mass.gov/files/documents/2016/08/ua/2015-ocean-plan-v1-complete-low-res.pdf

1.3 Necessary Data and Information

In addition to the enforceable policies of the Commonwealth of Massachusetts identified and addressed in Section 3.0 of this report, the Commonwealth considers certain background information on a proposed project in their decision-making process.[7] This background and general Project information is summarized in this document and is described in detail within the COP developed by Mayflower Wind and submitted to the BOEM. Table 1-1 below provides details on the required information outlined within the CZM Policy Guide, dated October 2011, and where that information can be found within this document as well as the COP.

This document is intended to provide background information on portions of the Project relevant to the CZM to ensure consistency with all applicable regulations. Applicable review procedures are set forth at 301 Code of Massachusetts Regulations (CMR) 21.07 (see 301 CMR 21.04(2)).

Table 1-1. Necessary Data and Information

Project Information	Reference Section or Description
The name and location of the project	Mayflower Wind Energy LLC; OCS Lease Area OCS-A 0521
A narrative summary of the project in clear, nontechnical language	CZMA Consistency Certification Section 2.0 – Project Information COP Section 1.1 – Project Overview
The EEA Massachusetts Environmental Policy Act (MEPA) number, if applicable	To be filed; MEPA Environmental Notification Form/Environmental Impact Report (ENF/EIR) not yet filed
A detailed description and analysis of the nature, location, type, size, proposed use, and anticipated lifespan of the project illustrated with map(s) and site plan(s)	CZMA Consistency Certification Section 2.0 – Project Description (summary) COP Section 3.0 – Description of Proposed Activities
A detailed description and analysis of the project objectives and anticipated benefits	CZMA Consistency Certification Section 1.1 – Project Objectives COP Section 1.3 – Purpose and Need
A detailed description of the physical, biological, chemical, economic, and social conditions of the project site, surroundings, and affected environment, including resource area delineations, illustrated with map(s) and site plan(s) depicting both existing and proposed conditions	COP Section 4.0 – Site Geology and Environmental Conditions COP Section 5.0 – Physical Resources COP Section 6.0 – Biological Resources COP Section 7.0 – Cultural Resources COP Section 10.0 – Socioeconomic Resources
A timetable, approximate cost, and the methods and timing of construction and operation of the project (including types of equipment, temporary impacts associated with construction, monitoring and maintenance plans, proposed reporting schedule)	COP Section 3.2 – Proposed Project Schedule COP Section 3.3 – Project Components and Project Stages COP Section 3.4 – Summary of Impact-Producing Factors
A detailed description and assessment of the negative and positive potential coastal effects of the project including direct and indirect resource and use impacts from all aspects of the project, short-term and long-term impacts for all phases of the project (e.g., acquisition, development, construction, and operation), and cumulative impacts of the project	CZMA Consistency Certification Section 3.0– Massachusetts Coastal Program Policies COP Section 5.1 Air Quality COP Section 5.2 Water Quality COP Section 6.1 Coastal and Marine Birds COP Section 6.2 Bats COP Section 6.3 Terrestrial Vegetation and Wildlife COP Section 6.4 Wetlands and Waterbodies COP Section 6.5 Coastal Habitats COP Section 6.6 Benthic and Shellfish

[7] Ibid., 11-12.

Project Information	Reference Section or Description
	COP Section 6.7 Finfish and Invertebrates COP Section 6.8 Marine Mammals COP Section 6.9 Sea Turtles COP Section 7.1 Marine Archaeology COP Section 7.2 Terrestrial Archaeology COP Section 7.3 Above-Ground Historic Properties
A detailed description of alternatives considered, analysis of the impacts on the resource areas, and explanation and justification as to why the preferred alternative was selected	COP Section 2.0 – Project Siting and Design Development
A description detailing any changes made to the project during MEPA review, if applicable	To be filed; ENF/EIR not yet filed
A description of measures taken to avoid, minimize, and mitigate adverse coastal effects and a description of how the project meets performance standards under the applicable regulations.	CZMA Consistency Certification Section 3.0– Massachusetts Coastal Program Policies Avoidance, Minimization and Mitigation Measures in the following COP Sections: COP Section 5.1 Air Quality COP Section 5.2 Water Quality COP Section 6.1 Coastal and Marine Birds COP Section 6.2 Bats COP Section 6.3 Terrestrial Vegetation and Wildlife COP Section 6.4 Wetlands and Waterbodies COP Section 6.5 Coastal Habitats COP Section 6.6 Benthic and Shellfish COP Section 6.7 Finfish and Invertebrates COP Section 6.8 Marine Mammals COP Section 6.9 Sea Turtles COP Section 7.1 Marine Archaeology COP Section 7.2 Terrestrial Archaeology COP Section 7.3 Above-Ground Historic Properties For a summary: COP Section 16.0 – Summary of Avoidance, Minimization, and Mitigation Measures
Permit applications	Filed/To be filed; Federal (COP filed Q1 2021) and State (MA Energy Facilities Siting Board for Falmouth POI) filing anticipated for submittal in Q4 2021. Chapter 91 and Water Quality Cert. applications will be filed after MEPA review process in Q3 2022 (2 weeks after Final EIR).
Final Environmental Impact Report	To be filed; ENF/EIR not yet filed. Anticipated Q4 2021.

2.0 Project Information

2.1 Project Timeline

The Project is currently in the planning and engineering design stages. For more details on the Project timeline please see the COP Section 3.2 – Proposed Project Schedule. The Project will be operational for approximately 30 years, after which time the Project will be decommissioned as per requirements in 30 CFR 585.906-910. Over the 30-year lifespan of the Project, there will be ongoing remote monitoring and maintenance of the offshore and onshore Project facilities.

2.2 Project Overview

The Mayflower Wind Project includes a Lease Area located south of Martha's Vineyard and Nantucket (Figure 1). Wind turbine generators (WTGs) constructed within the Lease Area will deliver power via inter-array cables to the offshore substation platform(s) (OSPs). The WTG/OSP positions have been established based on a 1 x 1 nautical mile (nm) (1.9 x 1.9 kilometer [km]) grid oriented along the cardinal directions to maintain a uniform spacing of WTGs across all the lease areas within the Massachusetts/Rhode Island Wind Energy Area. Submarine offshore export cable(s) will be installed within offshore export cable corridors (ECCs) to carry the electricity from the OSPs within the Lease Area in federal waters to the onshore transmission systems via two different ECCs. As noted in Section 1, this Consistency Statement is specific to the Falmouth POI. Therefore, the balance of the Project description is specific to the Falmouth ECC and Falmouth Onshore Project Area.

The proposed Falmouth ECC will extend from the Lease Area and enter Massachusetts state waters south of Nantucket Island and Martha's Vineyard, and pass through Muskeget Channel into Nantucket Sound, remaining in Massachusetts state waters. The offshore export cables will make landfall via horizontal directional drilling (HDD). Potential landing location(s) for the Falmouth ECC include Shore Street, Central Park, or Worcester Avenue in Falmouth, Massachusetts.

The underground onshore export cables will extend from the landfall location(s) to an onshore substation and will be installed within existing paved roadways and shoulder and within a municipal grassy median strip for the Worcester Avenue HDD transition vault (Figure 3). The new onshore substation will step up the voltage to 345 kilovolts (kV) to enable connection to either an overhead transmission line (preferred) or an underground transmission route (alternate). The selected landfall location will determine the route of the underground onshore export cables between the landfall and the new onshore substation. The proposed Falmouth POI to the regional transmission system is an existing switching station (Falmouth Tap). Mayflower Wind anticipates that upgrades to Falmouth Tap will be undertaken by Eversource, as part of a larger reliability project, which is independent of the Mayflower Wind Project. The overhead transmission line will be designed, permitted, and built by Eversource to provide interconnection at Falmouth Tap. The alternate underground transmission route would be constructed within local roadway and/or shoulder extending from the onshore substation to the POI at or near Falmouth Tap (Figure 3).

For the purposes of this assessment, the Offshore Project Area includes the Falmouth ECC, and the HDD at the landfall location(s). The Falmouth Onshore Project Area includes the landing(s), underground onshore export cables, onshore substation, alternate underground transmission route and POI at the Falmouth Tap switching station.

2.3 Specific Project Details

Each primary Project component is briefly described below in Table 2-1. Additional details may be found in the COP Section 3.0 – Description of Proposed Activities.

Table 2-1. Key Project Details

Project Attribute	Description
Lease Area Size	127,388 acres (51,552 hectares [ha])
Layout and Project Size	Up to 149 WTG/OSP positions Up to 147 WTGs Up to 5 OSPs
WTGs	Rotor diameter: 721.7 – 918.6 ft (220.0 – 280.0 m) Blade length of 351.0 – 452.8 ft (107.0 – 138.0 m) Hub height above Mean Lower Low Water: 418.7 – 605.1 ft (127.6 – 184.4 m)
OSP(s)	Top of topside height above Mean Lower Low Water: 160.8 – 344.5 ft (49.0 – 105.0 m)
WTG/OSP Substructures	Monopile, piled jacket, suction-bucket jacket, and/or gravity-based structure Seabed penetration: 0 – 295.3 ft (0 – 90.0 m) Scour protection for up to all positions
Inter-Array Cables	Nominal inter-array cable voltage: 60 kV to 72.5 kV Length of inter-array cables beneath seafloor: 124.3 – 497.1 miles (mi) (200 – 800 km) Target burial depth (below level seabed): 3.2 – 8.2 ft (1 – 2.5 m)
Landfall Location(s)	Three locations under consideration: Worcester Avenue (preferred), Shore Street, and Central Park
Offshore Export Cables	Anticipated Cable Type: HVAC Number of export cables: up to 5 Nominal export cable voltage: 200 – 345 kV Corridor width: up to 3,208.8 ft (1,000 m) (may be locally narrower or wider in sensitive or constrained areas, including landfalls) Length per export cable beneath seabed: 51.6 – 87.0 mi (83 – 140 km) Cable crossings: up to 9 Target burial depth (below level seabed): 3.2 – 13.1 ft (1 – 4 m)
Onshore Export Cables	HVAC; Nominal underground onshore export cable voltage: 200 – 345 kV Up to 12 onshore export power cables and up to five communications cables Length: Up to 6.4 mi (10.3 km)
Onshore Substation	Type: Step up 275-kV to 345-kV; Air-insulated substation (AIS) or gas-insulated substation (GIS) Location: Two locations under consideration: Lawrence Lynch (preferred), and Cape Cod Aggregates (alternate) Area: Up to 26 acres (10.5 ha)

Project Attribute	Description
Transmission from Onshore Substation to the POI	New, 345-kV overhead transmissions line along existing utility right of way (ROW) (preferred) (to be designed, permitted, and built by Eversource) Up to 5.1 mi (8.2 km) in length New, 345-kV underground transmission route (alternate) Up to 2.1 mi (3.4 km) in length
POI	Falmouth Tap (new or upgraded switching station to be designed, permitted, and built by Eversource)

2.4 Alternatives Considered

Mayflower Wind has considered numerous alternatives for various Project elements associated with the offshore and onshore Project development. COP Section 2.0 – Project Siting and Design Development provides a discussion of alternatives considered. Alternatives relevant to the CZMA consistency determination are summarized below.

2.4.1 Offshore Export Cable Routing

Numerous technical and environmental considerations and constraints have factored into determining the location of the Falmouth ECC, including:

- Water depths greater than 20 feet (6.1 m) are most suitable for accommodating the cable laying vessels that are likely to be utilized for the Project, and are preferable along the majority of the offshore corridor;
- Minimizing cable length is critical for reducing transmission losses and avoiding higher costs;
- The corridor should consider the presence of other existing offshore cables and/or pipelines, or intended location of planned future cables and/or pipelines, in order to mitigate (if possible) or carefully manage the risks associated with installing and maintaining cables in proximity to other infrastructure;
- The route should be perpendicular, or nearly perpendicular, to any large seabed slopes, and likewise across any existing offshore cables and/or pipelines (or planned future offshore cables and/or pipelines);
- The corridor should avoid or minimize impacts to Special, Sensitive, or Unique (SSU) natural resource areas, including North Atlantic Right Whale Habitat, hard/complex bottom, and eelgrass; and
- Anchorage areas and areas with mapped shipwrecks and boulders are to be avoided or minimized.

