

## Appendix D2. Rhode Island Coastal Zone Management Act Consistency Certification

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# MAYFLOWER WIND

Prepared for:  
Mayflower Wind Energy LLC

## Rhode Island Coastal Zone Management Act Federal Consistency Certification – Brayton Point POI (Draft)

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# Acronyms and Abbreviations

## Abbreviation or Acronym      Definition

BOEM	Bureau of Ocean Energy Management
CFR	Code of Federal Regulations
COP	Construction and Operations Plan
CRMC	Coastal Resource Management Council
CRMP	Coastal Resource Management Program
CZMA	Coastal Zone Management Act
ECC	Export Cable Corridor
EO	Executive Order
ft	foot/feet
GLD	Geographic Location Description
ha	hectare
HDD	Horizontal Directional Drilling
HVDC	High Voltage Direct Current
HPHC	Rhode Island Historical Preservation & Heritage Commission
km	kilometer
kV	kilovolt
m	meter
Mayflower Wind	Mayflower Wind Energy LLC
mi	mile
nm	nautical mile
NOAA	National Oceanic and Atmospheric Administration
OCS	Outer Continental Shelf
OER	Office of Energy Resources (Rhode Island)
OSP	Offshore Substation Platform
POI	Point of Interconnection
PPA	Power Purchase Agreement
RGGI	Regional Greenhouse Gas Initiative
RICR	Rhode Island Code of Regulations
SAMP	Special Area Management Plan
SAV	Submerged Aquatic Vegetation
UXO	Unexploded Ordinance
USC	United States Code
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 from the Lease Area at two points of interconnection (POI); one at Falmouth Tap in Falmouth Massachusetts, and the other at Brayton Point in Somerset Massachusetts via offshore export cables as well as onshore transmission systems extending to the respective POIs (Figure 1).

The offshore export cable corridor (ECC) for the Brayton Point POI will extend from the Lease Area in federal waters and into Rhode Island state waters (Sakonnet River), cross over Aquidneck Island, and reenter Rhode Island State waters (Mount Hope Bay), before entering waters of the Commonwealth of Massachusetts and ending in Somerset, Massachusetts, at Brayton Point (Figure 2).

This Coastal Zone Consistency Certification is specific to the portions of the Brayton Point export cable corridor (ECC) within the Rhode Island 2011 and 2018 Geographic Location Descriptions (GLDs). Mayflower Wind expects to separately submit a CRMC Category B State Assent application for the portion of the Brayton Point ECC through Rhode Island state waters. Construction and Operations Plan (COP) Revised Appendix D1 (Massachusetts Coastal Zone Management Act Consistency Certification) covers the remaining portions of the Project. Portions of the Project located within federal waters outside of the GLDs are not addressed by this Consistency Certification.

It should be noted that certain studies and analyses are ongoing which are needed to provide necessary demonstrations for compliance with one or more enforceable policies. Mayflower Wind has identified in Section 3, where additional information will be provided, and the expected demonstrations that will be made once those data are available. At that time, final federal consistency certification will be submitted for CRMC review.

## 1.1 Project Objectives

The Project's objective is to provide Massachusetts and neighboring states in the region, including Rhode Island, with clean, renewable wind energy. Mayflower Wind has been awarded power purchase agreements (PPAs) to deliver 1,204 MW to the Electric Distribution Companies that serve Massachusetts within the New England Regional Transmission Organization. The 2019 award of 804 MW was through the 2019 Offshore Wind Energy Generation request for proposals ("Section 83C II RFP") and has now been memorialized in executed PPAs with the Electric Distribution Companies that were approved by the Massachusetts Department of Public Utilities in November 2020. Mayflower Wind was more recently awarded a second Section 83C III PPA for 400 MW in 2021. Mayflower Wind will continue to pursue PPAs for the remaining generation capacity of the Lease Area.

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 environmental and clean/renewable energy goals for the region, including eliminating at least 1.6 million metric tons of CO<sub>2</sub> emissions annually once in operation — the equivalent of taking 347,968 cars off the road per year<sup>1</sup>. 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 southern New England. It should be instrumental in creating a thriving, utility scale, domestic offshore wind industry.

<sup>1</sup> Daymark Energy Advisors. (2021). *Massachusetts 83C-III Benefits Report: Mayflower Wind Proposal A*. Prepared for Mayflower Wind Energy, LLC. (2021, September 16).

In the “Offshore Renewable Energy and Other Offshore Development” Policy<sup>2</sup> of the Rhode Island Ocean Special Area Management Plan (SAMP), the Rhode Island Coastal Resources Management Council (CRMC) acknowledges support for increasing renewable energy production in Rhode Island provided the offshore development is consistent with the goals of the Ocean SAMP. The Project will produce a viable form of renewable energy for southern New England and be a key addition to existing energy mix of the region. The Rhode Island State Energy Plan “Energy 2035”<sup>3</sup> (released in 2015) identifies offshore wind as one of the most significant resources for wind energy available to the State. In addition, the Project complements Rhode Island’s “Lead by Example” Executive Order (EO 15-17)<sup>4</sup>, in which the Governor tasked the Rhode Island Office of Energy Resources (OER) to identify opportunities to support full transition toward renewable energy sources by 2025.

The 2021 Act on Climate bill signed by Gov. Dan McKee in April 2021 sets mandatory and enforceable targets for reducing greenhouse-gas emissions and transitioning to a low carbon economy. Under the Act on Climate, the State of Rhode Island will develop a plan to incrementally reduce climate emissions to net-zero by 2050. The plan will be updated every 5 years and will address areas such as environmental injustices, public health inequities and a fair employment transition as fossil-fuel jobs are replaced by green energy jobs. The 2021 Act specifically calls for the transition to a cleaner energy future to be just and equitable which includes replacing fossil-fuel-based jobs with renewable-energy jobs that pay prevailing wage delivering renewable energy at lower cost to families and businesses. The Act calls for the inclusion of environmental-justice populations and a process for environmental-justice communities to provide input on concrete plans that identify support for workers in the transition and the development of programs to recruit, train, and retain women, people of color, Indigenous people, veterans, formerly incarcerated people, and people living with disabilities in jobs related to a cleaner energy economy.

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

1. The Project, as planned, is expected to be the region’s single greatest contributor to achieving the emissions reduction goals outlined in the Regional Greenhouse Gas Initiative (RGGI) of the Eastern States of the U.S.; both Rhode Island and Massachusetts are members of the RGGI. Further, subject to potential future negotiated PPAs, the Project may also directly support achievement of Rhode Island’s greenhouse gas targets for 2035 and 2050 as laid out in the Rhode Island Greenhouse Gas Emissions Reduction Plan<sup>5</sup> (December 2016).
2. The Project is expected to bring significant employment and other economic benefits to the region, including creation of more than 11,280 full time equivalent jobs in the region during the operations, maintenance, and service phases of the Project from both direct, indirect, and induced employment opportunities.<sup>6</sup>

## 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 State of Rhode Island.<sup>7</sup> 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

<sup>2</sup> Rhode Island Ocean Special Area Management Plan (Title 650-Coastal Resources Management Council; Chapter 20 Coastal Management Program; Subchapter 05 – Ocean Special Area Management Plan; Part 11 - Policies of the Ocean SAMP (650 RICR-20-05-11))

<sup>3</sup> “Energy 2035” Rhode Island State Energy Plan. Rhode Island Division of Planning. State Guide Plan Element Report #120. October 8, 2015. (Link: <http://www.planning.ri.gov/documents/LU/energy/energy15.pdf>)

<sup>4</sup> <https://governor.ri.gov/documents/orders/ExecOrder15-17.pdf>

<sup>5</sup> Rhode Island Greenhouse Gas Emissions Reduction Plan, published in December 2016 (Link: <http://climatechange.ri.gov/documents/ec4-ghg-emissions-reduction-plan-final-draft-2016-12-29-clean.pdf>)

<sup>6</sup> BVG Associates. (BVG). (2021). *Economic Benefits. A Technical Report to Support Mayflower Wind’s Bid for Long-Term Contracts for Offshore Wind Energy Projects.* (2021, August).

<sup>7</sup> State of Rhode Island, Coastal Resources Management Council, Coastal Management Program, Part 1 – Red Book (650-RICR-20-00-1) and associated applicable policies. Available URL: <http://www.crmc.ri.gov/regulations.html>. Accessed June 30, 2021.



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 Rhode Island, the CZMA is administered within the coastal zone by the Rhode Island CRMC. The Rhode Island Coastal Zone includes the lands and waters within an area defined by the seaward limit of the state's territorial sea, to two hundred feet inland from any coastal feature, to watersheds, and to certain activities that occur anywhere within the state. In addition, consistency certification is required for federal authorizations for activities, including offshore wind facilities and underwater cables, proposed in federal waters designated as a geographic location description (GLD). National Oceanic and Atmospheric Administration (NOAA) has approved two GLDs for the State of Rhode Island, one in 2011 and the second in 2018. The 2011 GLD extends seaward 30 nautical miles (nm) from the shoreline and encompasses all waters beyond the seaward limit of Rhode Island state jurisdiction at 3 nm from the shoreline. The 2018 GLD includes a portion of the Massachusetts Wind Energy Area, BOEM lease blocks OCS-A 0500 and 0501, and an area of federal waters south of Martha's Vineyard and immediately north of the lease blocks where Rhode Island-based commercial fisheries operate.<sup>8</sup>

Project facilities to be located within the Rhode Island coastal zone, and thus within the jurisdiction of the CRMC, include the offshore ECC within the 2011 and 2018 GLDs as well as state waters and onshore export cables within Rhode Island (Figure 2). The Mayflower Wind Lease Area (OCS-A 0521) falls outside of the GLDs. As noted above, this Consistency Certification addresses only those portions of the offshore ECC within the GLDs.

## 1.3 Necessary Data and Information

In addition to the enforceable policies of the State of Rhode Island identified and addressed in Section 3.0 of this report, the State considers certain background information on a proposed project in their decision-making process.<sup>9</sup> 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 BOEM. Table 1-1 below provides details on the required information outlined within the Rhode Island CRMC Federal Consistency Manual (2018), 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 CZMA to ensure consistency with all applicable regulations of the State of Rhode Island. Applicable review procedures are set forth at 650 Rhode Island Code of Regulations (RICR) Chapter 20 (see 650-RICR-20-00-1).

