MAYFLOWER WIND

Appendix L2. Onshore Protected Lands Report

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MAYFLOWER WIND

Prepared for
Mayflower Wind Energy LLC

Final Onshore Protected Lands Report

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Quality Information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position
0	2/13/21	For Submittal	Yes	Nancy Palmstrom	Project Manager
1	8/27/21	Revised to include Brayton Point Onshore Project Area and updated Falmouth Project Design Envelope	Yes	Kristen Durocher	Deputy Project Manager

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Acronyms and Abbreviations

Abbreviation or Acronym	Definition
ACEC	Area of Critical Environmental Concern
AIS	Air-insulated Substation
converter station	High Voltage Direct Current Converter Station
COP	Construction and Operations Plan
ECC	Export Cable Corridor
ft	foot/feet
GIS	Gas-insulated Substation
ha	hectare
HDD	Horizontal Directional Drilling
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
JBCC	Joint Base Cape Cod
km	kilometer
kV	kilovolt
Lease Area	Lease Area OCS-A 0521
m	meter
mi	statute mile
MA ARNG	Massachusetts Army National Guard
MA DFW	Massachusetts Division of Fisheries and Wildlife
MA NG	Massachusetts National Guard
MassDEP	Massachusetts Department of Environmental Protection
MassGIS	Massachusetts Bureau of Geographic Information Systems
Mayflower Wind	Mayflower Wind Energy LLC
MNC	Massachusetts National Cemetery
MPMG	Multi-Purpose Machine Gun
NGO	Non-governmental organization
NHA	Natural Heritage Area
NOAA	National Oceanic and Atmospheric Administration
NWR	National Wildlife Refuge
NPS	National Park Service
OCS	Outer Continental Shelf
OSP	Offshore Substation Platform
POI	Point of Interconnection
RIDEM	Rhode Island Department of Environmental Management
RIGIS	Rhode Island Geographic Information System
ROW	Right of Way
USFWS	United States Fish and Wildlife Service
VA	Veterans Affairs'
WGT	Wind Turbine Generator
WMA	Wildlife Management Area

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 and at Brayton Point in Somerset, Massachusetts and onshore transmission systems extending to the anticipated points of interconnection (POIs) in Massachusetts.

This report is prepared as required by 30 Code of Federal Regulations 585.627(a)(5) and in accordance with the Bureau of Ocean Energy Management guidelines for development of a Construction and Operations Plan (COP) to identify the nature and extent of sensitive biological resources or habitats that may be affected by Project activities. These sensitive habitats may be scarce on a regional scale and vulnerable to the Project activities or are designated as special areas.

1.1 Assessment Objectives

The objective of this report is to identify particularly sensitive areas onshore in the Project Area that have been specially designated for protection by federal, state, or municipal government agencies, or other non-governmental organizations (NGO). These protected lands often protect or conserve biological diversity, important natural resources, culturally significant features, or other areas where certain activities may be prohibited or restricted in order to conserve the area for a specific use or purpose. These areas include (but are not limited to) parks, sanctuaries, refuges, wildlife management areas, preserves, open spaces, and other conservation lands. Due to their ecological, cultural, or other importance, onshore protected lands are often afforded some form of legal protection.

Offshore designated protected areas are the subject of a separate report (COP Appendix L1, Offshore Designated Protected Areas Report) and are not addressed here. Similarly, onshore lands regulated relative to threatened and endangered species habitat, surface and groundwater protection zones, wetlands/waterways/floodplains/coastal landforms, cultural/historic/archaeological resources, aviation, and military activities, are not discussed within this report and are the subject of separate assessments listed in Section 4.3 below.

1.2 Report Organization

This report includes a general Project overview (Section 2.0), description of the federal, state and local onshore protected lands (Section 3.0), and characterization of effects (Section 4.0). References cited in the report are provided in Section 5.0.