Geologic and sea floor conditions existing within the Offshore Project Area influenced the siting and selection of the Falmouth ECC. Figure 4 in Attachment 1 illustrates the Massachusetts Ocean Management Plan (OMP) Areas of Concern, Areas to Avoid, and Preliminary Transmission Cable Routes within the Massachusetts Coastal Zone. Hard or complex seabed conditions, steep slopes, ledges, extensive shallow water areas, as well as mobile seabeds will be avoided to the extent practicable (see Figure 5 in Attachment 1). Attachment 1 Figure 6 shows Shellfish Suitability Areas. While many of these physical conditions can be avoided through routing, mobile seabeds pose the threat of altering the cable burial depth which could risk burying the cables to an unsustainable depth or exposing the cables to potential harm from an insufficient cable burial depth. Areas of mobile seabed were identified through site surveys and were avoided wherever practicable.

Mayflower Wind intends to maintain an ECC width between approximately 2,625 ft (800.0 m) and 3,281 ft (1,000.0 m) to allow for maneuverability during installation and maintenance. The ECC may be locally

narrower or wider to accommodate sensitive locations, to provide sufficient area for anchoring, and/or at anticipated cable crossing locations.

Numerous export cable corridors were considered in Project development, including five specific to the Falmouth POI. Three ECC options were originally retained for further assessment, including eastern, western, and central export cable corridor options through Muskeget Channel, as shown on Figure 2 in Attachment 1. The three route options retained for evaluation, the western, central, and eastern options, are described below. All three of the ECC options are co-located for a large portion of the total ECC length, differing only in route through Muskeget Channel. Results from the 2020 geophysical and geotechnical (G&G) survey as well as results of a benthic survey program were used to evaluate the offshore route segments associated with a POI at Falmouth Tap. In 2021, additional G&G surveys are being conducted along the selected, western, ECC. The eastern and central route options were eliminated from consideration in the PDE.

Based on the analysis of the ECC options, the western option was the selected route corridor for reaching the potential landfall location(s) because it will minimize technical risks and minimizes cumulative impacts to sensitive/protected habitats of the Mayflower Wind and Vineyard Wind projects. Specific advantages of the western ECC include:

- Fewer areas of high risk related to extremely shallow water depths than the other options.
- Greater length of ECC proximate to or co-located with the Vineyard Wind cables, which may reduce the cumulative impact area of both projects.
- Shortest of the three options assessed.

2.4.1.1 Western Offshore Export Cable Corridor

The western option diverges from the common ECC from the Lease Area approximately 8 km south of the entrance to Muskeget Channel within federal waters. This ECC is located the farthest westward within Muskeget Channel, closest to Martha's Vineyard. The western ECC rejoins the common ECC north of the exit from Muskeget Channel. A portion of the western option is partially co-located in parallel with a planned export cable corridor for Vineyard Wind OCS-A-0501 and OCS-A 0534 Lease Area developments, which would provide the benefit of reducing the cumulative impact area of both projects. The western ECC is expected to cross the Vineyard Wind project export cable corridor south of Muskeget Channel. Up to six separate cables may be crossed depending on installation timing and as-installed locations of each respective project.

The western option through Muskeget Channel has been selected as the preferred offshore ECC route.

2.4.1.2 Central Offshore Export Cable Corridor

The central and eastern ECC options share a common ECC entering Muskeget Channel, and rejoin prior to exiting the Channel. The central option is located in between the eastern and western options within Muskeget channel, east of the western ECC and Martha's Vineyard. The central ECC enters Muskeget Channel close to Nantucket, and then turns westward to before turning north passing through the central portion of Muskeget Channel. The central option reenters federal waters, after passing through Muskeget Channel within Nantucket Sound.

A small portion of the central ECC option is partially co-located in parallel with a planned export cable corridor for Vineyard Wind OCS-A-0501 and OCS-A 0534 Lease Area developments. The common central-eastern ECC is expected to cross the Vineyard Wind project export cable corridor north of Muskeget Channel. Up to six separate cables may be crossed depending on installation timing and as-installed locations of each respective project.

2.4.1.3 Eastern Offshore Export Cable Corridor

The eastern ECC option includes a short segment located to the east of the central option within Muskeget Channel, farther eastward from Martha's Vineyard and closer to Nantucket. The eastern option continues north from the common ECC it shares with central option through Muskeget Channel, at a point where the

central route diverges to the west before a turn northward through the Channel. This deviation from the central route results in a slightly shorter total ECC length compared to the central option.

The eastern option generally avoids overlap with a planned ECC for Vineyard Wind OCS-A-0501 and OCS-A 0534 Lease Area developments, except at the necessary cable crossing locations. The common central-eastern ECC is expected to cross the Vineyard Wind project export cable corridor north of Muskeget Channel. Up to six separate cables may be crossed, depending on installation timing and as-installed locations of each respective project.

2.4.2 Alternate Landfall Location(s)

There are three landfall points being considered in the town of Falmouth (See Figure 7 in Attachment 1). These landfall locations include:

1. Shore Street at its intersection with Surf Drive (Figure 8 in Attachment 1);
2. Central Park north of Grand Street (Figure 9 in Attachment 1); and
3. Worcester Avenue near its intersection with Grand Avenue (in Worcester Park) (Figure 10in Attachment 1).

The estimated locations of sensitive coastal habitats in the nearshore areas of the three Falmouth landfall locations under consideration are shown in Figure 7. The Worcester Avenue landfall location in Falmouth, MA, near the intersection of Worcester Avenue with Grand Avenue (in Worcester Park), is the preferred landfall as the area is protected by a short seawall, a broad beach, and Grand Avenue. The main appeal of this location is the large grassy median strip, or common, that runs between the two lanes of Worcester Avenue and is surrounded by businesses and residences on either side. This area has only a slight elevation making it a prime candidate for an HDD landfall as well as being unlikely to be impacted by a typical storm event. Stakeholder engagement will be critical at this location as the area is home to a popular road race as well as hotels and inns. There are no known existing submarine cables that make landfall at Worcester Avenue and this landfall would avoid the need to cross any of the existing submarine cables between Martha's Vineyard and Falmouth. The grassy median strip would require re-landscaping after installation but would not require re-paving or any intensive repair following the installation of the cables (see Figure 10 in Attachment 1).

Selection of the preferred landfall location(s), as well as the HDD landfall installation method, were important considerations in preventing impacts to coastal areas. All locations were evaluated for their potential effects on coastal and nearshore environments including coastal, beaches, and coastal dunes= (see Figure 8 through Figure 10 in Attachment 1). Using an HDD landfall method will prevent or avoid excessive impacts to nearshore resources such as SAV and eelgrass beds that would be otherwise impacted with an open trench installation. This method will also reduce impacts to public access to coastal areas as the installation will take place beneath the coastal beach and intertidal area at Falmouth Heights Beach.

Another factor considered in the selection of the preferred landfall location is its effect on the onshore route. The landfall point will be the beginning of the onshore transmission route in Falmouth and the preferred landfall location at the intersection of Worcester Avenue and Grand Avenue will ensure that the cable route will be able to be located within and beneath existing roadways to the substation facility. This will limit disturbances to natural areas along the Project onshore route.

2.4.3 Potential Onshore Substation Locations

The two locations being examined are in close proximity to the POI (Falmouth Tap) determined preliminarily by ISO-NE. The final location of the onshore substation will determine the ultimate lengths of the underground onshore export cables and alternate underground transmission route. The current preferred site for the onshore substation is Lawrence Lynch. This site consists predominantly of disturbed land (see Figure 3 in Attachment 1). Cape Cod Aggregates is also largely disturbed bare land with low vegetations along the margins (see Figure 3 in Attachment 1). For more information on potential substation locations, please see COP Section 3.3 – Project Components and Project Stages.

2.4.4 Onshore Export Cable Routing

Mayflower Wind evaluated a number of onshore export cable routes between the landing location options and the preferred and alternate substation locations. The ultimate landfall selection will determine the route of the underground onshore export cables between the landfall and the new onshore substation. The preferred and several alternate routes under consideration are shown in Figure 3 in Attachment 1. Underground onshore export cables will primarily be installed within roadways and/or the roadway layout. The exception to this is a 0.4 mi (0.6 km) segment of the underground route that would be constructed within a grassy media strip known as Worcester Park, prior to joining Worcester Court. Mayflower Wind expects that tree clearing can be largely avoided, however, there may be a few tree removals required to accommodate this installation. The disturbed park areas would be restored after construction.

2.4.5 Transmission Alternatives

The preferred interconnection transmission, an overhead transmission circuit line would be designed, permitted and constructed within the existing utility ROW by the transmission system owner, Eversource, and will extend approximately 5 mi (8 km) from the preferred substation location (Lawrence Lynch) to the Falmouth Tap POI.

The alternate underground transmission route would be built by Mayflower Wind within the paved roadway or shoulder of several local Falmouth roads (Thomas B Landers Road, Geggatt Road and Turner Road) (See Figure 3 in Attachment 1). The cables would be installed within duct banks in a covered trench starting at the substation and terminating at the POI (Falmouth Tap).

2.5 Affected Environment

Mayflower Wind has conducted and is conducting terrestrial and marine surveys as well as desktop studies to determine the potentially affected resources within the Offshore Project Area. Marine surveys have included benthic infaunal sea floor habitat field studies along the offshore export cable corridors and an eelgrass survey at the landfall locations. In addition to field surveys, a number of desktop studies (shellfish, Essential Fish Habitat) have also been completed to further characterize sensitive resources in the Offshore Project Area. These surveys and studies were used to evaluate and select a preferred Falmouth export cable corridor which is feasible and minimizes impacts to sensitive resources.

Terrestrial surveys will include wetland delineations for both federal- and state-regulated wetlands, waterways, and waterbodies. Resource area delineations will also include coastal wetland resource areas including State Wetlands Protection Act-regulated Land Under the Ocean, Coastal Beach, Coastal Dune, Coastal Bank, and Land Subject to Coastal Storm Flowage. Inland resource area delineations will include areas of Bank, Bordering Vegetated Wetlands, Land Under Waterbodies and Waterways, Land Subject to Flooding, Riverfront Areas, and Vernal Pools. Mayflower Wind completed a desktop analysis of the onshore Project activities on Terrestrial Vegetation and Wildlife, including wetlands (see COP Appendix J, Terrestrial Vegetation and Wildlife Assessment).

Terrestrial areas affected by the Project primarily consist of previously disturbed and/or developed areas within the coastal zone. An effort was made by Mayflower Wind to concentrate on the installation of the underground onshore export cables or alternate underground transmission route within pre-disturbed areas, including existing roadways.

2.6 Potential Project Impacts

Potential Project-related impacts to coastal areas of Massachusetts may be caused by the installation of WTGs, the installation of OSPs, the installation of the offshore export cables as well as landfall of the export cables, installation of the underground onshore export cables, or underground transmission route, and the onshore substation facilities. A discussion of Project-related impacts can be found in the COP within the sections identified below:

- COP Section 5.1 – Air Quality

- COP Section 5.2 – Water Quality
- COP Section 6.1 – Coastal and Marine Birds
- COP Section 6.2 – Bats
- COP Section 6.3 – Terrestrial Vegetation and Wildlife
- COP Section 6.4 – Wetlands and Waterbodies
- COP Section 6.5 – Coastal Habitats
- COP Section 6.6 – Benthic and Shellfish
- COP Section 6.7 – Finfish and Invertebrates
- COP Section 6.8 – Marine Mammals
- COP Section 6.9 – Sea Turtles
- COP Section 7.1 – Marine Archaeology
- COP Section 7.2 – Terrestrial Archaeology
- COP Section 7.3 – Above-Ground Historic Properties
- COP Section 8.0 – Visual Resources
- COP Section 9.1 – In-Air Acoustics
- COP Section 9.2 – Underwater Acoustic Environment
- COP Section 10.1 – Demographics, Employment, and Economics
- COP Section 10.2 – Environmental Justice and Minority and Lower Income Groups
- COP Section 10.3 – Recreation and Tourism
- COP Section 11.0 – Commercial and Recreational Fisheries and Fishing Activity
- COP Section 12.0 – Zoning and Land Use
- COP Section 13.0 – Navigation and Vessel Traffic
- COP Section 14.0 – Other Marine Uses

Portions of the Project that will have the most potential for coastal impacts to the Commonwealth of Massachusetts will be the routing and burial of the offshore export cables as well as landfall of the offshore export cables.