**Table 1-1. Necessary Data and Information**

<b>Project Information</b>	<b>Reference Section or Description</b>
The name and location of the project	Mayflower Wind Energy LLC; OCS Lease Area OCS-A 0521
A detailed description of the site, nature, and extent of the proposed activity and its associated facilities and services,	CZMA Consistency Certification Section 2.0 – Project Description (summary) CZMA Consistency Certification Attachment 1 (Figures) COP Section 1.1 – Project Overview 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

<sup>8</sup>Rhode Island Coastal Resources Management Program, Accessed August 13, 2021: [http://www.crmc.ri.gov/news/2018\\_1218\\_jurisdiction.html](http://www.crmc.ri.gov/news/2018_1218_jurisdiction.html)

<sup>9</sup> State of Rhode Island Coastal Resources Management Program Federal Consistency Manual (December 7, 2018 (Revised)). Accessed July 28, 2021: [http://www.crmc.ri.gov/regulations/Fed\\_Consistency.pdf](http://www.crmc.ri.gov/regulations/Fed_Consistency.pdf)

**Project Information****Reference Section or Description**

	CZMA Consistency Certification Attachment 1 (Figures) 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 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	CZMA Consistency Certification Section 3.0– Rhode Island 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 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 justification as to why the preferred alternative was selected	COP Section 2.0 – Project Siting and Design Development CZMA Consistency Certification Attachment 1 (Figures)
A description of measures taken to avoid, minimize, and mitigate adverse coastal effects and a description of how the project meets applicable coastal program policies	CZMA Consistency Certification Section 3.0– Rhode Island Coastal Program Policies COP Section 16.0 – Summary of Avoidance, Minimization, and Mitigation Measures
A brief assessment indicating how the activity will be undertaken in a manner consistent with the Coastal Resources Management Program (CRMP)	CZMA Consistency Certification Section 3.0 – Rhode Island Coastal Program Policies
A brief analysis indicating that the proposed activity, associated facilities, and their effects are consistent with the CRMP.	CZMA Consistency Certification Section 4.0 – Consistency Certification

## 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 in federal waters south of Martha's Vineyard and Nantucket (Figure 2). Wind turbine generators (WTGs) constructed within the Lease Area will deliver power via inter-array cables to the offshore substation platforms (OSPs). The WTG/OSP positions have been established based on a 1 x 1 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 cables will be installed within offshore ECCs to carry the electricity from the OSPs within the Lease Area to the onshore transmission systems via two different ECCs. One ECC will make landfall in Falmouth, Massachusetts and the other will make landfall at Brayton Point, in Somerset, Massachusetts. As noted in Section 1.0, this Consistency Certification is specific to the Project components for the Brayton Point POI located within Rhode Island jurisdiction. Therefore, the balance of the Project description is specific to the Brayton Point ECC and Brayton Point Onshore Project Area, specifically the portion over Aquidneck Island.

The proposed Brayton Point ECC travels north and west from the Lease Area in federal waters through Rhode Island Sound to the Sakonnet River. The ECC travels north up the Sakonnet River and crosses the northern end of Aquidneck Island before returning to Mount Hope Bay. The ECC continues north into Massachusetts state waters to one of two landfall locations on Brayton Point. Portions of the ECC travel through the 2011 and 2018 GLD and Rhode Island state waters.

### 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**

<b>Project Attribute</b>	<b>Description</b>
Lease Area Size (Federal waters outside GLDs)	127,388 acres (51,552 hectares [ha]) in federal waters (located outside the 2011 and 2018 GLD)
Offshore Export Cables	<p>Cable Type: High voltage direct current (HVDC)</p> <p>Number of export cables: up to 6</p> <p>Up to 4 export power cables and up to 2 communication cables (to be installed in 1-2 cable bundles, where practicable)</p> <p>Nominal export cable voltage: <math>\pm 320</math> kilovolts (kV)</p> <p>Corridor width: Up to 2,300 feet (ft) (700 miles [mi]) (may be locally narrower or wider in sensitive or constrained areas, including landfalls)</p> <p>Length per export cable beneath seabed: 97 – 124 mi (156 – 200 km)</p> <p>Length per export cable (within Rhode Island state waters): 20.4 mi (32.9 km)</p> <p>Length per export cable (within Rhode Island 2011 GLD): 27 mi (43.8 km)</p> <p>Length per export cable (within Rhode Island 2018 GLD): 22.7 mi (36.6 km)</p> <p>Cable/pipeline crossings: up to 16 (total)</p> <p>Target burial depth (below level seabed): 3.2 – 13.1 ft (1 – 4 meters [m])</p>
Point of Interconnection	Brayton Point, Somerset, MA; Existing National Grid substation

## 2.4 Alternatives Considered

Mayflower Wind has considered alternative ECC routes between the Lease Area and Brayton Point POI. COP Section 2.0 – Project Siting and Design Development provides a discussion of alternatives considered. These alternatives include: Alternative 1 (East Passage of Narragansett Bay), Alternative 2 (West Passage of Narragansett Bay), and Alternative 3 (northern Sakonnet River near Stone Bridge and Railroad Bridge). The portion of the alternative ECCs passing through the 2011 and/or 2018 GLDs is common to all alternatives and the selected ECC. Mayflower Wind will use ongoing and recently completed survey results and habitat mapping to further demonstrate that the selected route is the least impacting feasible route. Based on available state mapping and 2021 survey data, complete avoidance of certain APCs within the GLD is not feasible.

Mayflower Wind will also, in its siting of the offshore export cables within the Brayton Point ECC, seek to avoid hard or complex seabed conditions, steep slopes, ledges, extensive shallow water areas, glacial moraine, and mobile seabeds to the extent practicable.

Figure 3 illustrates Areas of Concern, Areas to Avoid, and Preliminary Transmission Cable Routes within the Rhode Island GLDs along with the offshore ECC<sup>10</sup>. Locations of glacial moraine mapped for the GLDs are illustrated in Figure 4. However, as illustrated in Figure 3 and Figure 4, complete avoidance of shallow waters and glacial moraines is not feasible given the broad geographic extent of these features. The potential for the offshore export cable installation to affect archaeological resources (e.g., shipwrecks) (Figure 5), shipping lanes (Figure 6), and vessel activity (Figure 7), was also considered in initial siting of the ECC and will be factored into the final routing of the offshore export cables within the ECC as well as the cable burial and protection strategy.

<sup>10</sup> Available from Massachusetts Ocean Management Plan (OMP)

## 2.5 Affected Environment

Mayflower Wind has conducted and is conducting marine surveys and related data analysis to characterize the potentially affected resources within the Brayton Point ECC, including the segments within the 2011 and 2018 GLDs. The results of these surveys and analyses will be documented in reports to be filed with BOEM as updates to the Mayflower Wind COP, and will be discussed in the Mayflower Wind Rhode Island state permit submittals. In addition, Mayflower Wind has completed a number of desktop studies which characterize the affected environment. The findings of these desktop studies are documented in technical reports provided in appendices to the COP and are summarized in relevant COP Sections (see Table 1-1).

Recently completed or ongoing marine surveys and analyses that will support a characterization of the affected environment include benthic infaunal sea floor habitat field studies, geophysical and geotechnical (G&G) surveys, and marine archaeological surveys along the offshore export cable corridor. No eelgrass has been mapped by the Rhode Island Department of Environmental Management, CRMC or the Massachusetts Department of Environmental Protection in the vicinity of Brayton Point ECC; therefore, no eelgrass surveys are currently planned. However, surveys may be conducted, if necessary, to support permitting and/or if results of the ongoing benthic surveys reveal evidence of eelgrass beds within the Brayton Point ECC. In addition to field surveys, a number of desktop studies have been completed to further characterize sensitive marine resources in the Brayton Point ECC including: Essential Fish Habitat (EFH) (COP Appendix N), submerged aquatic vegetation (COP Appendix K, Seagrass and Macroalgae), offshore designated protected areas (COP Appendix L1, Designated Protected Areas) and water quality (COP Appendix H, Water Quality). These surveys and studies were used to characterize existing conditions and to evaluate and minimize impacts to sensitive resources within the Brayton Point ECC.

## 2.6 Potential Project Impacts

Potential Project-related impacts to coastal areas of Rhode Island, including the 2011 and 2018 GLD, may be caused by the installation of the offshore export cables as well as landfall of the export cables, and the installation of the underground onshore export cables. 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

## 2.7 Avoidance, Minimization, and Mitigation Measures

Mayflower Wind's design and planning process seeks to avoid and minimize construction-related impacts to the coastal environment. Many of the unavoidable Project-related impacts will be isolated and/or temporary in nature. Temporary impacts within the GLDs will include the installation of the export cables. The COP provides additional details on avoidance, minimization, and mitigation measures for specific resources in COP Section 16.0 – Summary of Avoidance, Minimization, and Mitigation Measures of Potential.

## 3.0 Rhode Island Coastal Program Policies

Table 3-1 details the enforceable policies of the State of Rhode Island that relate to the Project, and demonstrates how the Project, as proposed, is consistent with each of these policies and their underlying authorities. The enforceable policies and guidelines are found in the CRMP Red Book (650-RICR-20-00-1) and associated guidance document, as well as the Special Area Management Plans and Energy Amendments Policy Guide published October 2011. Enforceable policies are discussed. General policies, which are not enforceable, are omitted. The Legal Authority for the coastal policies detailed in the CRMP Red Book include the federal Coastal Zone Management Act of 1972 (16U.S.C §§ 1451 through 1466) and Rhode Island General Laws Chapter 46-23.