2.0 Project Description

2.1 Project Overview

The Mayflower Wind Project includes a Lease Area located in federal waters south of Martha's Vineyard and Nantucket (Figure 2-1). Wind turbine generators (WTGs) constructed within the Lease Area will deliver power via inter-array cables to the offshore substation platforms (OSPs). Submarine offshore export cables will be installed within offshore export cable corridors (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. The offshore export cables will make landfall via horizontal directional drilling (HDD). The proposed Falmouth ECC will extend from the Lease Area through Muskeget Channel into Nantucket Sound to three potential landing location(s) in Falmouth including Shore Street, Central Park, or Worcester Avenue. The proposed Brayton Point ECC will run north and west from the Lease Area through Rhode Island Sound to the Sakonnet River. It will then run north up the Sakonnet River, cross land at Aquidneck Island to Mount Hope Bay, and then north into Massachusetts state waters to Brayton Point. Landfall will be made via HDD at one of two potential landing locations in Somerset on the western side of Brayton Point from the Lee River (preferred) or the eastern side via the Taunton River (alternate).

In Falmouth, 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 2-2). The new Falmouth 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 point of interconnection (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 Falmouth Tap.

As stated above, the Brayton Point ECC includes an overland portion where underground onshore export cables will be installed to cross the northern portion of Aquidneck Island (Figure 2-3). Three route options for the crossing of the island are under consideration; all route options include HDD for entry and exit on/off the island. At Brayton Point, the onshore underground export cables will traverse the site from the landing to the location of a new high voltage direct current (HVDC) converter station (converter station). Underground transmission cable(s) will be constructed from the converter station to the Brayton Point POI, the adjacent existing National Grid substation.

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. The Brayton Point Onshore Project Area includes the onshore export cable route options over Aquidneck Island, landing(s) at Aquidneck Island and Brayton Point, the underground onshore export cables, converter station, underground transmission route, and the POI at the National Grid substation. See Figure 2-2 and Figure 2-3 for the Falmouth Onshore Project Area and the Brayton Point Onshore Project Area respectively.

2.2 Specific Project Details

Each primary onshore 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
Landfall Location(s)	Falmouth, MA Three locations under consideration: Worcester Avenue (preferred), Shore Street, and Central Park Brayton Point, Somerset, MA Two locations under consideration: the western (preferred) and eastern (alternate) shorelines of Brayton Point Aquidneck Island, RI Several locations under consideration for intermediate landfall across the island
Onshore Export Cables	Falmouth, MA High voltage alternating current (HVAC)(anticipated); 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 statute miles (mi) (10.3 kilometers [km]) Brayton Point, Somerset, MA HVDC; Nominal underground onshore export cable voltage: ±320 kV Up to 4 export power cables and up to 2 communication cables Length: Up to 3,940 feet (ft) (1,200 m) on Brayton Point Aquidneck Island, RI HVDC; Nominal underground onshore export cable voltage: ±320 kV Up to 4 onshore export power cables and up to 2 communication cables Up to 3 mi (4.8 km) across Aquidneck Island
Onshore Substation/HVDC Converter Station	Falmouth, MA 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 hectares [ha]) Brayton Point, Somerset, MA Type: HVDC Converter Station Location: On the Brayton Point property area under consideration Area: Up to 7.5 acres (3.0 ha)
Transmission from Onshore Substation/Converter Station to POI	Falmouth, MA New, 345-kV overhead transmission 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 Brayton Point, Somerset, MA New 345-kV underground transmission route to National Grid substation HVAC; nominal underground transmission cable voltage: up to 345 kV Up to 2,788 ft (850 m) on Brayton Point property
Point of Interconnection	Falmouth, MA Falmouth Tap (new or upgraded switching station to be designed, permitted, and built by Eversource) Brayton Point, Somerset, MA Existing National Grid substation