2.7 Avoidance, Minimization, and Mitigation Measures

Through design and planning, construction-related impacts to the coastal environment will be minimized to the greatest extent practicable. Many of the remaining Project-related impacts will be isolated or temporary in nature. Temporary impacts to the coastal and nearshore area will include the installation of the export cables as well as facilities at the landfall location(s). The COP provides additional details on avoidance, minimization, and mitigation measures for specific resources. They are summarized in COP Section 16.0 – Summary of Avoidance, Minimization, and Mitigation Measures of Potential Impacts and discussed in these COP sections:

- COP Section 5.1 – Air Quality
- COP Section 5.2 – Water Quality
- COP Section 6.1 – Coastal and Marine Birds
- COP Section 6.2 – Bats
- COP Section 6.3 – Terrestrial Vegetation and Wildlife
- COP Section 6.4 – Wetlands and Waterbodies

- COP Section 6.5 – Coastal Habitats
- COP Section 6.6 – Benthic and Shellfish
- COP Section 6.7 – Finfish and Invertebrates
- COP Section 6.8 – Marine Mammals
- COP Section 6.9 – Sea Turtles
- COP Section 7.1 – Marine Archaeology
- COP Section 7.2 – Terrestrial Archaeology
- COP Section 7.3 – Above-Ground Historic Properties
- COP Section 8.0 – Visual Resources
- COP Section 9.1 – In-Air Acoustics
- COP Section 9.2 – Underwater Acoustic Environment
- COP Section 10.1 – Demographics, Employment, and Economics
- COP Section 10.2 – Environmental Justice and Minority and Lower Income Groups
- COP Section 10.3 – Recreation and Tourism
- COP Section 11.0 – Commercial and Recreational Fisheries and Fishing Activity
- COP Section 12.0 – Zoning and Land Use
- COP Section 13.0 – Navigation and Vessel Traffic
- COP Section 14.0 – Other Marine Uses

3.0 Massachusetts Coastal Program Policies

Table 3-1 details the exact enforceable policies of the Commonwealth of Massachusetts that relate to the Project, as well as a detailed analysis and description of how the Project, as proposed, is fully consistent with each of these policies and their underlying authorities. The enforceable policies and guidelines are found in the CZM Policy Guide published October 2011. Enforceable policies will be discussed, and therefore, growth management policies, which contain no enforceable policies, are omitted. The Legal Authority for these enforceable policies is detailed in Appendix 3 – Coastal Program Legal Authorities to the policy guide.

Table 3-1. Enforceable Policies of the CZM

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
Coastal Hazards			
Coastal Hazard Policy #1 (Enforceable)	Preserve, protect, restore, and enhance the beneficial functions of storm damage prevention and flood control provided by natural coastal landforms, such as dunes, beaches, barrier beaches, coastal banks, land subject to coastal storm flowage, salt marshes, and land under the ocean. (CZM, 2011 pp 19-25)	This policy protects natural areas of the Massachusetts coastline that serve valuable functions as flood and storm control features. Mayflower Wind will comply with this policy by utilizing construction techniques and placing the export cable landfall in an area where these natural ecosystem functions and landforms will not be altered. Offshore: Installation of the export cables in nearshore and offshore areas will affect Land Under the Ocean as defined in the Massachusetts Wetlands Protection Act (WPA; Massachusetts General Laws [M.G.L.] Chapter 131 Section 40) and implementing regulations (310 CMR 10.00). The minor changes to the seabed associated with the burial of the cables are not anticipated to significantly affect the storm damage prevention and flood control functions of Land Under the Ocean, nor is the more significant dredging that may be required in areas of highly mobile sediments as these areas are already subject to frequent and significant natural seabed disturbances from storms. Landfall: To avoid impacts to nearshore areas and other coastal landforms, Mayflower Wind will utilize an HDD method for the cable landfall, which is a trenchless installation method that will allow the Project to avoid directly impacting sensitive coastline areas (see Massachusetts Department of Environmental Protection [DEP] wetlands in Figure 7 through Figure 10 in Attachment 1). An HDD landfall method would allow for the export cables to make landfall through a horizontal tunnel bored several meters underneath these nearshore areas and coastline features. The horizontal tunnel boring will be completed by a drill rig set up on shore within previously disturbed land, with the drill exiting on the seafloor in Nantucket Sound several thousand feet from shore, where the direct burial of the export cables through State waters would end and the cables would be pulled to shore through the HDD borehole. Onshore: The preferred landing location for the Falmouth ECC will make landfall within a developed area near the intersection of Worcester Avenue and Grand Avenue within Worcester Park. This location was chosen for the export cable landfall because it contains a seawall, a major secondary roadway and an open grassy area between lanes of Worcester Avenue (see Figure 10 in Attachment 1). Choosing this location will control or eliminate the damage to coastal areas that assist in flood control and storm damage prevention. If the preferred landfall location is used, there will be no impacts to Coastal Dune, Coastal Beach, or Coastal Bank, as defined in the Massachusetts WPA. Following completion of onshore construction, restoration of the HDD landfall location and installation of the underground onshore export cables, the Project will have no effect on flood velocities or floodplain storage capacity, and therefore no permanent impacts to Land Subject to Flooding or Land Subject to Coastal Storm Flowage would result as all Project facilities will be below the ground surface and all pre-construction grades and contours will be restored.	COP Section 6.3 - Terrestrial Vegetation and Wildlife 6.3.1 – Affected Environment 6.3.1.1 – Terrestrial Habitats 6.3.1.1.1 - Falmouth Landfall Location 6.3.1.1.2 – Falmouth Onshore Export Cable Route/Transmission Line 6.3.1.2 – Terrestrial Wildlife and Plants 6.3.2 – Potential Effects 6.3.2.1 – Ground Disturbance 6.3.2.5 – Operation of Equipment and Heavy Machinery COP Section 6.4 – Wetlands and Waterbodies 6.4.1 - Affected Environment 6.4.1.1 – Wetlands 6.4.1.2 - Streams and Ponds 6.4.2 - Potential Effects 6.4.2.1 – Ground Disturbance COP Section 6.5 – Coastal Habitats 6.5.1 – Affected Environment 6.5.1.1.1 – Seagrass 6.5.1.1.2 – Macroalgae 6.5.1.1.3 – Submerged Aquatic Vegetation Beds 6.5.2 – Potential Effects 6.5.2.1 – Seabed (or Ground) Disturbance COP Appendix J, Terrestrial Vegetation and Wildlife Assessment
Coastal Hazard Policy #2 (Enforceable)	Ensure that construction in water bodies and contiguous land areas will minimize interference with water circulation and sediment transport. Flood or erosion control projects must demonstrate no significant adverse effects on the project site or adjacent or downcoast areas. (CZM, 2011 pp 25-26)	The Project, as proposed, will not interfere with water circulation or pose a threat to the integrity of downcoast areas. Offshore: During installation of the export cables in State waters, some dredging of highly mobile sediments along the export cable route will likely be required to allow for adequate burial of the cables to ensure safe operation. Assessments have been completed to evaluate scour influence on built infrastructure (e.g., export cables) as well as plume dispersion impacts during construction (COP Appendix F1, Sediment Plume Impacts from Construction Activities and COP Appendix F2, Scour Potential Impacts from Operational Phase and Post-Construction Infrastructure). A	COP Section 4.1 – Site Geology 4.1.4 – Affected Environment 4.1.4.2 – Falmouth Offshore Export Cable Corridor 4.1.5 – Potential Effects 4.1.5.1 – Seabed Disturbance COP Section 6.4 – Wetlands and Waterbodies

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
		hydrodynamic model was development and the Project is not expected to interfere with ongoing sediment transport functions and patterns occurring along the export cable route, and sediment will continue to naturally accumulate or erode based on pre-existing patterns of sediment transport occurring in Nantucket Sound and elsewhere. Onshore: Mayflower Wind will be constructing onshore portions of the Project within previously disturbed or developed areas of Falmouth (see Figure 3 in Attachment 1). Once landfall is made, the onshore export cables will be installed within an underground duct bank buried beneath existing roadway and/or shoulder layouts.	6.4.1 - Affected Environment 6.4.1.1 – Wetlands 6.4.1.2 - Streams and Ponds 6.4.1.3 – Wetlands and Waterbodies in the Onshore Project Area 6.4.2 - Potential Effects 6.4.2.1 – Ground Disturbance COP Section 6.5 – Coastal Habitats 6.5.1 – Affected Environment 6.5.1.1.1 – Seagrass 6.5.1.1.2 – Macroalgae 6.5.1.1.3 – Submerged Aquatic Vegetation Beds 6.5.2 – Potential Effects 6.5.2.1 – Seabed (or Ground) Disturbance COP Appendix F1, Sediment Plume Impacts from Construction Activities COP Appendix F2, Scour Potential Impacts from Operational Phase and Post-Construction Infrastructure
Coastal Hazard Policy #3 (Enforceable)	Ensure that state and federally funded public works projects proposed for location within the coastal zone will: Not exacerbate existing hazards or damage natural buffers or other natural resources. Be reasonably safe from flood and erosion-related damage. Not promote growth and development in hazard-prone or buffer areas, especially in velocity zones and Areas of Critical Environmental Concern. Not be used on Coastal Barrier Resource Units for new or substantial reconstruction of structures in a manner inconsistent with the Coastal Barrier Resource/Improvement Acts. (CZM, 2011 pp 26-28)	There are no state or federally funded public works projects as a result of the proposed action.	Not applicable
Energy			
Energy Policy #1 (Enforceable)	For coastally dependent energy facilities, assess siting in alternative coastal locations. For non-coastally dependent energy facilities, assess siting in areas outside of the coastal zone. Weigh the environmental and safety impacts of locating proposed energy facilities at alternative sites. (CZM, 2011 pp 30-35)	The Project involves the installation of a commercial-scale array of offshore WTGs within an established federal lease area for wind energy generation, which will produce clean, renewable energy for the New England region, and fulfill the obligations of the 20-year Power Purchase Agreement between Mayflower Wind and six utilities within the New England area. Offshore: The Project is inherently coastally dependent. The federal lease areas were previously subject to an alternatives analysis by BOEM during establishment of the Massachusetts/Rhode Island Wind Energy Area, in which the Project is located. This analysis was conducted as a portion of the Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Rhode Island and Massachusetts: Environmental Assessment which received a Finding of No Significant Impact in May 2013. This Environmental Assessment included a prepared Consistency Determination pursuant to 15 CFR 930.36(a) sent to the Commonwealth of Massachusetts on August 20, 2012 for review. The Environmental Assessment provided all data and information required under 30 CFR 939.39 to support the Consistency Determination. BOEM determined that the activities described in the revised Environmental Assessment were consistent with	COP Section 2.0 – Project Siting and Design Development 2.1 – Offshore Facilities 2.1.6 – Offshore Export Cables 2.1.6.1 – Offshore Export Cable Corridors Selected for PDE 2.2 – Onshore Facilities 2.2.1 – Landfall Location 2.2.1.1 – Landfall Locations Selected for PDE 2.2.2 – Sea-to-Shore Transition 2.2.2.1 – Sea-to-Shore Transition Selected for PDE 2.2.3 – Onshore Export Cable Route 2.2.3.1 – Onshore Cable Routes Selected for PDE 2.2.4 – Onshore Substation