Table 3-1. Enforceable Policies of the CRMP

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
<b>Ocean SAMP Regulatory Standards</b>			
Overall Regulatory Standards Part 11.10.1 (A)	Offshore renewable energy development in the state waters of the Ocean SAMP, regardless of size are subject to policies and standards outlined in Part 11.10.	The Project meets the definition of Offshore Development under 11.10.1 (A)(3) Underwater Cables.	COP Section 3.0 – Description of Proposed Activities 3.1 – Proposed Project Location 3.3 – Project Components and Project Stages 3.3.5 - Offshore Export Cables 3.3.6 - Sea-to-Shore Transition 3.3.7 - Onshore Underground Export Cable
Overall Regulatory Standards Part 11.10.1 (C)	Offshore development shall not have a significant adverse impact on natural resources or existing human uses, particularly the Rhode Island marine economic sector.	<p>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 ISO New England regionally administered electric grid. The generation capacity from the Project would be available for future Power Purchase Agreements (PPAs) that may be negotiated with other New England states, including Rhode Island.</p> <p>Offshore: The federal Lease Area proposed for the Project is outside of Rhode Island state waters and is also beyond the 2011 and 2018 GLD areas. The Brayton Point ECC crosses the 2011 and 2018 GLD and enters State waters. .</p> <p>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, environmental constraints, existing water uses, and regulatory concerns.</p> <p>Mayflower Wind has assessed alternative routes for the ECCs, as well as potential landfall locations. The evaluation of these alternatives is detailed within the COP Section 2.0 – Project Siting and Design Development. As noted in Section 2.4, the alternative ECCs considered for the Brayton Point POI share a common route for the portion of the ECC located within the GLDs.</p> <p>Potential impacts to natural resources and existing marine uses are primarily associated with construction period impacts.</p> <p>Mayflower Wind is and will continue to work closely with commercial and recreational fishing interests on mitigation of potential impacts to their operations. Mitigation of temporary impacts associated with construction safety zone, gear interaction/loss and port usage are described in COP Section 16.0 - Summary of Avoidance, Minimization, and Mitigation Measures of Potential Impacts. Potential impacts to vessels and navigation as well as other marine uses are discussed in COP Section 13 – Navigation and Vessel Traffic and Section 14 - Other Marine Uses (Military Uses, Aviation, Offshore Energy, and Cables and Pipelines).</p> <p>Installation of the cables within the ECC will result in temporary disturbance of bottom habitats through direct disturbance or indirect effects of sedimentation to adjacent areas. As discussed in COP Section 6.6 Benthic and Shellfish and COP Appendix M - Benthic and Shellfish Resources Characterization Report, benthic communities are expected to recolonize the affected area following construction activities. The time period for recolonization varies depending on the substrate/habitat type ranging from less than one year for soft substrates to three years for complex or hard bottom substrates. Further discussion of glacial moraines is provided below in the consistency assessment for Part 11.10.1 (H , I and J).</p> <p>Mayflower Wind has sited the Project in a way that would ensure minimal displacement of water dependent industries and minimize environmental impact. Mayflower expects to</p>	<p>COP Section 2.0 – Project Siting and Design Development</p> <p>2.1 – Offshore Facilities</p> <p>2.1.6 – Offshore Export Cables</p> <p>2.1.6.1 – Offshore Export Cable Corridors Selected for PDE</p> <p>2.2 – Onshore Facilities</p> <p>2.2.1 – Landfall Location</p> <p>2.2.1.1 – Landfall Locations Selected for PDE</p> <p>2.2.2 – Sea-to-Shore Transition</p> <p>2.2.2.1 – Sea-to-Shore Transition Selected for PDE</p> <p>COP Section 3.0 – Description of Proposed Activities</p> <p>3.1 – Proposed Project Location</p> <p>3.3 – Project Components and Project Stages</p> <p>3.3.5 – Offshore Export Cables</p> <p>3.3.6 – Sea-to-Shore Transition</p> <p>3.3.6.6 – HDD Locations on Aquidneck Island (Intermediate Landfall)</p> <p>3.3.6.7 – Construction and Installation</p> <p>3.3.6.8 – Operation and Maintenance</p> <p>3.3.6.9 – Decommissioning</p> <p>3.4 – Summary of Impact-Producing Factors</p> <p>3.4.1 – Seabed (or Ground) Disturbance</p> <p>3.4.1.1 – Offshore Export Cable and Inter-Array Cable Installation</p> <p>3.4.1.1.1 – Seabed Disturbance – Seabed Preparation and Cable Burial</p> <p>3.4.1.1.1.1 – Seabed Disturbance – Horizontal Directional Drilling</p> <p>3.4.9 – Activities that may Displace or Impact Fishing, Recreation, and Tourism</p> <p>COP Section 10.0 – Socioeconomic Resources</p> <p>COP Section 11.0 – Commercial and Recreational Fisheries and Fishing Activity</p> <p>COP Section 13.0 – Navigation and Vessel Traffic</p> <p>COP Section 14.0 – Other Marine Uses (Military Uses, Aviation, Offshore Energy, and Cables and Pipelines)</p> <p>COP Section 16.0 - Summary of Avoidance, Minimization, and Mitigation Measures of Potential Impacts</p> <p>COP Appendix F3 – Hydrodynamic and Sediment Transport Modeling for the Brayton Point Export Cable Burial Assessment</p> <p>COP Appendix L1 - Offshore Designated and Protected Areas Report</p> <p>COP Appendix M - Benthic and Shellfish Resources Characterization Report</p> <p>COP Appendix V – Commercial and Recreational Fisheries Technical Report</p> <p>COP Appendix X - Navigation Safety Risk Assessment</p>



Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
		implement mitigation to address unavoidable adverse impacts. Mayflower Wind expects to work with CRMC to ensure that the Project is consistent with this policy requiring the assessment of siting project facilities within alternative coastal locations.	
Overall Regulatory Standards Part 11.10.1 (D through G)	<p>A meeting between the Fisherman’s Advisory Board (FAB), the applicant and CRMC is required to discuss potential fishery impacts.</p> <p>Uses or activities that would result in significant long-term impacts (i.e., more than 1 or 2 seasons) to commercial or recreational fisheries are prohibited.</p> <p>Mitigation is required for potential adverse impacts on fisheries.</p>	<p>Mayflower Wind will coordinate with CRMC to schedule the requisite meeting with CRMC and the FAB in the near future to discuss potential fishery impacts.</p> <p>As part of the ongoing studies, an EFH assessment has been conducted. The EFH Assessment concluded that when Project activities are considered together with the existing EFH in the Offshore Project Area, the potential for negative effects associated with the construction, operation, and decommissioning of the Project on EFH are limited in scale and considered to be very low to low. The Project is not expected to cause population level changes to EFH species or resident, migratory, and/or or protected fish species. The ECC cable construction and operations will not prohibit fish movements, present an obstacle to migration, and/or displace large populations of fish. The Project will not cause long-term or permanent negative impacts to EFH or Habitat Areas of Particular Concern available to support fish of recreational and/or commercial importance. Mayflower Wind is undertaking a habitat mapping effort based on recently completed G&amp;G and benthic surveys to support consultation with NMFS. It is anticipated that the habitat mapping and anticipated consultation with NMFS will further support this consistency determination.</p> <p>Correspondingly, the Project is not anticipated to cause long-term or permanent negative impacts to commercial or recreational fisheries.</p> <p>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 officer, conducting outreach to the commercial and recreational fishing industry, and holding regular “port hours” at key ports 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.</p> <p>The Brayton Point ECC has been evaluated for technical feasibility and environmental considerations, as well as the amount of dredging required. The ECC crosses some areas mapped as Areas of Concern and Areas to Avoid for Transmission Cables, as well as Glacial Moraines and Fishing Areas (see Figure 3 and Figure 4). The Brayton Point ECC will be up to 2300 ft (700 m) in width (and may be locally narrower or wider in sensitive or constrained areas) and is intended to allow maximum flexibility to refine siting to avoid sensitive habitats and resources. Not all sensitive habitat and resource areas can be avoided. 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 the cable placement. Disturbance of the benthic communities with complex bottom habitat conditions are expected to require from one to three years to recover (COP Appendix M1, Benthic and Shellfish Resources Characterization Report and COP Appendix M3, Summer 2021 Benthic Survey Reports). Construction related impacts are expected to be temporary.</p>	<p>COP Section 6.0 – Biological Resources</p> <p>6.6 – Benthic and Shellfish</p> <p>6.6.1 – Affected Environment</p> <p>6.6.1.4 – Brayton Point Export Cable Corridor</p> <p>6.6.1.6 – Benthic Seafloor Substrate Classifications</p> <p>6.6.1.6.4 – Brayton Point Export Cable Corridor</p> <p>6.6.2 – Potential Effects</p> <p>6.6.2.1 – Introduced Sound into the Environment (in-Air or Underwater)</p> <p>6.6.2.2 – Disturbance of Softbottom Habitat and Species</p> <p>6.6.2.3 – Introduction of Novel Hardbottom Habitat</p> <p>6.6.2.4 – Change in Ambient EMF</p> <p>6.6.2.5 – Planned Discharges</p> <p>6.6.2.6 – Accidental Events</p> <p>6.7 – Finfish and Invertebrates</p> <p>6.7.1 - Affected Environment</p> <p>6.7.2 - Species in the MA/RI WEA and the Offshore Project Area</p> <p>6.7.3 - Invertebrates in the Offshore Project Area</p> <p>6.7.4 – Potential Effects</p> <p>6.7.4.1 – Introduced Sound into the Environment (In-air or Underwater)</p> <p>6.7.4.2 – Seabed (Or Ground) Disturbance</p> <p>6.7.4.3 – Habitat Disturbance and Modification</p> <p>6.7.4.4 – Change in Ambient Lighting</p> <p>6.7.4.5 – Change in Ambient EMF</p> <p>6.7.4.6 – Planned Discharges</p> <p>6.7.4.7 – Accidental Events</p> <p>COP Section 11.0 – Commercial and Recreational Fisheries and Fishing Activity</p> <p>11.1 – Affected Environment</p> <p>11.1.2 – Summary of Commercial Fishing in the Offshore Project Area</p> <p>11.1.3 – Recreational Fishing</p> <p>11.1.4 – Fisheries Outreach</p> <p>11.1.5 – Proposed Fisheries Monitoring Research and Activities</p> <p>11.2 - Potential Effects</p> <p>11.2.1 – Vessel Activity and Presence of Infrastructure</p> <p>11.2.3 – Gear Interactions</p> <p>COP Appendix M - Benthic and Shellfish Resources Characterization Report</p> <p>COP Appendix N – Essential Fish Habitat Assessment and Protected Fish Species Assessment</p> <p>COP Appendix V – Commercial and Recreational Fisheries Technical Report</p> <p>COP Appendix W, Mayflower Wind Fisheries Communication Plan</p>
Overall Regulatory Standards Part 11.10.1 (H, I and J)	<p>Moraine edges, spawning and nursery areas and marine resources and habitats are sensitive and important habitats that shall be protected and impacts to these areas avoided. Coordination with the Habitat</p>	<p>Mayflower Wind evaluated alternative Brayton Point ECCs with respect to engineering feasibility, environmental constraints, existing water uses, and regulatory concerns. The selected Brayton Point ECC seeks to avoid and minimize impacts to glacial moraines, spawning and nursery areas, and marine resource and habitats. However, as illustrated in Figure 3 the planned ECC does not avoid all CRMC mapped glacial moraines.</p>	<p>COP Section 2.0 – Project Siting and Design Development</p> <p>2.1 – Offshore Facilities</p> <p>2.1.6 – Offshore Export Cables</p> <p>2.1.6.1 – Offshore Export Cable Corridors Selected for PDE</p> <p>2.2 – Onshore Facilities</p> <p>2.2.1 – Landfall Location</p> <p>2.2.1.1 – Landfall Locations Selected for PDE</p>