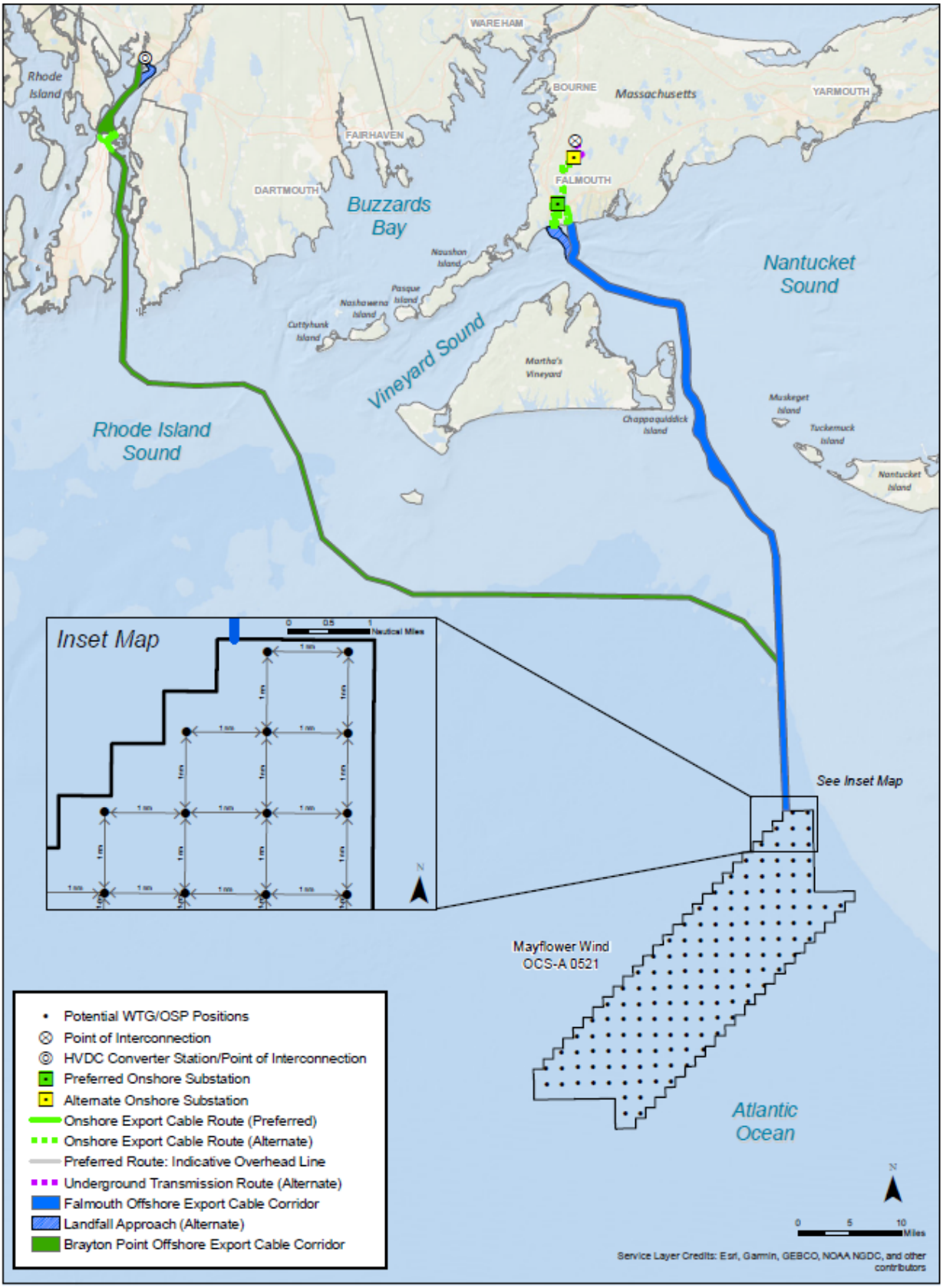


Figure 2-1. Location of Mayflower Wind Offshore Wind Renewable Energy Generation Project