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
		the enforceable policies of the Massachusetts Coastal Zone Management Program. The Commonwealth of Massachusetts concurred with BOEM's determination on January 30, 2013.[8] To transmit electricity generated from the offshore WTG array to the onshore administered electrical grid, the shortest practicable path to shore will be utilized while considering engineering feasibility and environmental constraints and regulatory concerns. This path to transmit the generated electricity will naturally cross through the coastal areas of Massachusetts, and Mayflower Wind has assessed multiple alternative routes for the export cables, as well as potential landfall locations. The evaluation of these alternatives is detailed within the COP Section 2.0 – Project Siting and Design Development. Landfall and Onshore: The evaluation of multiple different landfall locations necessitated the evaluation of multiple onshore export cable routes with the coastal zone as well. Mayflower Wind also evaluated multiple different potential sites for the onshore substation facility. Mayflower Wind completed these efforts to site the Project in a way that would ensure minimal displacement of water dependent industries and minimize environmental impact to the extent practicable. Therefore, the Project is fully consistent with this CZM policy requiring the assessment of siting project facilities within alternative coastal locations.	2.2.4.1 – Onshore Substation Sites Selected for PDE COP Section 3.0 – Description of Proposed Activities 3.1 – Proposed Project Location 3.4 – Summary of Impact-Producing Factors 3.4.1 – Seabed (or Ground) Disturbance 3.4.1.1 – Offshore Export Cable and Inter-Array Cable Installation 3.4.1.1.1 – Seabed Disturbance – Seabed Preparation and Cable Burial 3.4.1.1.1.1 – Seabed Disturbance – Horizontal Directional Drilling
Habitat			
Habitat Policy #1 (Enforceable)	Protect coastal, estuarine, and marine habitats—including salt marshes, shellfish beds, SAV, dunes, beaches, barrier beaches, banks, salt ponds, eelgrass beds, tidal flats, rocky shores, bays, sounds, and other ocean habitats—and coastal freshwater streams, ponds, and wetlands to preserve critical wildlife habitat and other important functions and services including nutrient and sediment attenuation, wave and storm damage protection, and landform movement and processes. (CZM, 2011 pp 41-48)	Mayflower Wind has designed the Project to avoid impacts to ecologically sensitive areas to the maximum extent practicable, including nearshore coastal areas, natural shoreline areas, as well as saltwater and freshwater wetlands that are particularly sensitive to impacts. Figure 4 through Figure 6 in Attachment 1 show the Falmouth export cable corridor in relation to areas of concern or sensitive ocean habitat for consideration in siting transmission cables as mapped within the Massachusetts OMP. Figure 7 through Figure 10 in Attachment 1 show locations of coastal and marine habitats in the vicinity of the Falmouth ECC landfall locations. Selection of the preferred landfall location and use of HDD will avoid impacts to mapped coastal salt marshes, tidal flats, barrier beaches, salt ponds, bays and sounds, coastal beach, dunes, and rocky shores. Offshore: The Falmouth ECC is located entirely within areas designated as Land Under the Ocean by the Massachusetts WPA (M.G.L. Chapter 131 Section 40). These areas may also contain shellfish and SAV. The Falmouth ECC has been evaluated for technical feasibility and environmental considerations, such as the presence of hard bottom habitat, mapped shellfish suitability areas, and the amount of dredging required. The Falmouth ECC crosses some areas of mapped hard bottom and shellfish suitability areas (see Figure 5 and Figure 6 in Attachment 1). The Falmouth ECC is up to 3,280.8 ft (1,000 m) in width and is intended to allow maximum flexibility to refine siting to avoid sensitive habitats and resources. The Falmouth ECC width may be narrower or wider in certain locations to avoid known obstructions and/or to allow maximum flexibility to avoid critical features (e.g., complex hardbottom habitat) with micro-siting during installation. Not all sensitive habitat and resource areas can be avoided. Mayflower Wind has selected a preferred ECC to avoid impacts to these areas to the greatest extent practicable. Export cable installation will temporarily alter the seabed habitat, resulting in some effects associated with mortality and displacement during construction and some effects associated with recovery time from the areas affected by their placement. The northernmost portion of the Southern Falmouth export cable corridor and the Northern Falmouth export cable corridor were characterized by more heterogeneous, complex habitats. Disturbance of the benthic communities in these areas are expected to require a longer period (estimated one to three years) to recover[9] (COP Appendix M, Benthic and Shellfish Resources Characterization Report). Construction related impacts are expected to be temporary.	COP Section 6.4 – Wetlands and Waterbodies 6.4.1 - Affected Environment 6.4.1.1 – Wetlands 6.4.1.2 – Stream and Ponds 6.4.1.3 – Wetlands and Waterbodies in the Onshore Project Area 6.4.2 - Potential Effects 6.4.2.1 – Ground Disturbance 6.4.2.2 – Planned Discharges 6.4.2.3 – Accidental Events COP Section 6.5 – Coastal Habitats 6.5.1 – Affected Environment 6.5.1.1.1 – Seagrass 6.5.1.1.2 – Macroalgae 6.5.1.1.3 – Submerged Aquatic Vegetation Beds 6.5.2 – Potential Effects 6.5.2.1 – Seabed (or Ground) Disturbance 6.5.2.2 – Changes in Ambient Lighting 6.5.2.3 – Changes in Ambient EMF 6.5.2.4 – Actions that may Displace Biological Resources (Eelgrass and Macroalgae) 6.5.2.5 – Actions that may Cause Direct Injury or Death 6.5.2.6 – Planned Discharges 6.5.2.7 – Accidental Events COP Section 6.6 – Benthic and Shellfish 6.6.1 – Affected Environment 6.6.1.3 – Falmouth Export Cable Corridor

[8] U.S. Department of the Interior, Bureau of Ocean Energy Management (BOEM). May 2013. Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Rhode Island and Massachusetts, Revised Environmental Assessment. OCS EIS/EA BOEM 2013-1131

[9] Guarinello, M., D. Carey, and L.B. Read. 2017. Year 1 Report for 2016 Summer Post-Construction Surveys to Characterize Potential Impacts and Response of Hard Bottom Habitats to Anchor Placement at the Block Island Wind Farm (BIWF). INSPIRE Environmental prepared for Deepwater Wind Block Island LLC. May.

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
		Nearshore/Landfall: The Project will utilize an HDD method for the export cable landfall which will limit impacts to both nearshore areas as well as coastal landforms, including eelgrass beds, shellfish suitability areas, Coastal Beach, and Coastal Dune (see Figure 7 through Error! Reference source not found. in Attachment 1). Mayflower Wind has conducted surveys to identify and delineate areas of SAV, including eelgrass, at each of the Falmouth landfall locations (see COP Appendix K, Seagrass and Macroalgae Report). Based on the results of the 2020 survey, mapped eelgrass beds extend approximately 3,100 ft (945 m) from shore in some locations. Mayflower Wind anticipates that the use of HDD will avoid impacts to mapped eelgrass beds. This information was used in selection of the preferred landfall location and will be used in the design of the HDD. The location that has been chosen for the landfall is a highly developed area near the intersection of Worcester Avenue and Grand Avenue. The HDD construction method will avoid or significantly limit impacts to eelgrass beds, shellfish beds, SAV, dunes, beaches, tidal flats, and rocky shores. Onshore: Additionally, the onshore export cables will largely be installed in a duct bank within existing roadway and/or roadway layout from the landfall location to the onshore substation location – this will eliminate or greatly limit impacts to onshore coastal habitat areas to the maximum extent practicable.	6.6.1.6 – Benthic Seafloor Substrate Classifications 6.6.1.6.2 – Falmouth Export Cable Corridor – Southern Portion 6.6.1.6.3 – Falmouth Export Cable Corridor – Northern Portion 6.6.1.8 – Substrate and Biota – Integrated Habitat Classification 6.6.1.8.2 – Southern Falmouth Export Cable Corridor Stations 045, 046 and 047 6.6.1.8.3 – Northern Falmouth Export Cable Corridor Transect 005 6.6.2 – Potential Effects 6.6.2.1 – Introduced Sound into the Environment (in-Air or Underwater) 6.6.2.2 – Disturbance of Softbottom Habitat and Species 6.6.2.3 – Introduction of Novel Hardbottom Habitat 6.6.2.4 – Change in Ambient EMF 6.6.2.5 – Planned Discharges 6.6.2.6 – Accidental Events COP Appendix K, Seagrass and Macroalgae Report COP Appendix M, Benthic and Shellfish Resources Characterization Report
Habitat Policy #2 (Enforceable)	Advance the restoration of degraded or former habitats in coastal and marine areas. (CZM, 2011 pp 48-50)	The Project has been designed to avoid impacts to coastal and marine habitats to the maximum extent practicable, and those impacts that cannot be avoided will be mitigated for in accordance with applicable federal, state, and local regulations.	Not applicable
Ocean Resources			
Ocean Resources Policy #1 (Enforceable)	Support the development of sustainable aquaculture, both for commercial and enhancement (public shellfish stocking) purposes. Ensure that the review process regulating aquaculture facility sites (and access routes to those areas) protects significant ecological resources (salt marshes, dunes, beaches, barrier beaches, and salt ponds) and minimizes adverse effects on the coastal and marine environment and other water-dependent uses. (CZM, 2011 pp 50-53)	The Project is not an aquaculture development, nor will it adversely affect any current aquaculture facilities or local shellfishing areas. As detailed in the COP Section 11.0 – Commercial and Recreational Fisheries and Fishing Activity, commercial and recreational fishing areas will not be permanently impacted by the Project nor will access to these areas be affected. Offshore: Temporary impacts to ocean bottom within areas suitable for shellfish, as identified by the Massachusetts Division of Marine Fisheries, will be necessary during the export cable burial. However, this temporary disturbance will occur at sufficient depth and distance from shore such that no impact to recreational shellfishing or shellfish resources is anticipated to occur. Landfall: Mayflower Wind is planning to install the export cable shore landing(s) through the use of an HDD construction method to avoid sensitive eelgrass habitats that provide critical habitat for certain commercially and recreationally important shellfish species, such as bay scallops. Additionally, Mayflower Wind continues to coordinate with local stakeholders and the commercial fishing industry and has developed a Fisheries Communication Plan for the Project (see COP Appendix W, Mayflower Wind Fisheries Communication Plan), which included hiring of an on-staff fisheries liaison, conducting outreach to the commercial and recreational fishing industry, and holding regular “port hours” in the Port of New Bedford and Point Judith where the public can communicate and interact with a Mayflower Wind representative and ask questions about the Project or discuss any concerns related to potential impacts to fisheries.	COP Section 10.3 – Recreation and Tourism 10.3.1 – Affected Environment 10.3.1.1 – Land-based and Near-shore-based Recreation and Tourism Resources 10.3.1.1.1 – Falmouth Onshore Project Area 10.3.1.2 – Water-based Recreation and Tourism Resources 10.3.2 – Potential Effects 10.3.2.1 – Construction Areas and Traffic COP Section 11.0 – Commercial and Recreational Fisheries and Fishing Activity 11.1 – Affected Environment 11.1.1 – Data Sources 11.1.2 – Summary of Commercial Fishing in the Offshore Project Area 11.1.3 – Recreational Fishing 11.1.4 – Fisheries Outreach 11.2 - Potential Effects 11.2.1 – Vessel Activity and Presence of Infrastructure