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
	Advisory Board (HAB) and the CRMC is required.	<p>Seafloor features such as moraines have been mapped in more detail using acoustic data from recently completed G&amp;G surveys (COP Appendix E.2, Geohazard Report for the Brayton Point Export Cable Corridor]). These maps define the limits and topography of the moraines in more detail and will be used to optimize the routing of cables within the Brayton Point ECC to avoid or reduce disturbance to sensitive and important habitats.</p> <p>As noted above, Mayflower Wind is completing a habitat mapping analysis in support of the NMFS EFH consultation. That analysis will supply additional information needed to provide the above demonstrations with respect to glacial moraines, spawning and nursery areas.</p> <p>Mayflower Wind will coordinate with the HAB and CRMC to address consistency with these policies.</p>	<p>2.2.2 – Sea-to-Shore Transition 2.2.2.1 – Sea-to-Shore Transition Selected for PDE</p> <p>COP Section 3.0 – Description of Proposed Activities</p> <p>3.1 – Proposed Project Location</p> <p>3.3 – Project Components and Project Stages</p> <p>3.3.5 – Offshore Export Cables</p> <p>3.3.6 – Sea-to-Shore Transition</p> <p>3.3.6.6 – HDD Locations on Aquidneck Island (Intermediate Landfall)</p> <p>3.3.6.7 – Construction and Installation</p> <p>3.3.6.8 – Operation and Maintenance</p> <p>3.3.6.9 – Decommissioning</p> <p>3.4 – Summary of Impact-Producing Factors</p> <p>3.4.1 – Seabed (or Ground) Disturbance</p> <p>3.4.1.1 – Offshore Export Cable and Inter-Array Cable Installation</p> <p>3.4.1.1.1 – Seabed Disturbance – Seabed Preparation and Cable Burial</p> <p>3.4.1.1.1.1 – Seabed Disturbance – Horizontal Directional Drilling</p> <p>3.4.1.3 – Vessel Anchoring–Construction, Operation, and Decommissioning</p> <p>3.4.4 - Changes in Ambient Electric and Magnetic Fields</p> <p>3.4.5 – Planned Discharges</p> <p>3.4.6 – Accidental Events</p> <p>COP Section 6.0 Biological Resources</p> <p>6.5 – Coastal Habitats</p> <p>6.5.1 – Affected Environment</p> <p>6.5.1.1.1 – Seagrass</p> <p>6.5.1.1.2 – Macroalgae</p> <p>6.5.1.1.3 – Submerged Aquatic Vegetation Beds</p> <p>6.5.2 – Potential Effects</p> <p>6.5.2.1 – Seabed (or Ground) Disturbance</p> <p>6.5.2.2 – Changes in Ambient Lighting</p> <p>6.5.2.3 – Changes in Ambient EMF</p> <p>6.5.2.4 – Actions that may Displace Biological Resources (Eelgrass and Macroalgae)</p> <p>6.5.2.5 – Actions that may Cause Direct Injury or Death</p> <p>6.5.2.6 – Planned Discharges</p> <p>6.5.2.7 – Accidental Events</p> <p>6.6 – Benthic and Shellfish</p> <p>6.6.1 – Affected Environment</p> <p>6.6.1.4 – Brayton Point Export Cable Corridor</p> <p>6.6.1.6 – Benthic Seafloor Substrate Classifications</p> <p>6.6.1.6.4 – Brayton Point Export Cable Corridor</p> <p>6.6.1.7 – Benthic Epifauna and Infauna</p> <p>6.6.2 – Potential Effects</p> <p>6.6.2.1 – Introduced Sound into the Environment (in-Air or Underwater)</p> <p>6.6.2.2 – Disturbance of Softbottom Habitat and Species</p> <p>6.6.2.3 – Introduction of Novel Hardbottom Habitat</p> <p>6.6.2.4 – Change in Ambient EMF</p> <p>6.6.2.5 – Planned Discharges</p> <p>6.6.2.6 – Accidental Events</p> <p>COP Appendix E.2 - Geohazard Report for the Brayton Point Export Cable Corridor</p> <p>COP Appendix L1 – Offshore Designated Protected Areas Report</p> <p>COP Appendix M - Benthic and Shellfish Resources Characterization Report</p>

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
			COP Appendix N – Essential Fish Habitat Assessment and Protected Fish Species Assessment
Overall Regulatory Standards Part 11.10.1 (K, L, and M)	Cultural and Historic Resources.  Potential impacts to these resources will be evaluated per the National Historic Preservation Act and Antiquities Act, and the Rhode Island Historical Preservation Act and Antiquities Act, as applicable.	<p>A comprehensive assessment of potential Project impacts to marine cultural and historic resources has been completed as part of Project studies and assessments for the Brayton Point ECC (see COP Section 7.1 and COP Appendix Q –Marine Archaeological Resources Assessment).</p> <p>Mayflower Wind will continue to coordinate with the Rhode Island Historic Preservation and Heritage Commission and Tribal representatives to ensure that impacts are evaluated, and, if necessary, mitigated for, in accordance with applicable federal and state regulations.</p> <p>The Project has been sited to avoid or minimize direct and indirect impact to cultural and historic resources.</p>	<p>COP Section 7.0</p> <p>7.1 – Marine Archaeology</p> <p>7.1.1 – Affected Environment</p> <p>7.1.1.1 – Shipwrecks and Obstructions</p> <p>7.1.1.2 – Paleolandscape</p> <p>7.1.2 – Potential Effects</p> <p>7.1.2.1 – Seabed (or Ground) Disturbance</p> <p>7.1.2.2 – Sediment Suspension and Deposition</p> <p>COP Appendix Q –Marine Archaeological Resources Assessment</p>
Overall Regulatory Standards Part 11.10.1 (N and O)	Visual Impact Assessment may be required in relation to potential impacts on cultural or historic resources, as well as for the potential visual impacts of the project overall.	All Project features within the Rhode Island GLDs are below the seabed. Therefore, these policies are not applicable to the Brayton Point ECC.	
Areas of Particular Concern Part 11.10.2	All offshore development shall be presumptively excluded from Areas of Particular Concern (APCs) unless the applicant demonstrates that there are no practicable alternatives that are less damaging outside the APC or that the project will not result in significant alteration to the values and resources of the APC. Avoidance measures must be demonstrated, and mitigation may be required.	<p>APCs in the Ocean SAMP include:</p> <ul style="list-style-type: none"><li>• historic shipwrecks, archaeological or historical sites and their buffers,</li><li>• offshore dive sites,</li><li>• glacial moraines,</li><li>• navigation, military and infrastructure areas</li><li>• areas of high fishing activity</li><li>• seasonal heavily used recreational boating and sailboat racing areas</li><li>• naval fleet submarine transit lanes</li><li>• other areas as identified during pre-application review</li></ul> <p>Additional details for each type of APC are provided below.</p> <p>Shipwrecks - Numerous wrecks are mapped in state and federal waters off the coast of Rhode Island. Additional details on wrecks of cultural/historical significance identified within the Offshore Project Area will be addressed in the Marine Archaeological Resources Assessment for the Project (COP Appendix Q). As with all APCs, disturbance to shipwrecks and other submerged historic resources will be avoided and mitigated if avoidance is not feasible. Recently completed G&amp;G surveys will provide additional supporting data to allow for micro-siting within the Brayton Point ECC to avoid shipwrecks.</p> <p>Dive Sites: The two closest offshore dive sites to the Brayton Point ECC are the T.C. Teti site located adjacent to but outside the ECC, and the Neptune site located approximately 4 mi (6 km) southwest of the ECC The Brayton Point ECC will not cross directly through any designated offshore dive sites.</p> <p>Glacial Moraines: The Brayton Point ECC passes over known glacial moraines associated with the Buzzards Bay Moraine and the Martha’s Vineyard Moraine. Based on an initial review in support of the Summer 2021 benthic habitat survey and geophysical and acoustic survey, the Brayton Point ECC will cross through blocky, boulder, and boulder/cobble/sand moraines mapped in the Ocean SAMP area (Figure 4, Attachment 1). Glacial moraines are broadly distributed within the Ocean SAMP area, as such complete avoidance of glacial moraines is not possible. Seafloor features such as moraines will be mapped in more detail using acoustic data as part of the cable route planning process (COP Appendix E, Marine</p>	<p>COP Section 4.0 - Site Geology and Environmental Conditions</p> <p>4.1 – Site Geology</p> <p>4.1.4 – Affected Environment</p> <p>4.1.4.3 – Brayton Point Export Cable Corridor</p> <p>4.1.5 – Potential Effects</p> <p>4.1.5.1 – Seabed Disturbance</p> <p>COP Section 7.0 – Cultural Resources</p> <p>7.1 – Marine Archaeology</p> <p>7.1.1 – Affected Environment</p> <p>7.1.1.1 – Shipwrecks and Obstructions</p> <p>7.1.1.2 – Paleolandscape</p> <p>7.1.2 – Potential Effects</p> <p>7.1.2.1 – Seabed (or Ground) Disturbance</p> <p>7.1.2.2 – Sediment Suspension and Deposition</p> <p>COP Section 10.0 - Socioeconomic Resources</p> <p>10.3 – Recreation and Tourism</p> <p>COP Section 11.0 – Commercial and Recreational Fisheries and Fishing Activity</p> <p>11.1 – Affected Environment</p> <p>11.1.2 – Summary of Commercial Fishing in the Offshore Project Area</p> <p>11.1.3 – Recreational Fishing</p> <p>11.1.4 – Fisheries Outreach</p> <p>11.1.5 – Proposed Fisheries Monitoring Research and Activities</p> <p>11.2 - Potential Effects</p> <p>11.2.1 – Vessel Activity and Presence of Infrastructure</p> <p>11.2.3 – Gear Interactions</p> <p>COP Section 13.0 – Navigation and Vessel Traffic</p> <p>COP Section 14.0 – Other Marine Uses (Military Uses, Aviation, Offshore Energy, and Cables and Pipelines)</p> <p>COP Appendix E - Marine Site Investigation Report (MSIR)(pending)</p>

Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
		<p>Site Investigation Report [MSIR]). These maps will define the limits and topography of the moraines in more detail and will be used to optimize the routing of cables within the Brayton Point ECC to avoid or reduce disturbance and protect the cables.</p> <p>Navigation: The Brayton Point ECC will cross through two designated shipping lanes and one ferry route (Quonset Point to Martha's Vineyard Fast Ferry Route) within the Ocean SAMP area. The Brayton Point ECC avoids all other mapped navigation, military, and infrastructure areas in the Ocean SAMP area.</p> <p>Unexploded Ordnance (UXO): The Brayton Point ECC will pass in the vicinity of known UXO locations and within 29 miles (47 km) of a UXO disposal site. However, the Brayton Point ECC does not encompass known UXO locations.</p> <p>High Fishing Activity: Areas of high fishing activity will be discussed with the CRMC and the FAB during the requisite meeting with those entities. Figure 4 illustrates the location of fixed and mobile fishing gear as well as recreational fishing areas.</p> <p>Boating/Racing Areas: The Brayton Point ECC does not pass through any designated boating and sailboat racing areas.</p> <p>Naval Fleet Submarine Transit lanes: The U.S. Navy has designated Submarine Transit Lanes for submerged transit. One of these lanes overlaps with the southern border of the Ocean SAMP area. Based on this description, the Brayton Point ECC does not cross a designated transit lane. Detailed information on submarine transits through the SAMP area is unavailable as this information is classified.</p> <p>Per Ocean SAMP § 11.10.2(B), all offshore development, which includes submerged cables, is presumptively excluded from Areas of Particular Concern (APCs). However, this exclusion is rebuttable if the applicant can demonstrate by clear and convincing evidence that there are no practicable alternatives that are less damaging in areas outside of the APC, or that the proposed project will not result in a significant alteration to the values and resources of the APC.</p> <p>Figure 4 shows the Brayton Point ECC in relation to glacial moraines and commercial/recreational fishing. Figure 5 illustrates the location of the Brayton Point ECC in relation to shipping channels. Mayflower Wind has endeavored to site the ECC to avoid APCs. However, complete avoidance of these areas is not feasible. Therefore, Mayflower Wind is required to demonstrate:</p> <ol style="list-style-type: none"><li>1) There are no practicable alternatives that are less damaging in areas outside of the APC;</li><li>2) All feasible efforts have been made to avoid damage to APC resources and values; and</li><li>3) There will be no significant alteration of the APC resources or values.</li></ol> <p>As noted above, Mayflower Wind is completing a habitat mapping analysis in support of the NMFS EFH consultation. That analysis will supply additional information needed to provide the above demonstrations with respect to glacial moraines. Mayflower Wind continues to coordinate with local stakeholders and the commercial fishing industry to address areas of high fishing activity within the Brayton Point ECC.</p> <p>The results of the above referenced habitat mapping in combination with consultations with commercial and recreational fishing interests, as well as evaluations that may be presented in the BOEM DEIS are expected to provide information needed to support the above demonstrations.</p>	<p>COP Appendix L1 – Offshore Designated Protected Areas Report</p> <p>COP Appendix Q –Marine Archaeological Resources Assessment</p> <p>COP Appendix V – Commercial and Recreational Fisheries Technical Report</p> <p>COP Appendix X - Navigation Safety Risk Assessment</p>



Policy #	Policy Requirement	Mayflower Wind Response	COP Section Reference
Prohibitions and Areas Designated for Preservation Part 11.10.3	Areas designated for preservation are designated for the purpose of preserving them for their ecological value. Large-scale offshore development that is in conflict with the intent and purpose of these areas is prohibited. Underwater cables are exempt from this prohibition.	<p>Areas designated for preservation in the Ocean SAMP include:</p> <ul style="list-style-type: none"><li>• Sea duck foraging habitat</li><li>• Critical Habitat under the Endangered Species Act</li></ul> <p>The Ocean SAMP designates sea duck foraging habitat in water depths less than or equal to 65.6 ft (20 m) as an area designated for protection due to the ecological value of these foraging areas to avian species. In lieu of more detailed information on bottom substrate and bivalve density, CRMC preemptively designated all areas within the 65.6 ft (20 m) contour as an area designated for protection until further research allows for a more refined determination (CRMC, 2010). The Brayton Point ECC does not pass through designated sea duck foraging habitat, and as an underwater cable, would be exempt from the prohibition for crossing these areas.</p> <p>Critical habitat for the North Atlantic Right Whale is located along the Atlantic coast, north and west of the Mayflower Wind Lease Area. The Brayton Point ECC crosses a corner of the North Atlantic Right Whale Seasonal Management Area. Given the abundance and distribution of these whales in the area, there is the potential for North Atlantic Right Whales to co-occur with activities in the Project Area, particularly in the proposed export cable corridor during the winter and spring. However, little, if any, effects to North Atlantic Right Whale critical habitat are anticipated given its position in relation to the Offshore Project Area.</p> <p>Although other Endangered Species Act listed species may be present in the Project Area, there are no other critical habitats designated within the Brayton Point ECC.</p>	<p>COP Section 6.0 – Biological Resources</p> <p>6.1 – Coastal and Marine Birds</p> <p>6.1.1 – Affected Environment</p> <p>6.1.1.2 – Marine Birds</p> <p>6.1.1.2.5 – Sea Ducks</p> <p>6.1.2 – Potential Effects</p> <p>6.1.2.1 – Seabed (or Ground) Disturbance</p> <p>6.1.2.2 – Introduced Sound</p> <p>6.1.2.3 – Changes to Ambient Lighting</p> <p>6.1.2.4 – Vessel Operations</p> <p>6.1.2.5 – Presence of Structures</p> <p>6.1.2.6 – Planned Discharges</p> <p>6.1.2.7 – Accidental Events</p> <p>6.8 – Marine Mammals</p> <p>6.8.1 – Affected Environment</p> <p>6.8.1.2 – Endangered and Threatened Marine Mammals</p> <p>6.8.2 – Potential Effects</p> <p>6.8.2.1 – Introduced Sound into the Environment (In-air or Underwater)</p> <p>6.8.2.2 – Vessel Operations</p> <p>6.8.2.3 – Seabed (or Ground) Disturbance</p> <p>6.8.2.4 – Habitat Disturbance and Modification</p> <p>6.8.2.5 – Entanglement</p> <p>6.8.2.6 – Planned Discharges</p> <p>6.8.2.7 – Accidental Events</p> <p>COP Appendix L1 - Offshore Designated Protected Areas Report</p>
Other Areas Part 11.10.4	Large-scale projects found to be a hazard to commercial navigation shall avoid areas of high intensity commercial marine traffic in state waters.	<p>Areas of high intensity commercial marine traffic in state waters, defined as 50 or more vessel counts within a 1 km by 1 km grid, are identified as an “Other Area” in the Ocean SAMP – i.e., an area for which some offshore developments could represent a hazard to commercial navigation. An area running east to west along the entire coast of Rhode Island registers as high intensity based on the above definition (Figure 7). However, the area crossed by the Brayton Point ECC within the GLD has relatively lower intensity use (at 50 to 250 vessel counts for commercial ship traffic) than most of the Rhode Island coast, in particular the offshore area directly approaching and entering Narragansett Bay (Figure 8).</p> <p>Mayflower Wind conducted a Navigation Safety Risk Assessment for the Brayton Point ECC, which is included in COP Appendix X.</p>	<p>COP Section 13.0 – Navigation and Vessel Traffic</p> <p>13.1 – Affected Environment</p> <p>13.2 – Potential Effects</p> <p>13.2.2 - Activities that may Displace or Impact Fishing and Recreation and Tourism</p> <p>COP Section 14.0 – Other Marine Uses</p> <p>14.1 – Affected Environment</p> <p>14.1.4 – Cables and Pipelines</p> <p>14.2 – Potential Effects</p> <p>14.2.2 – Installation and Maintenance of Infrastructure</p> <p>14.2.3 – Presence of Infrastructure</p> <p>COP Appendix X – Navigation Safety Risk Assessment</p>

## 4.0 Consistency Certification

Mayflower Wind has evaluated all applicable enforceable policies of the Rhode Island CRMP for the Project to determine if the activities within the GLD are consistent with those policies.

Mayflower Wind has collected benthic and geophysical field data within the full marine export cable corridor and is preparing detailed habitat mapping to support BOEM's EFH consultation with NMFS. This habitat mapping will further support cable routing and clarify impacts assessment. The EFH Consultation is scheduled to start in Q3 2022. These survey data and mapping will provide information to more fully map habitat in the Sakonnet River, Mt. Hope Bay and offshore glacial moraine areas, and to evaluate the potential impacts on Atlantic cod habitat.

While certain demonstrations are still required to support a consistency determination by CRMC, Mayflower Wind is confident that working in consultation with CRMC, the Brayton Point ECC within the GLDs can be developed in a manner consistent with enforceable policies of Rhode Island's approved CRMP.