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
			11.2.2 – Actions that may Displace Biological Resources 11.2.3 – Gear Interactions COP Section 13.0 – Navigation and Vessel Traffic 13.1 – Affected Environment 13.1.1 – Vessel Traffic 13.1.2 - Navigation 13.2 – Potential Effects 13.2.2 - Activities that may Displace or Impact Fishing and Recreation and Tourism COP Appendix K, Seagrass and Macroalgae Report COP Appendix M, Benthic and Shellfish Resources Characterization Report COP Appendix V, Commercial and Recreational Fisheries and Fishing Activity Technical Report COP Appendix W, Mayflower Wind Fisheries Communication Plan
Ocean Resources Policy #2 (Enforceable)	Except where such activity is prohibited by the Ocean Sanctuaries Act, the Massachusetts OMP, or other applicable provision of law, the extraction of oil, natural gas, or marine minerals (other than sand and gravel) in or affecting the coastal zone must protect marine resources, marine water quality, fisheries, and navigational, recreational and other uses. (CZM, 2011 pp 53-55)	The Project does not include the extraction of oil, natural gas, or marine minerals.	Not applicable
Ocean Resources Policy #3 (Enforceable)	Accommodate offshore sand and gravel extraction needs in areas and in ways that will not adversely affect marine resources, navigation, or shoreline areas due to alteration of wave direction and dynamics. Extraction of sand and gravel, when and where permitted, will be primarily for the purpose of beach nourishment or shoreline stabilization. (CZM, 2011 pp 55-57)	The Project does not include the extraction of sand and gravel from marine areas and it is not anticipated to affect any ongoing or planned sand and gravel extraction activities.	Not applicable
Ports and Harbors			
Ports and Harbors Policy #1 (Enforceable)	Ensure that dredging and disposal of dredged material minimize adverse effects on water quality, physical processes, marine productivity, and public health and take full advantage of opportunities for beneficial re-use. (CZM, 2011 pp 57-61)	At this time, it is not anticipated that construction of the Mayflower Wind Project would require dredging at any port or harbor facilities. As such, there will be no dredge material produced from port and harbor areas, nor will there be any need to dispose of dredge material originating from such facilities.	Not Applicable
Ports and Harbors Policy #2 (Enforceable)	Obtain the widest possible public benefit from channel dredging and ensure that Designated Port Areas and developed harbors are given highest priority in the allocation of resources. (CZM, 2011 pp 61-63)	The Project does not anticipate any dredging activities within channels to any port or harbor facilities. At this time, Mayflower Wind does not propose to implement any port or harbor improvements to support the Project and anticipates using existing ports and facilities that are suitable to support the types and sizes of vessels required for use during construction. Similarly, during operations and maintenance (O&M) of the Project, Mayflower Wind would utilize existing port and harbor facilities that are capable of accommodating the necessary vessels and support activities required during that phase of the Project lifecycle.	Not Applicable
Ports and Harbors Policy #3	Preserve and enhance the capacity of Designated Port Areas to accommodate water-dependent industrial uses and	Mayflower Wind is planning to use existing port and harbor facilities that are suitable to support the types and sizes of vessels required for use both during construction, as well as O&M of the Project.	Not Applicable

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
(Enforceable)	prevent the exclusion of such uses from tidelands and any other Designated Port Areas lands over which an EEA agency exerts control by virtue of ownership or other legal authority. (CZM, 2011 pp 63-67)		
Ports and Harbors Policy #4 (Enforceable)	For development on tidelands and other coastal waterways, preserve and enhance the immediate waterfront for vessel-related activities that require sufficient space and suitable facilities along the water's edge for operational purposes. (CZM, 2011 pp 68--70)	The export cables located within State waters, including the Falmouth ECC landfall, will not preclude the use of the immediate waterfront for vessel-related activities or other water-dependent activities. The Project will use an HDD landfall method to minimize impacts to nearshore and coastal waters. During construction, this installation method will require a temporary, short-term prohibition on access to the waterfront within the immediate construction work areas and HDD path for safety reasons. However, there will be no long-term impacts to immediate waterfront areas, public access, or vessel related activities along the waterfront area.	COP Section 3.0 – Description of Proposed Activities 3.4 – Summary of Impact-Producing Factors 3.4.1 – Seabed (or Ground) Disturbance 3.4.1.1 – Offshore Export Cable and Inter-Array Cable Installation 3.4.1.1.1 – Seabed Disturbance – Seabed Preparation and Cable Burial 3.4.1.1.1.1 – Seabed Disturbance – Horizontal Directional Drilling COP Section 6.4 – Wetlands and Waterbodies 6.4.1 - Affected Environment 6.4.1.1 – Wetlands 6.4.1.2 – Stream and Ponds 6.4.1.3 – Wetlands and Waterbodies in the Onshore Project Area 6.4.2 - Potential Effects 6.4.2.1 – Ground Disturbance COP Section 6.5 – Coastal Habitats 6.5.1 – Affected Environment 6.5.1.1.1 – Seagrass 6.5.1.1.2 – Macroalgae 6.5.1.1.3 – Submerged Aquatic Vegetation Beds 6.5.2 – Potential Effects 6.5.2.1 – Seabed (or Ground) Disturbance COP Section 12.0 – Zoning and Land Use 12.1 - Affected Environment 12.1.2 – Landfall Locations and HDD Sites 12.1.2.1 – Falmouth Landfall Location Option 1: Falmouth Heights Beach – Worcester Avenue 12.2 – Potential Effects 12.2.1 – Land Use COP Section 13.0 – Navigation and Vessel Traffic 13.1 – Affected Environment 13.1.1 – Vessel Traffic 13.1.2 - Navigation 13.2 – Potential Effects 13.2.2 – Actions that may Displace or Impact Fishing and Recreation and Tourism COP Section 14.0 – Other Marine Uses 14.1 – Affected Environment 14.1.3 – Federal Offshore Energy

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
			14.1.4 – Cables and Pipelines 14.2 – Potential Effects 14.2.2 – Installation and Maintenance of Infrastructure
Protected Areas			
Protected Areas Policy #1 (Enforceable)	Preserve, restore, and enhance coastal Areas of Critical Environmental Concern, which are complexes of natural and cultural resources of regional or statewide significance. (CZM, 2011 pp 72-75)	There are no Areas of Critical Environmental Concern in proximity to the Project; therefore, the Project will have no effect on Areas of Critical Environmental Concern.	Not applicable
Protected Areas Policy #2 (Enforceable)	Protect state designated scenic rivers in the coastal zone. (CZM, 2011 pp 75-76)	There are no designated scenic rivers within the area of the Project, and therefore, there will be no impact on these resources.	Not applicable
Protected Areas Policy #3 (Enforceable)	Ensure that proposed developments in or near designated or registered historic places respect the preservation intent of the designation and that potential adverse effects are minimized. (CZM, 2011 pp 76-77)	Mayflower Wind is conducting assessments of historical and archaeological resources within the area of potential effect for the Project. This includes both the terrestrial (onshore) and marine (nearshore and offshore) facilities for the Project. Mayflower Wind has obtained a permit from the Massachusetts Board of Underwater Archaeological Resources to conduct a marine archaeological survey of the Falmouth ECC and initiated surveys in July 2020. Additionally, Mayflower Wind has submitted a Project Notification Form to the Massachusetts Historical Commission (MHC) for the onshore Project facilities, secured a permit from MHC to conduct reconnaissance terrestrial surveys (Phase 1A) and has prepared a Phase 1A report for the Project (see COP Appendix R, Terrestrial Archaeological Resources Assessment). Mayflower Wind also anticipates conducting intensive surveys, as necessary, within areas identified as potentially sensitive for presence of previously unknown historic or archaeological resources. Potential effects, if any, to historic resources will be addressed with BOEM, the Tribes, Board of Underwater Archaeological Resources, and MHC through established review procedures, and all appropriate measures consistent with Section 106 of the National Historic Preservation Act and state register review process will be taken. Offshore: Mayflower Wind has evaluated potential visual impacts to historic resources as a result of the Project facilities (see COP Appendix S, Analysis of Visual Effects to Historic Properties). There are no anticipated visual impacts to mainland (Upper Cape Cod) historic resources from the WTGs/OSPs due to the distance of the Lease Area. Mayflower Wind has conducted visual simulations from various key observation points on Martha's Vineyard and Nantucket, including designated or registered historic places. In many instances, these properties were not designated or listed due to the significance of the viewshed from the historic property, and therefore, the significance of the designation or listing would not be diminished. Also, based on the distance of the Lease Area from these resources coupled with common weather conditions, it is anticipated that the WTGs/OSPs may not be visible from these resources for a significant portion of the year. Onshore: Similarly, for the onshore Project facilities, Mayflower Wind has assessed the potential visual impact of these facilities on historic resources (see COP Appendix S, Analysis of Visual Effects to Historic Properties). The underground onshore export cables will have no visual impact on historic resources as the cables will be buried beneath existing paved roadways, and following completion of construction, the only visual indicators of the presence of the cables will be manhole covers within the paved roadway surface. The potential onshore substation sites are not located within any designated or registered historic districts, though the preferred substation location (Lawrence Lynch) located at 396 Gifford Street in Falmouth is located next to the Oak Grove Cemetery, which is a listed property on the National Register of Historic Places (NRHP). If this site was selected for construction of the onshore substation facility, Mayflower Wind does not believe the Project would have an unacceptable adverse effect this NRHP-listed historic property as the substation facility would be built within an existing industrial sand and gravel pit facility and would not require any tree clearing or land	COP Section 7.1 – Marine Archaeology 7.1.1 – Affected Environment 7.1.1.1 – Shipwrecks and Obstructions 7.1.1.2 – Paleolandscape 7.1.2 – Potential Effects 7.1.2.1 – Seabed (or Ground) Disturbance 7.1.2.2 – Sediment Suspension and Deposition COP Section 7.2 – Terrestrial Archaeology 7.2.1 – Affected Environment 7.2.1.1 – Landfall Locations and HDD Sites 7.2.1.1.1 – Falmouth Landfall Location Option A: Falmouth Heights Beach – Worcester Avenue 7.2.1.3 – Onshore Export Cable Routes 7.2.1.4 – Onshore Substation and Converter Station Sites 7.2.2 – Potential Effects 7.2.2.1 – Ground Disturbance 7.2.2.2 – Accidental Events COP Section 7.3 – Above-Ground Historic Properties 7.3.1 – Affected Environment 7.3.1.1 – Offshore APE 7.3.1.2 – Onshore APE 7.3.2 – Potential Effects 7.3.2.1 – Altered Visual Conditions COP Section 8.0 – Visual Resources 8.1 – Affected Environment 8.1.1 – Offshore Project Area 8.1.2 – Onshore Project Area 8.2 – Potential Effects 8.2.1 – Altered Visual Conditions COP Appendix Q1, Marine Archaeological Resources Assessment COP Appendix R, Terrestrial Archaeological Resources Assessment

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
		disturbance any closer to the cemetery than currently exists. Visual impacts may be minimized or avoided by vegetative screening.	COP Appendix S, Analysis of Visual Effects to Historic Properties COP Appendix T, Visual Impact Assessment
Public Access			
Public Access Policy #1 (Enforceable)	Ensure that development (both water-dependent or non-water-dependent) of coastal sites subject to state waterways regulation will promote general public use and enjoyment of the water's edge, to an extent commensurate with the Commonwealth's interests in flowed and filled tidelands under the Public Trust Doctrine. (CZM, 2011 pp 78-87)	The Project, as proposed, will have no appreciable effects on the Commonwealth's interests in flowed and filled tidelands under the Public Trust Doctrine or on the general public's use and enjoyment at the water's edge. The Project will make landfall in a highly developed section of the Massachusetts coastline utilizing an HDD method that will avoid impacting the public's use and recreation in coastal areas. During the installation of the export cables there will be a temporary, short-term prohibition on access to the waterfront within the immediate construction work areas and HDD path for safety reasons. However, it is anticipated that the installation of the export cables and landfall construction will take place outside of peak tourism season so as to not interfere with public access to waterfront areas. Additionally, there will be no long-term impacts to waterfront areas or to public access to the water's edge resulting from the Project.	COP Section 10.3 – Recreation and Tourism 10.3.1 – Affected Environment 10.3.1.1 – Land-based and Near-shore-based Recreation and Tourism Resources 10.3.1.1.1 – Falmouth Onshore Project Area 10.3.1.2 – Water-based Recreation and Tourism Resources 10.3.2 – Potential Effects 10.3.2.1 – Construction Areas and Traffic 10.3.2.2 – Saturation of Tourism-related Services (Boat Rentals, Outfitters, etc.) COP Section 11.0 – Commercial and Recreational Fisheries and Fishing Activity 11.1 – Affected Environment 11.1.1 – Data Sources 11.1.2 – Summary of Commercial Fishing in the Offshore Project Area 11.1.3 – Recreational Fishing 11.1.4 – Fisheries Outreach 11.2 - Potential Effects 11.2.1 – Vessel Activity and Presence of Infrastructure 11.2.3 – Gear Interactions COP Section 12.0 – Zoning and Land Use 12.1 - Affected Environment 12.1.2 – Landfall Locations and HDD Sites 12.1.2.1 – Falmouth Landfall Location Option 1: Falmouth Heights Beach – Worcester Avenue 12.2 – Potential Effects 12.2.2 – Construction Areas / Traffic 12.2.3 – Noise and Vibration COP Section 15.0 – Public Health and Safety 15.1 – Affected Environment 15.1.1 – Health and Safety Regulations Related to the Proposed Project 15.1.2 – Communities Health and Safety 15.2 – Potential Effects 15.2.1 – Unplanned Events
Water Quality			
Water Quality Policy #1 (Enforceable)	Ensure that point-source discharges and withdrawals in or affecting the coastal zone do not compromise water quality standards and protect designated uses and other interests. (CZM, 2011 pp 92-95)	Offshore: Construction and installation activities associated with the Project have the potential to impact coastal and marine water quality through structure installations and removal, as well as vessel discharges such as domestic wastewater, uncontaminated bilge water, treated deck drainage and sumps, uncontaminated ballast water, and uncontaminated fresh or seawater from vessel air conditioning. Bilge water discharges may only occur in nearshore and offshore waters provided that	COP Section 3.3 – Project Components and Project Stages 3.3.16 – Waste Generation and Disposal COP Section 5.2 – Water Quality 5.2.1 – Affected Environment