# Attachment 1 – Figures

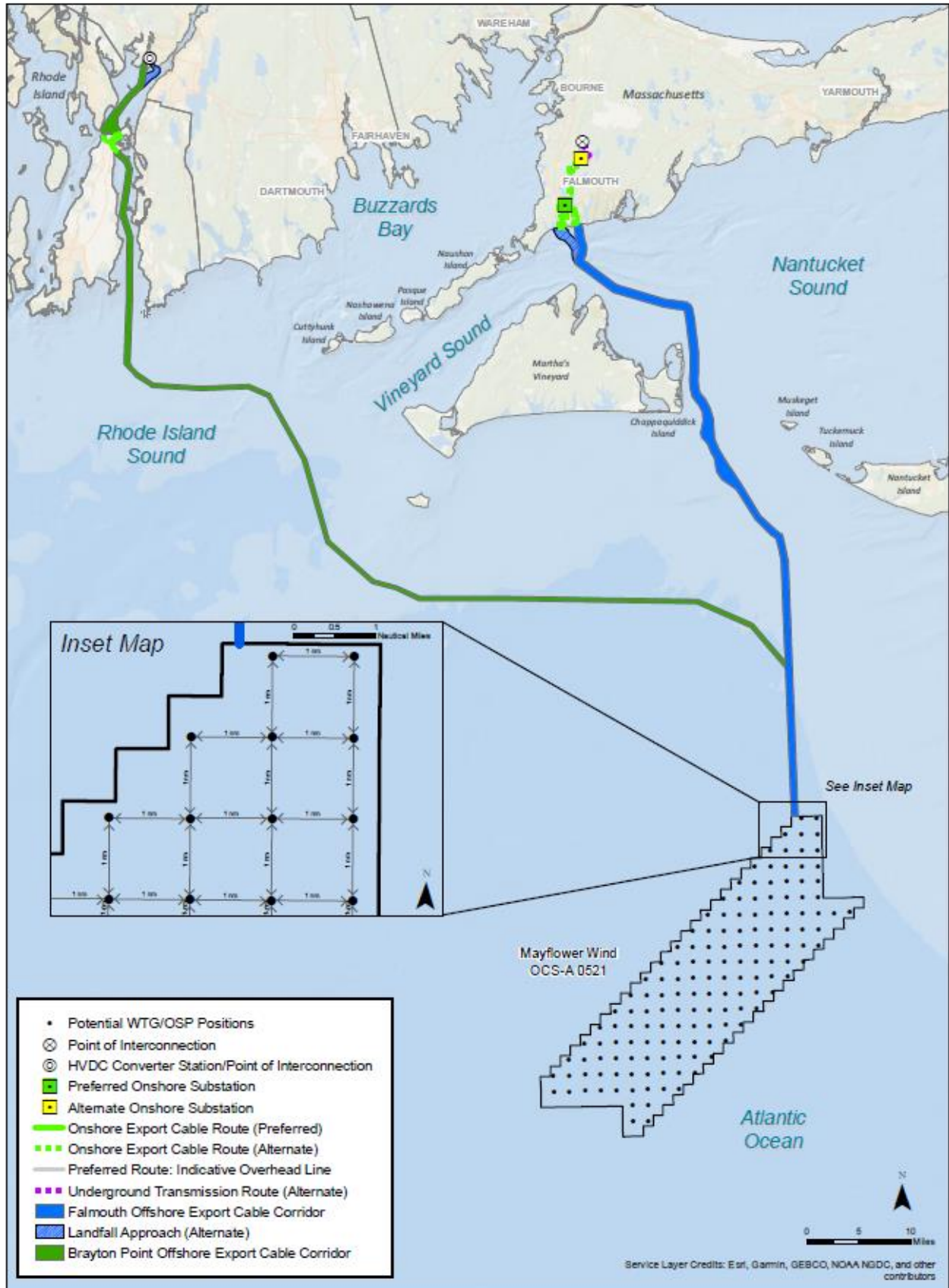


Figure 1. Overview of Mayflower Wind Offshore Renewable Energy Generation Project



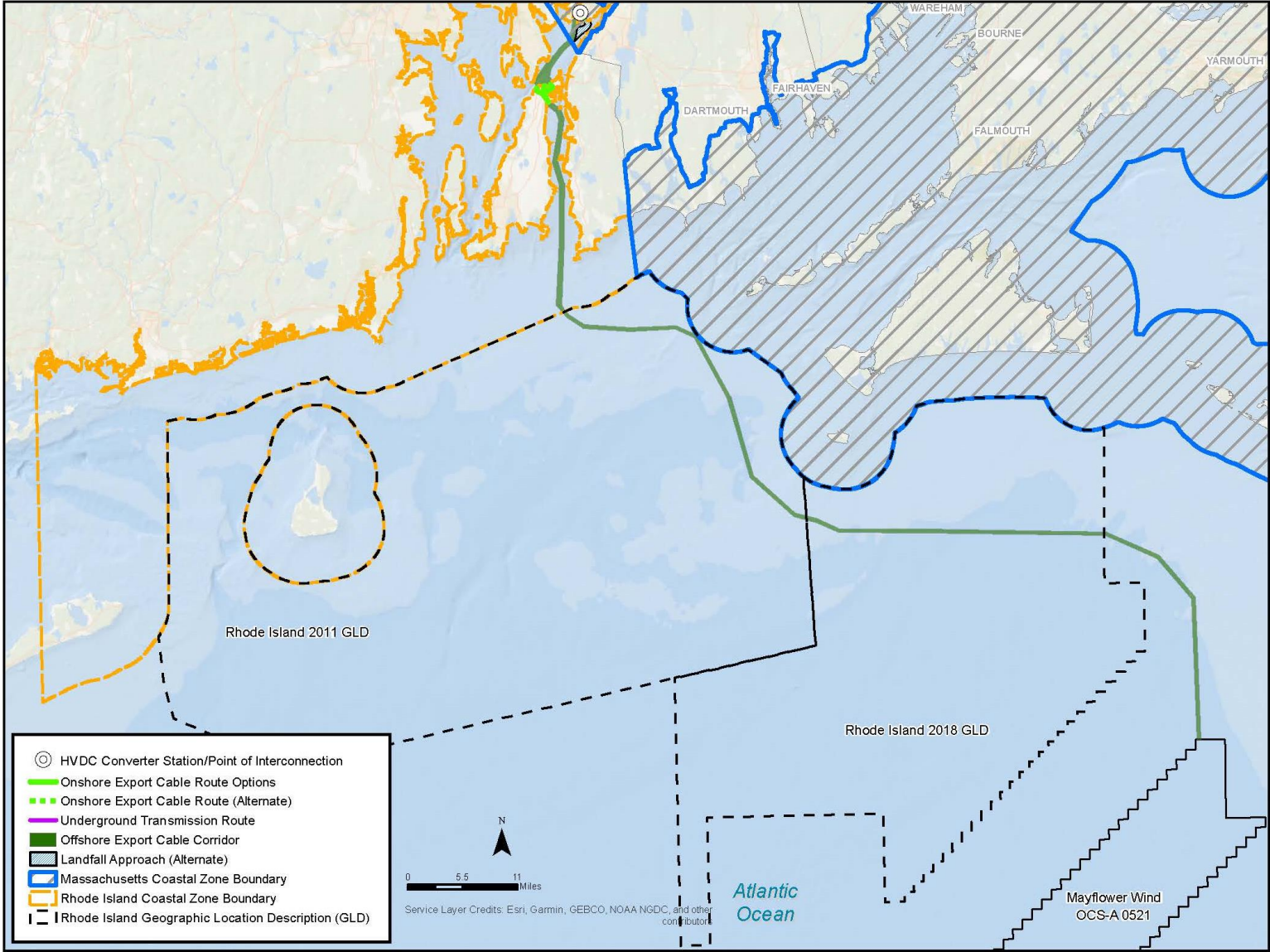


Figure 2. Location of the Brayton Point ECC within the Rhode Island GLD Boundaries

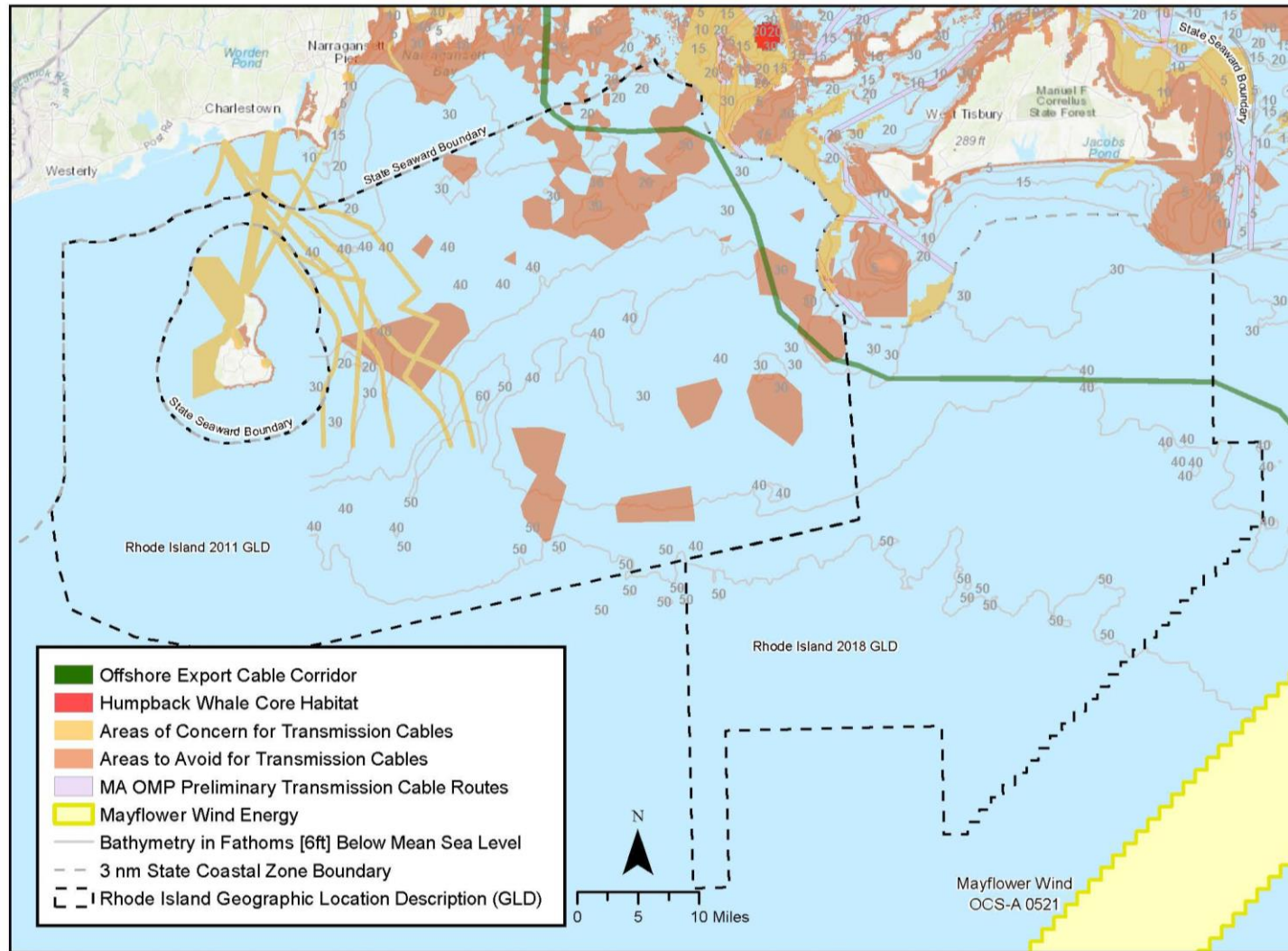
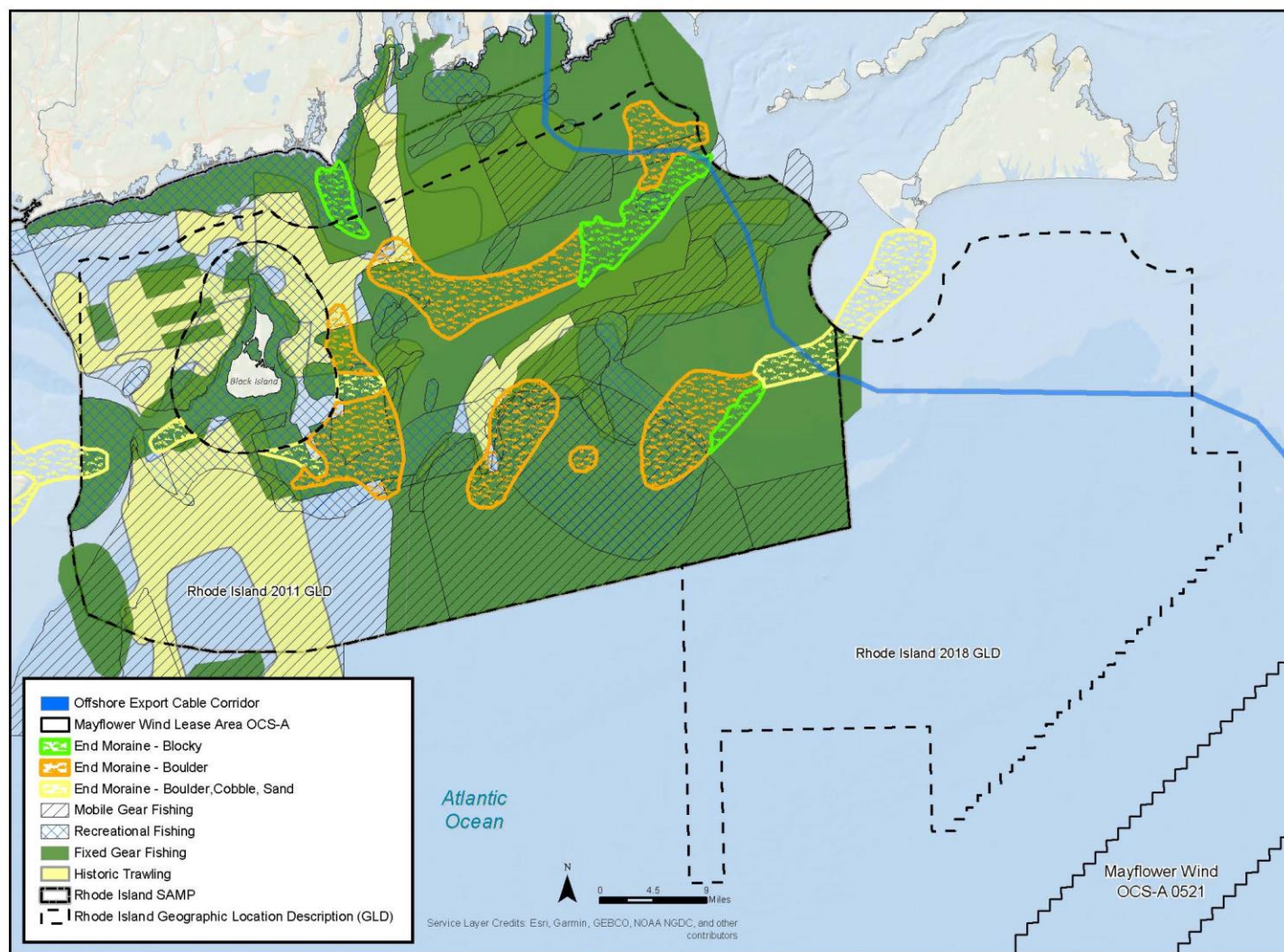


Figure 3. Areas of Concern and Areas to Avoid within Rhode Island GLD Boundaries<sup>11</sup>

<sup>11</sup> Sources: Areas to Avoid and Areas of Concern for Siting of Potential Offshore Wind Transmission Cables Corridors, 2015 Massachusetts Ocean Management Plan [http://maps.massgis.state.ma.us/czm/moris/metadata/moris\\_om\\_areas\\_to\\_avoid\\_cables\\_poly.htm](http://maps.massgis.state.ma.us/czm/moris/metadata/moris_om_areas_to_avoid_cables_poly.htm) and <http://www.crmc.ri.gov/windenergy.html>





**Figure 4. Glacial Moraines and Fishing Areas within the Rhode Island GLD Boundaries<sup>12</sup>**

<sup>12</sup> Fishing Areas (Commercial Fixed and Mobile Gear; Recreational). URI Environmental Data Center/RIGIS. Updated October 2009. Accessed July 14, 2021. [http://www.narrbay.org/d\\_projects/oceansamp/gis\\_fisheries.htm](http://www.narrbay.org/d_projects/oceansamp/gis_fisheries.htm) and Glacial Geology; GLD from <http://www.crmc.ri.gov/windenergy.html>

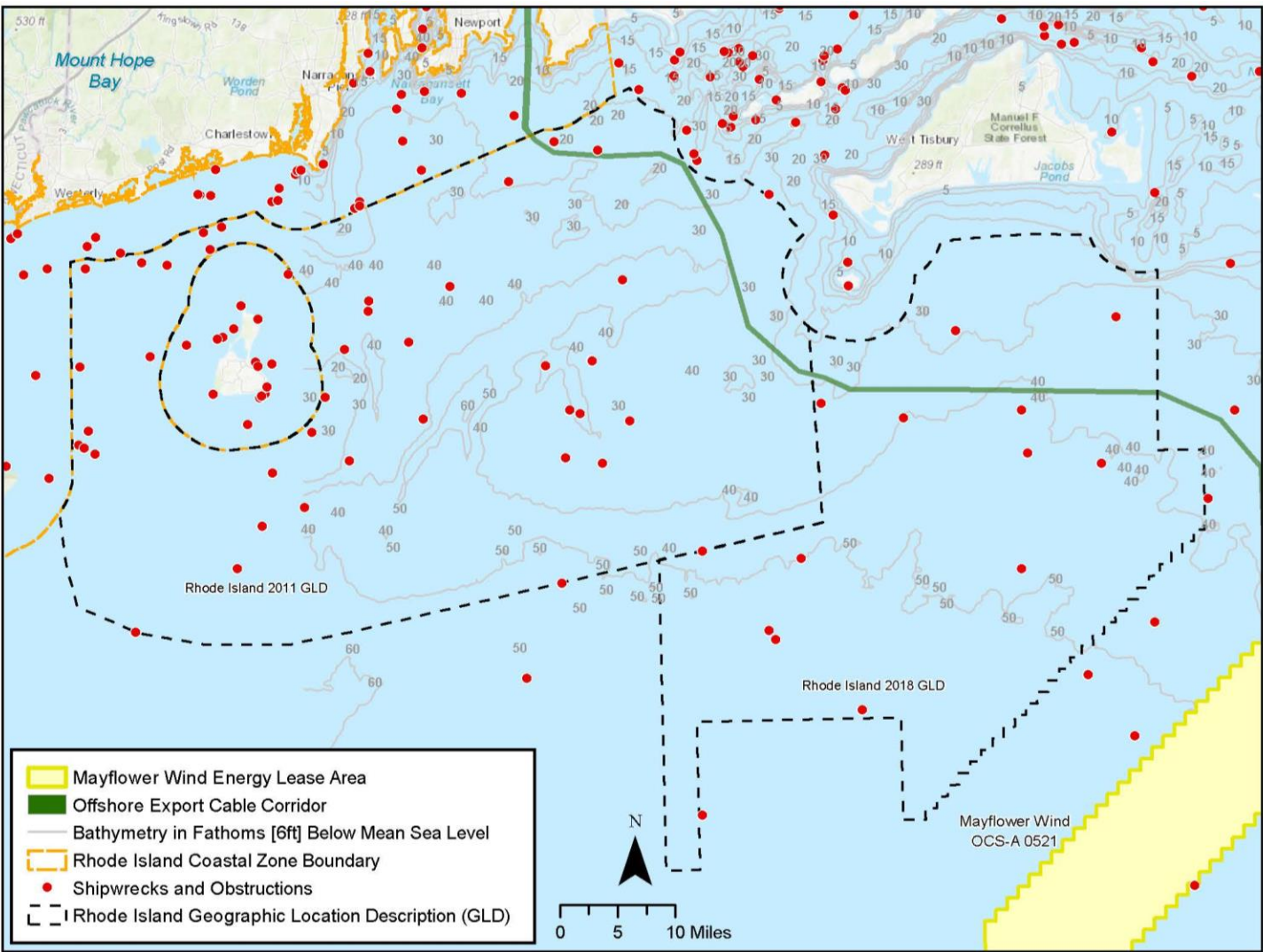


Figure 5. Marine Archaeology (Shipwrecks and Obstructions) within the Rhode Island GLD Boundaries<sup>13</sup>

<sup>13</sup> Sources: RICMC and RICZM credits, NOAA. Public Wrecks and Obstructions. 2016. Accessed July 14, 2021. <https://nauticalcharts.noaa.gov/data/wrecks-and-obstructions.html>. RI GLD <http://www.crmc.ri.gov/windenergy.html>