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
		the effluent is processed by an approved oil and water separator and the oil content of the bilge water is less than 15 parts per million. Bilge water that cannot be discharged in compliance with regulations will be retained onboard the vessel for disposal at an approved receiving facility back in port. Generally, ballast water is pumped into and out of separate compartments and is not usually contaminated with oil. However, the same discharge criteria for oil content also applies to ballast water. All vessels will be required to comply with federal and state discharge requirements, as well as requirements for the control and prevention of accidental spills, which are detailed in the Oil Spill Response Plan developed for the Project (see COP Appendix AA, Oil Spill Response Plan). By complying with these state and federal regulations, it is anticipated that there will be no impacts to water quality. Within the Lease Area and Falmouth ECC, installation of the WTGs/OSPs, as well as burial of the export cables, will cause an increase in turbidity. However, mapped ocean currents should allow this sediment to settle rapidly into the local environment. Cable burial will also occur for all inter-array cables between the WTGs and the OSPs using a similar method to the laying of the export cables. This is not anticipated to be a significant impact, as sediment that will be resuspended is anticipated to settle rapidly within the immediate vicinity of the Lease Area (see Section 5.2 – Water Quality of the COP document, and the COP Appendix H, Water Quality Report). As part of the federal and state permitting processes under the federal Clean Water Act Section 404 and Section 401 Water Quality Certification frameworks, Mayflower Wind will engage with the permitting agencies and comply with the conditions of the permit issued. The installation of scour protection as well as cable protections along the seafloor are anticipated to temporarily increase turbidity in the localized area. The surface sediments, however, are predominately sandy and anticipated to settle quickly and present temporary conditions similar to the installation of the WTG/OSP foundations and the inter-array cables (see COP Appendix F1, Sediment Plume Impacts from Construction Activities and COP Appendix F2, Scour Potential Impacts from Operational Phase and Post-Construction Infrastructure). Landfall: Use of the HDD construction technique for installation of the export cable landfall in Falmouth is proposed to avoid large-scale disturbance of surface and underwater sediments that would have a more significant effect on water quality. However, the activity still has the ability to affect water quality as a result of an inadvertent release of the drilling fluid used to lubricate the drill head and help maintain the bore hole during drilling activities. The drill fluid is composed of non-hazardous compounds and typically consists of mixture of bentonite mud and water. Regardless, any inadvertent release of this drilling fluid to coastal waters has the ability to negatively impact water quality. Mayflower Wind will develop and implement an HDD drill fluid management and contingency plan to avoid inadvertent returns before they occur, and to clean up any drill fluid that is released through an inadvertent return to the ground surface. Provisions of this plan will be a requirement that the Project constantly monitor fluid pressures within the borehole and re-assess conditions and potentially re-align the bore path any time there is a drop in fluid pressure that could indicate the loss of drill fluid to an inadvertent return. Mayflower Wind will require all vessels to comply with applicable regulations for the prevention and control of accidental spills of fuels, oils, and other hazardous materials. Mayflower Wind has also included an Oil Spill Response Plan (COP Appendix AA, Oil Spill Response Plan) that includes provisions for responding to oil and fuel spills. Other wastes generated during offshore construction and O&M activities, including septage, solid wastes or other hazardous materials (chemicals, solvents, oils, greases, etc.) from equipment operation or maintenance will be temporarily stored and properly disposed of on land or otherwise disposed of in accordance with all applicable regulations (see COP Section 3.3 – Project Components and Project Stages).	5.2.1.2 – Massachusetts Department of Environmental Protection 5.2.3 – Potential Effects 5.2.3.1 – Seabed or Ground Disturbance 5.2.3.2 – Planned Discharges 5.2.3.3 – Accidental Events COP Section 15.0 – Public Health and Safety 15.1 – Affected Environment 15.1.1 – Health and Safety Regulations Related to the Proposed Project 15.1.2 – Communities Health and Safety 15.2 – Potential Effects 15.2.1 – Unplanned Events COP Appendix A, Agency Correspondence COP Appendix H, Water Quality Report COP Appendix X, Navigation Safety Risk Assessment COP Appendix AA, Oil Spill Response Plan

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
		Onshore: Construction of the onshore substation facility will be subject to the Massachusetts Stormwater Standards and will be designed with a stormwater management system to adequately manage stormwater runoff originating from these developments. By designing the stormwater management systems in compliance with state regulations pertaining to stormwater, the point source discharges associated with these discrete site developments is anticipated to have no adverse effect on water quality within the coastal zone.	
Water Quality Policy #2 (Enforceable)	Ensure the implementation of nonpoint source pollution controls to promote the attainment of water quality standards and protect designated uses and other interests. (CZM, 2011 pp 95-98)	Nonpoint source pollution controls will be utilized during the construction and installation of all onshore portions of the Project to ensure that nonpoint source pollution will not adversely affect water quality within the coastal zone. These include construction phase best management practices, such as limiting of vegetation disturbance and soil grading, installation of erosion and sedimentation controls at the limit of work to manage stormwater runoff, implementation of vehicle refueling restrictions within 100 ft (30 m) of wetlands and waterbodies, strict storage and management of oils and hazardous materials incidental to construction activities, and provisions for immediate containment, cleanup, and reporting (as necessary) of any inadvertent releases of oils and hazardous materials. As part of the National Pollution Discharge Elimination System Construction General Permit for construction projects disturbing one or more acres (0.4 ha or more), Mayflower Wind will develop and implement a construction phase Erosion and Sediment Control Plan for the onshore Project facilities that includes all of the provisions detailed above and more and establishes requirements to inspect the construction areas on a weekly basis at minimum to determine compliance with the Construction General Permit conditions and the Project-specific Erosion and Sediment Control Plan.	COP Section 3.3 – Project Components and Project Stages 3.3.15 – Health, Safety and Environmental Protections COP Appendix A, Agency Correspondence COP Appendix F2, Scour Potential Impacts from Operational Phase and Post-Construction Infrastructure COP Appendix H, Water Quality Report
Water Quality Policy #3 (Enforceable)	Ensure that subsurface waste discharges conform to applicable standards, including the siting, construction, and maintenance requirements for on-site wastewater disposal systems, water quality standards, established Total Maximum Daily Load limits, and prohibitions on facilities in high-hazard areas. (CZM, 2011 pp 98-100)	The Project does not propose any facilities that include a subsurface wastewater disposal system as the onshore facilities will not be manned by any O&M personnel. Temporary sanitation facilities will be provided during construction of the onshore Project components through the use of portable latrines that will be periodically emptied and cleaned by a portable latrine service provider. Likewise, the offshore facilities will not be manned by any O&M personnel. However, during construction and O&M activities, sanitation would be provided on the service vessels utilized by O&M personnel for transport to the offshore facilities. The transport vessels would hold sewage within holding tanks and dispose of all raw or treated sewage in accordance with all applicable discharge rules and regulations.	COP Section 5.2 – Water Quality 5.2.1 – Affected Environment 5.2.1.2 – Massachusetts Department of Environmental Protection 5.2.3 – Potential Effects 5.2.3.1 – Seabed or Ground Disturbance 5.2.3.2 – Planned Discharges 5.2.3.3 – Accidental Events COP Appendix A, Agency Correspondence COP Appendix H, Water Quality Report

4.0 Consistency Certification

Mayflower Wind has evaluated all applicable enforceable policies of the Massachusetts CZM for the Project to determine if the activities are consistent with those policies. Mayflower Wind believes the Project and related activities comply with the enforceable policies of Massachusetts' approved coastal zone management program and will be conducted in a manner fully consistent with that program.

Attachment 1 – Figures

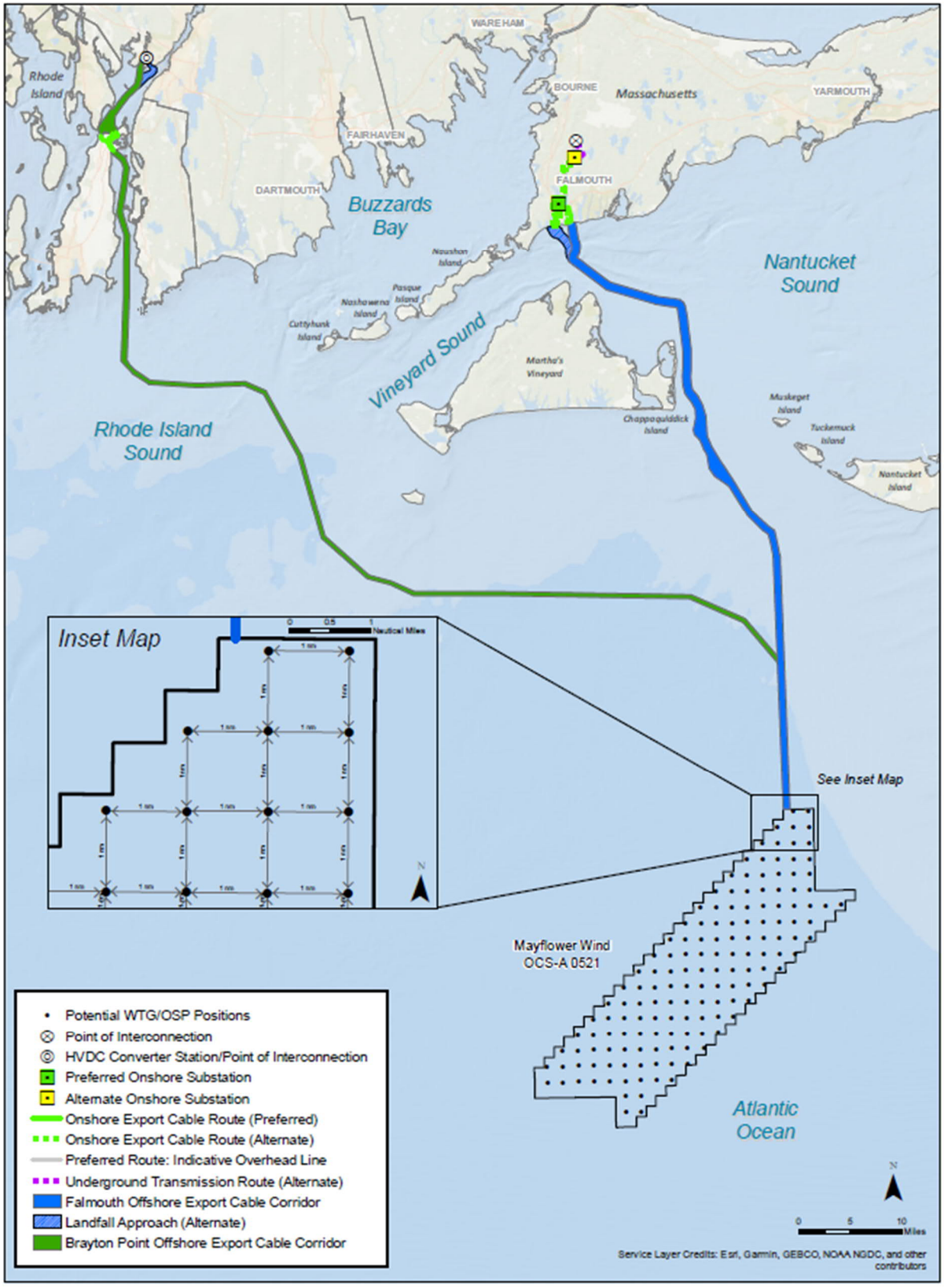

Figure 1. Overview of Mayflower Wind Offshore Renewable Energy Generation Project

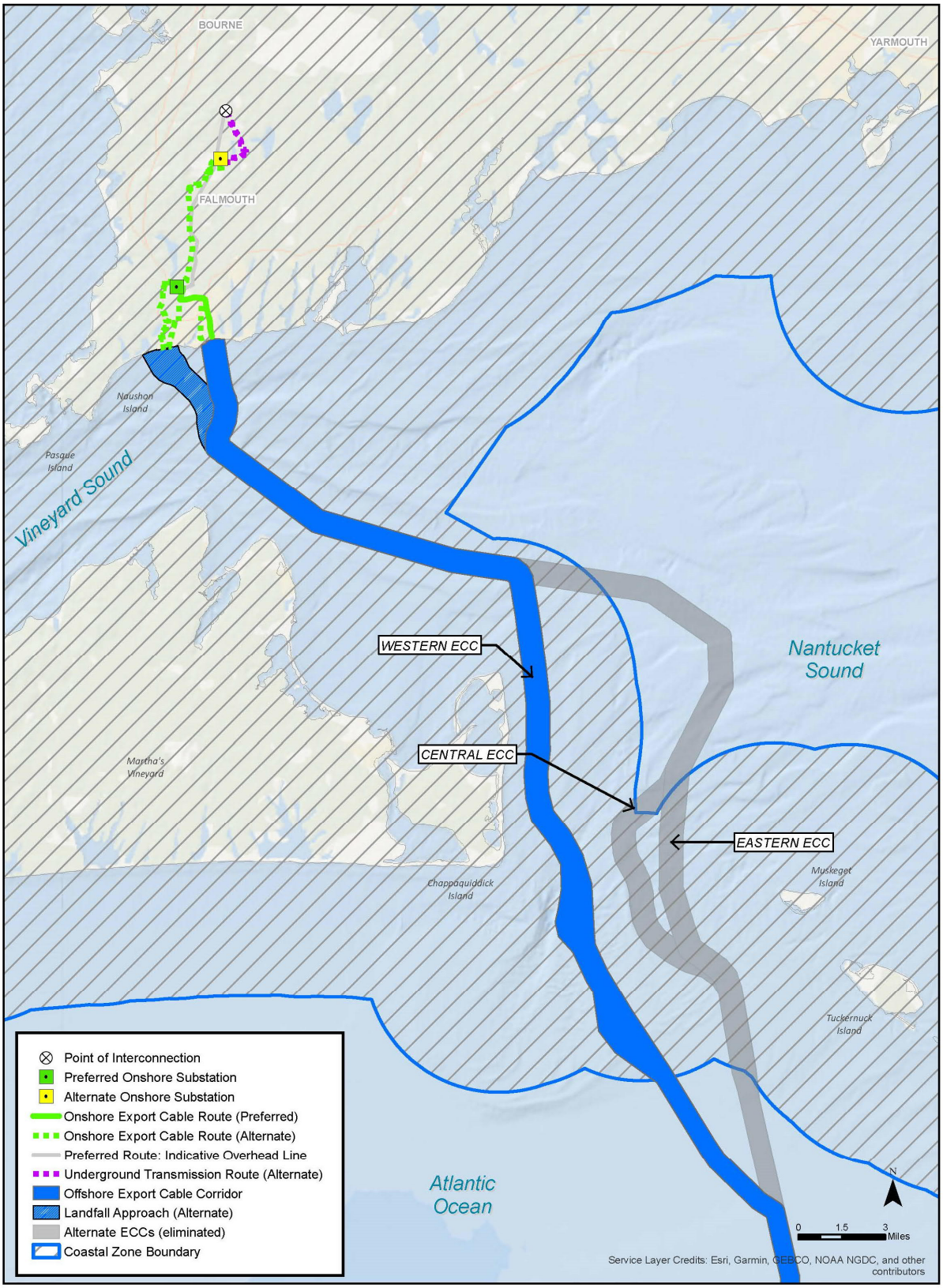

Figure 2. Alternate Offshore Export Cable Corridors Evaluated

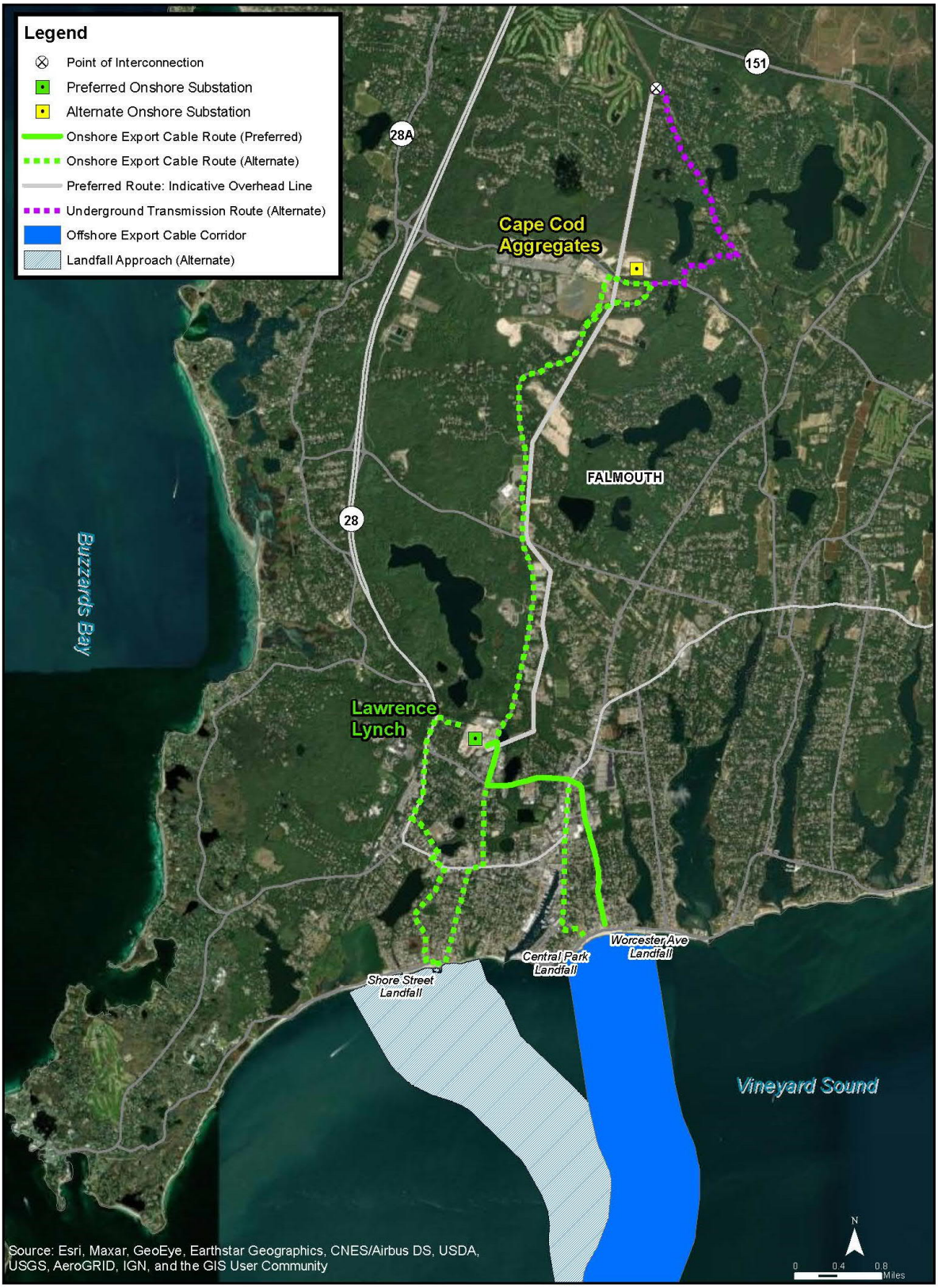

Figure 3. Location of Mayflower Wind Onshore Project Elements – Falmouth Onshore Project Area

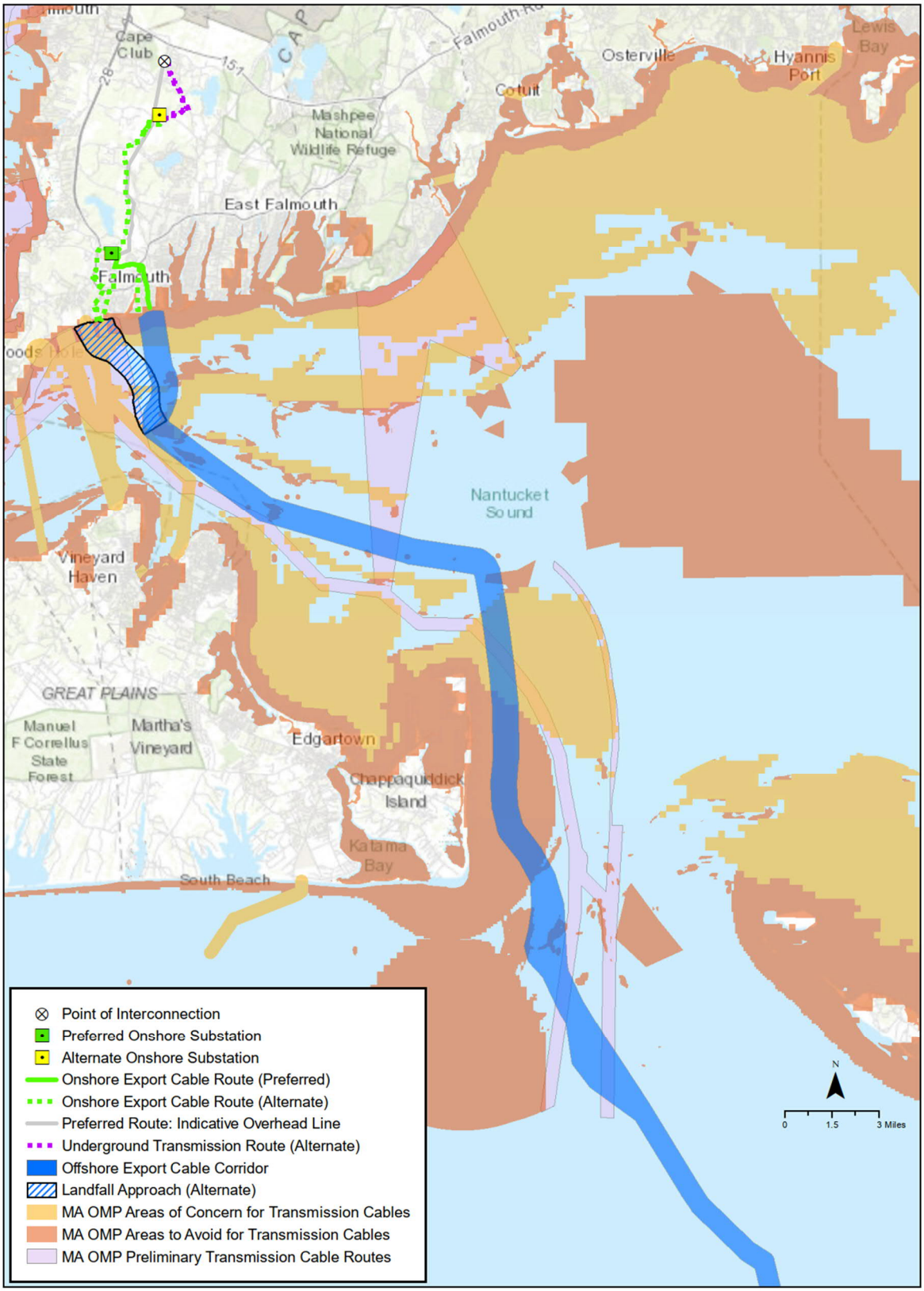

Figure 4. Massachusetts OMP Areas of Concern, Areas to Avoid, and Preliminary Transmission Cable Routes within the Massachusetts Coastal Zone Boundary