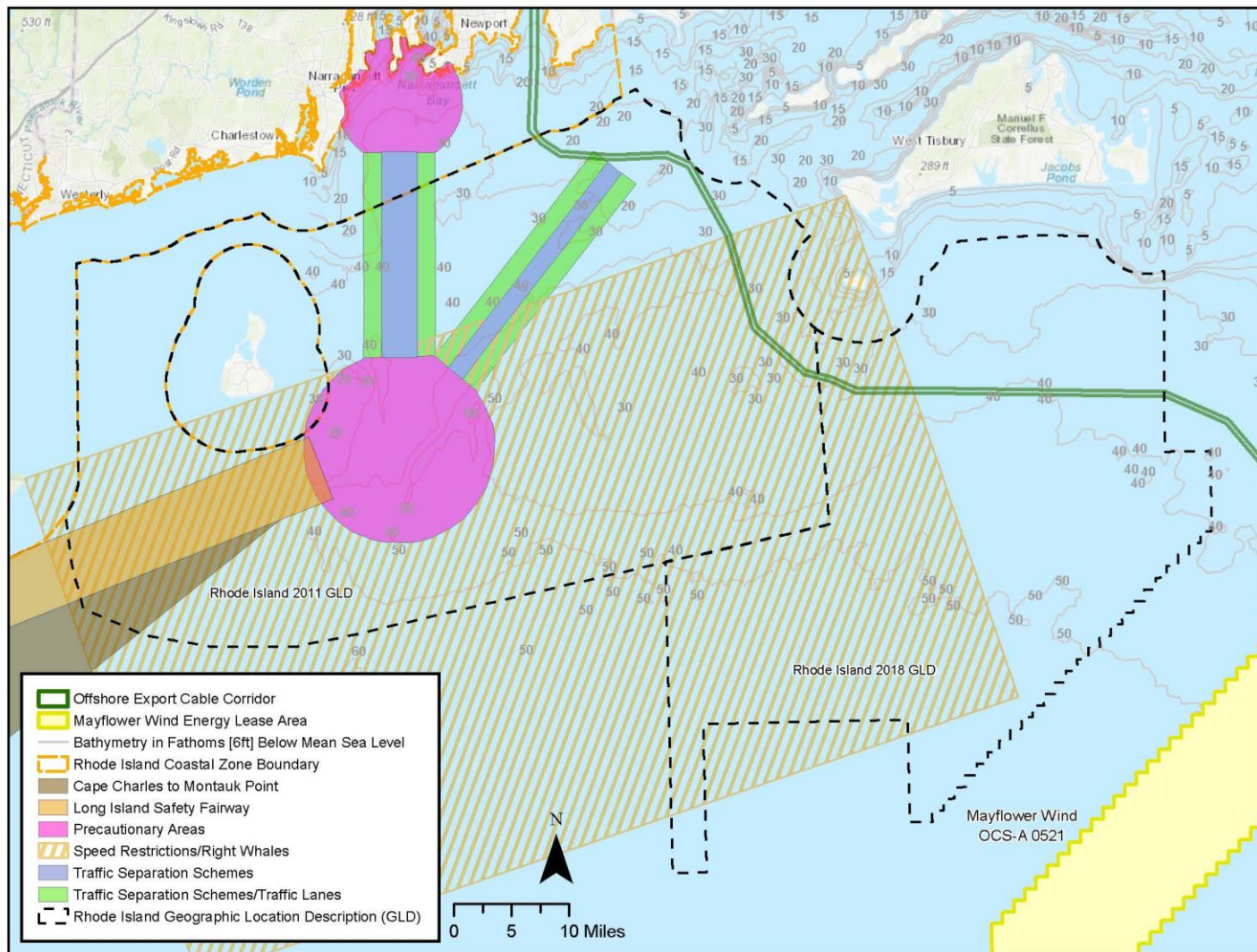


Figure 6. Shipping Lanes within the Rhode Island GLD Boundaries<sup>14</sup>

<sup>14</sup> Sources: Shipping Fairways, Lanes, and Zones for US waters. NOAA. Published 12/4/2015. Accessed July 14, 2021. <https://nauticalcharts.noaa.gov/data/gis-data-and-services.html#enc-direct-to-gis> and GLD from <http://www.crmc.ri.gov/windenergy.html>



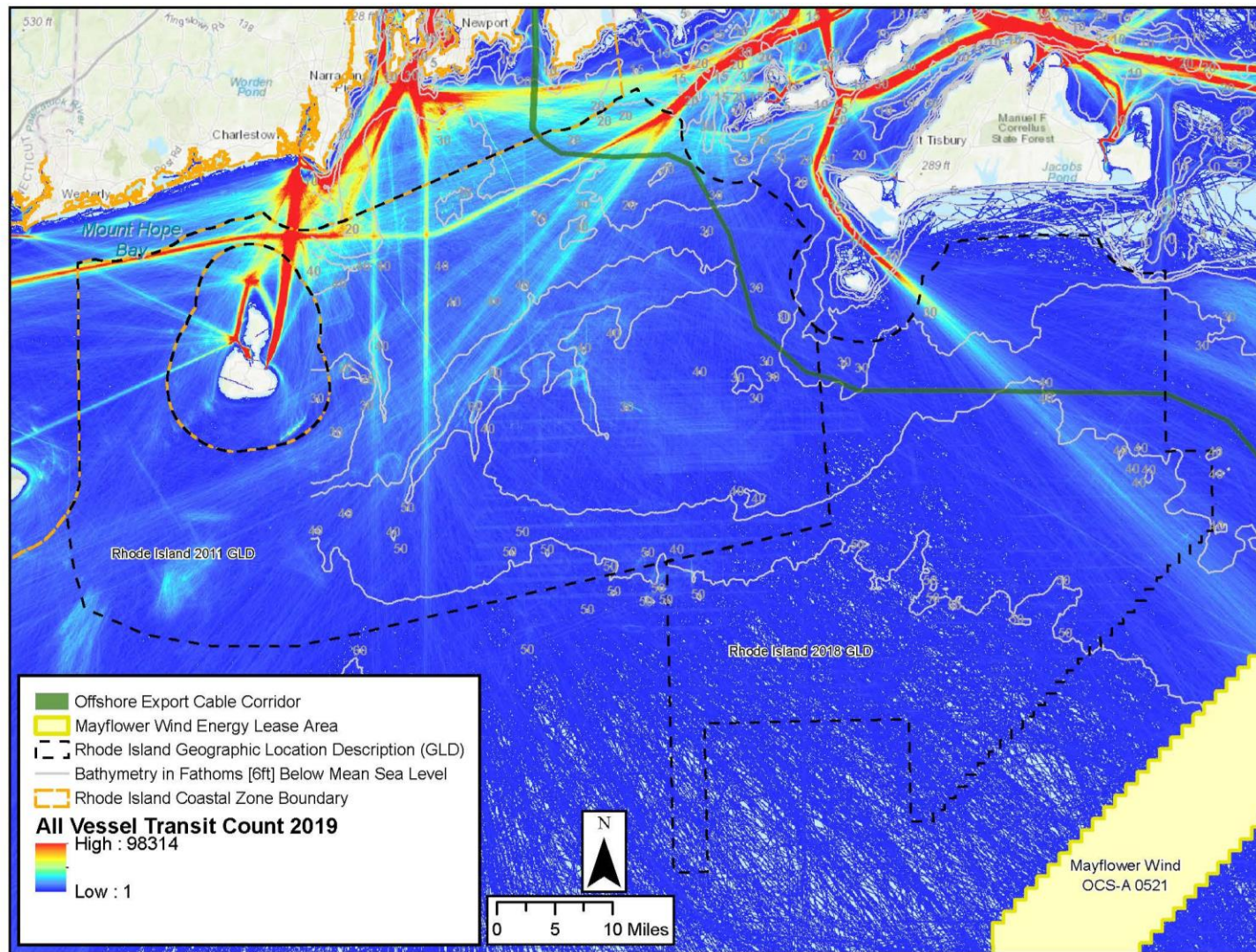
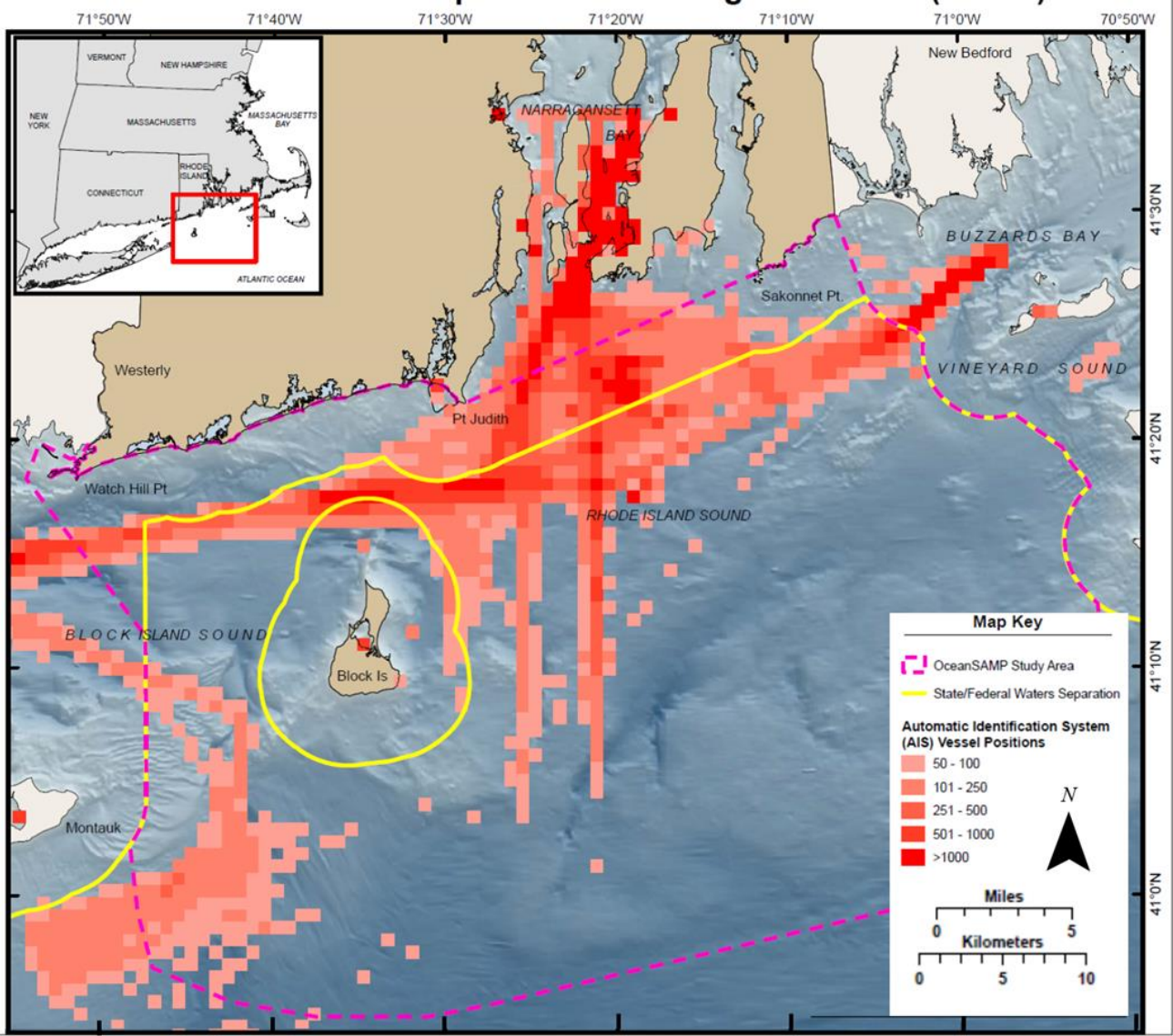


Figure 7. Vessel Activity in the Rhode Island GLD Boundaries<sup>15</sup>

<sup>15</sup> Sources: All Vessel Transit Counts from - 2019 AIS Northeast and Mid-Atlantic United States. Northeast Regional Ocean Council Northeast Ocean Data. Published April 2020. Accessed July 14, 2021, <https://portal.midatlanticocean.org/visualize> and GLD from <http://www.crmc.ri.gov/windenergy.html>



Source: Adapted from the Rhode Island Ocean Special Area Management Plan (CRMC, 2010)

Figure 8. Commercial Ship Traffic in the Rhode Island GLD