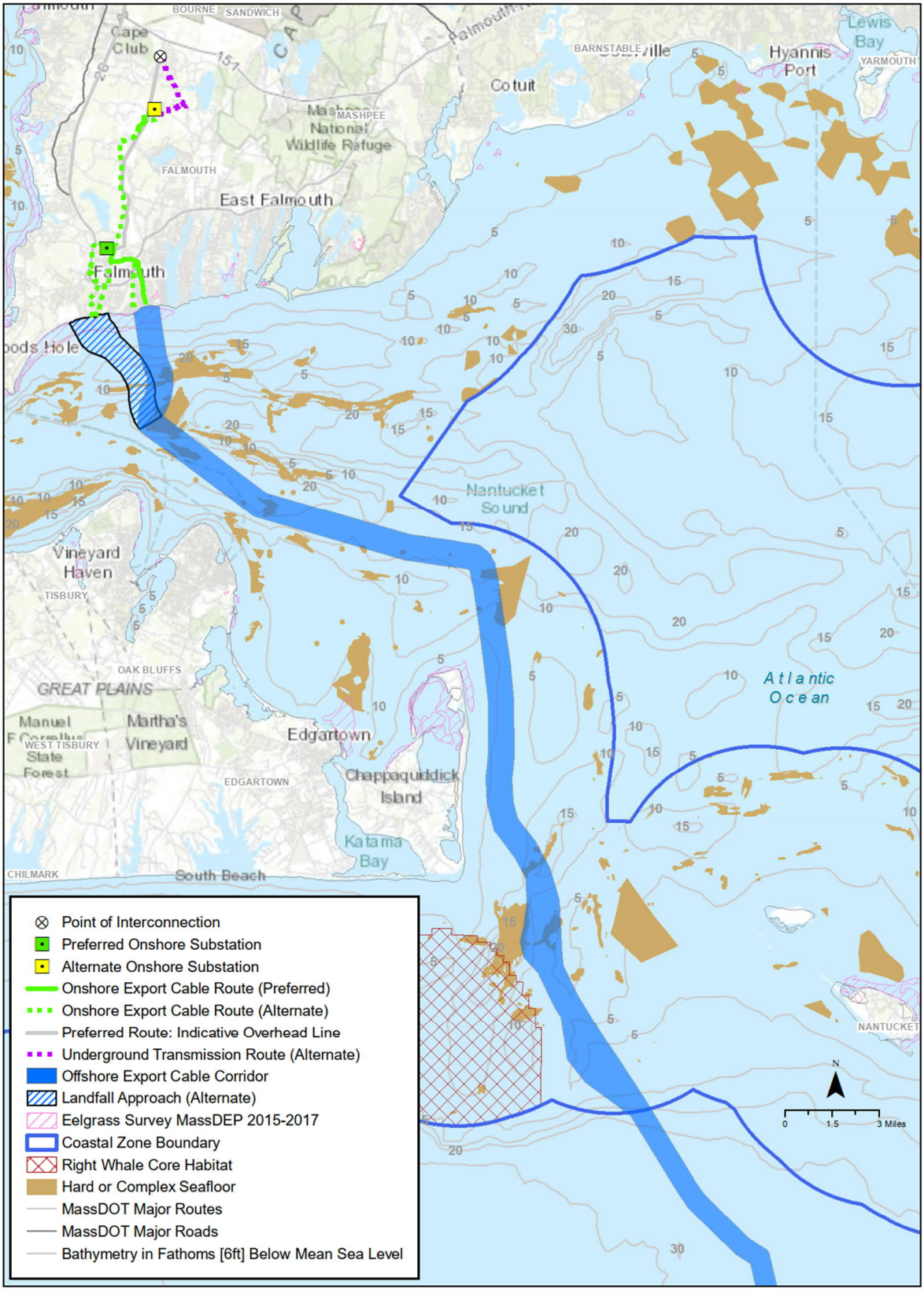

Figure 5. Sensitive Resources and Hard or Complex Seafloor within the Massachusetts Coastal Zone Boundary

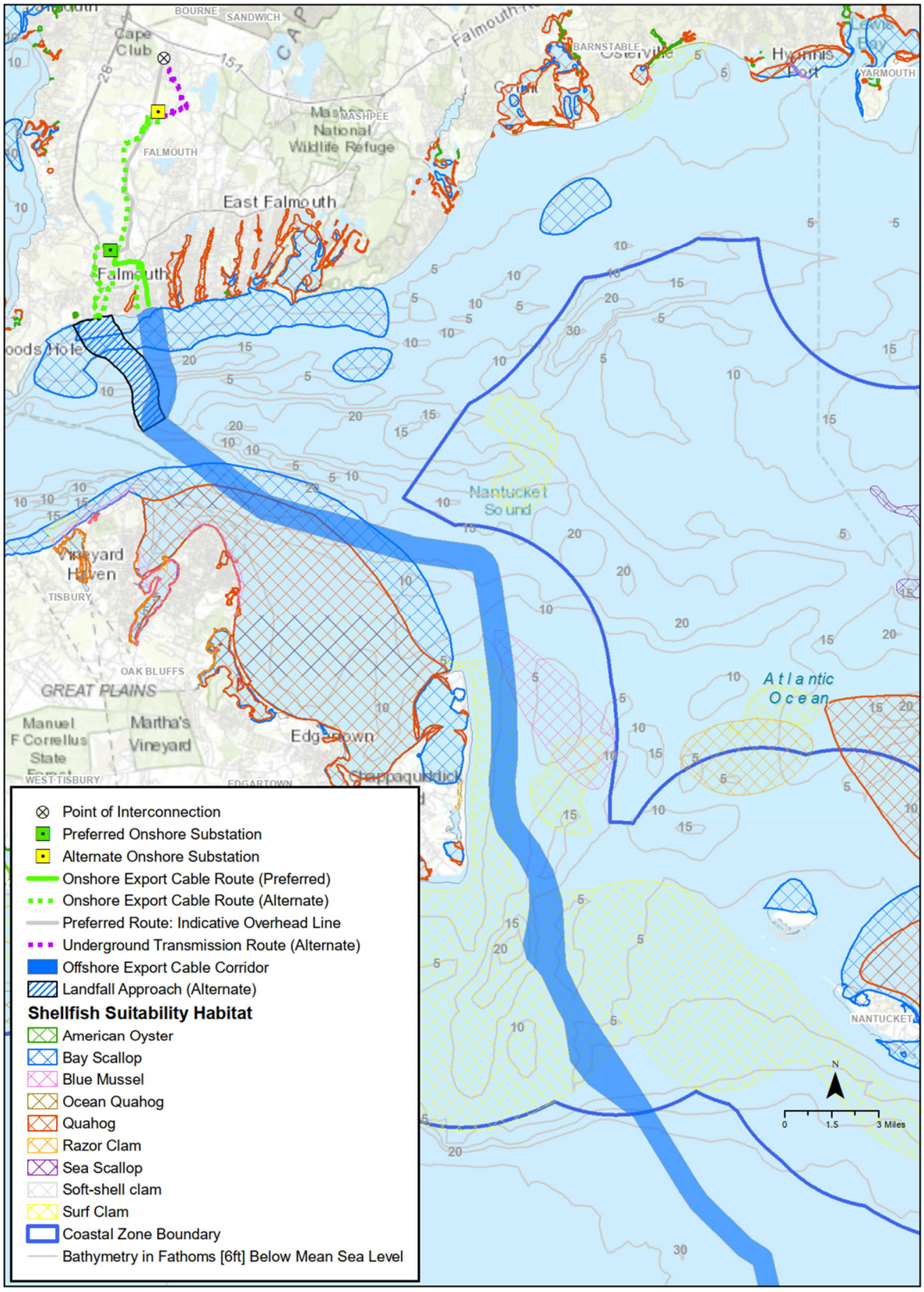

Figure 6. Shellfish Suitability Areas within the Massachusetts Coastal Zone Boundary

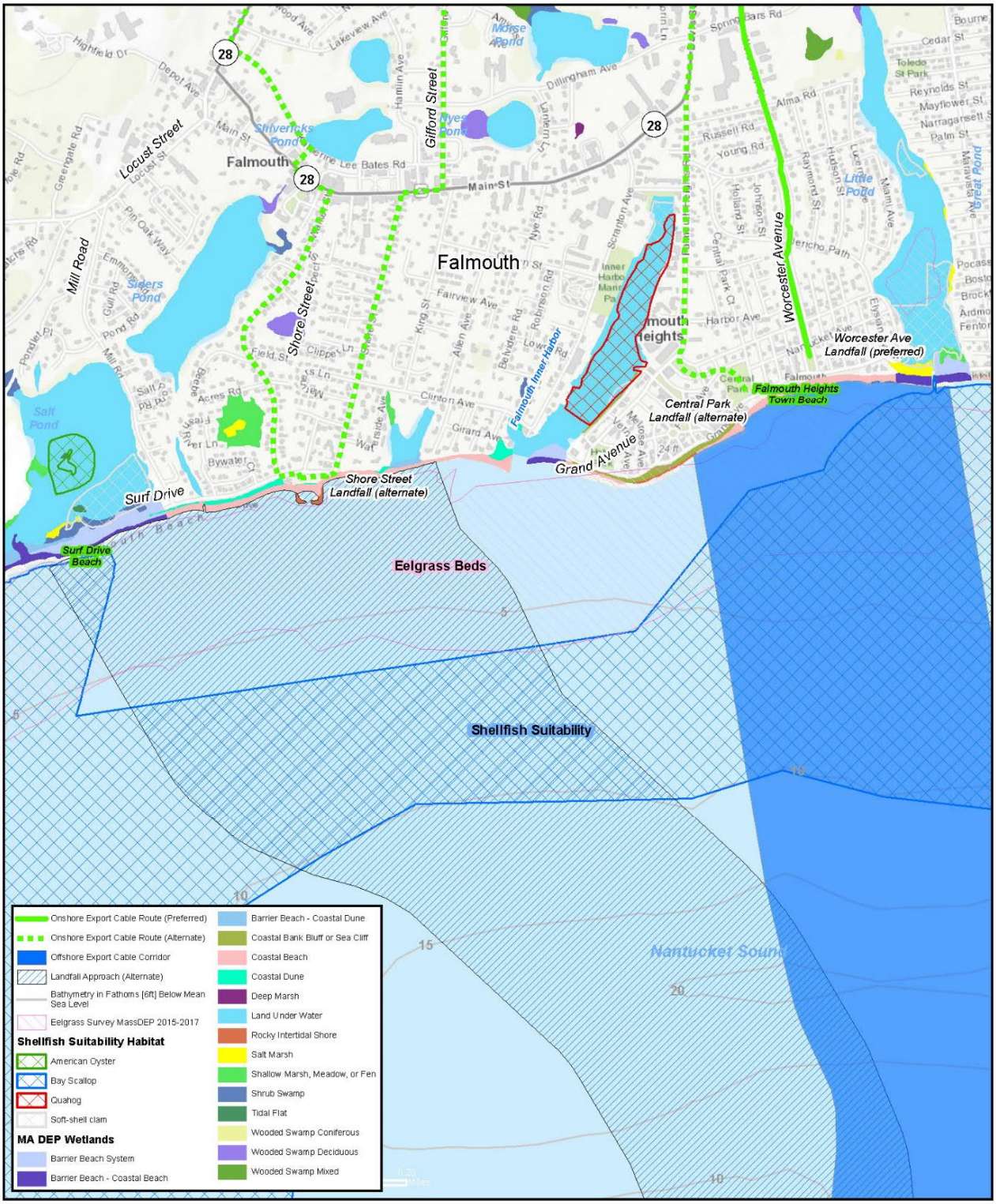

Figure 7. Estimated Location of Sensitive Coastal Habitats, SAV, and Shellfish Suitability Areas at Falmouth Landfall Locations

Figure 8. Massachusetts DEP Wetlands and Coastal Resource Areas in the Vicinity of the Landfall

Figure 9. Massachusetts DEP Wetlands and Coastal Resource Areas in the Vicinity of the Central Park Landfall

Figure 10. Massachusetts DEP Wetlands and Coastal Resource Areas in the Vicinity of the Worcester Avenue Landfall