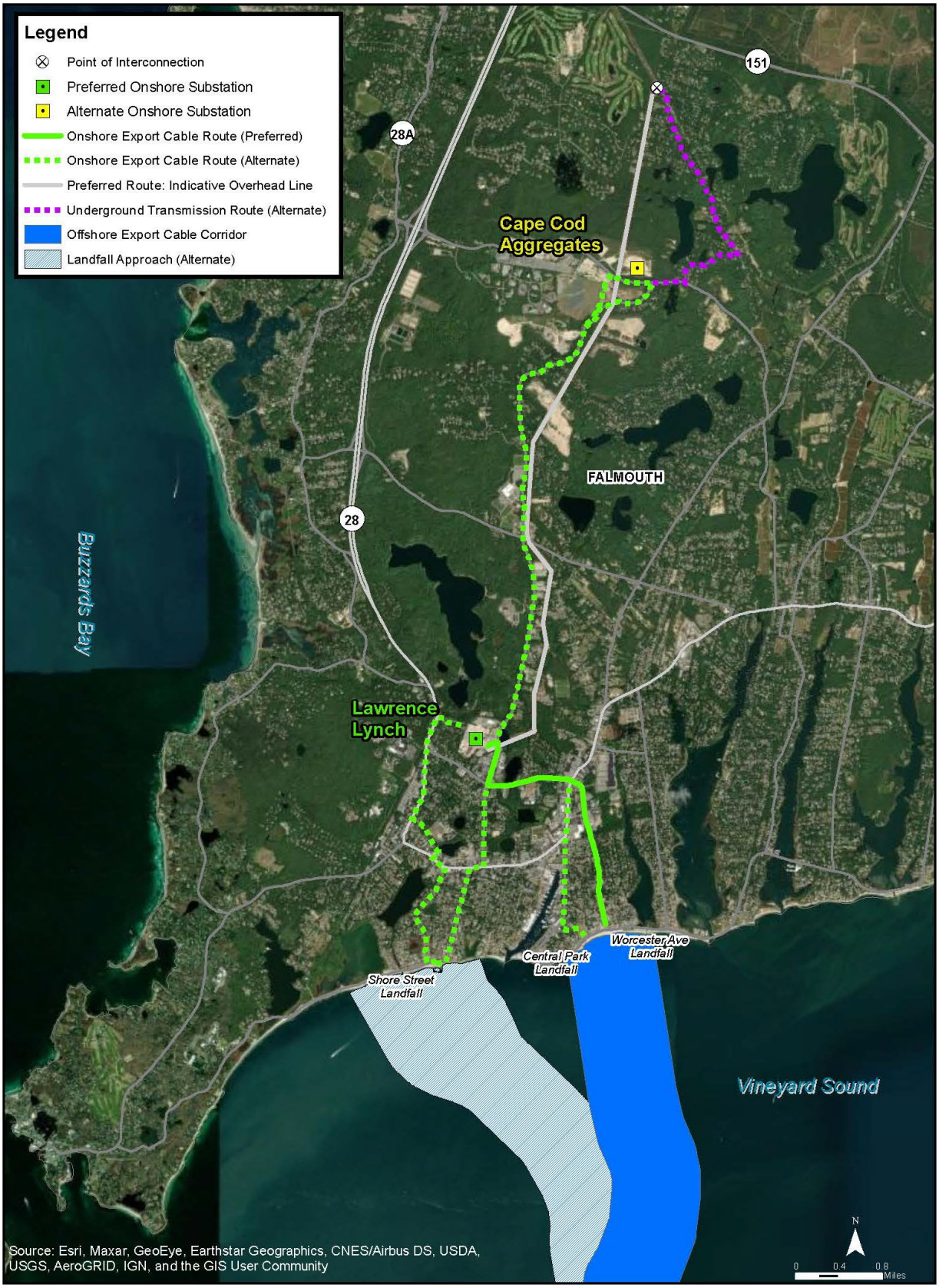


Figure 2-2. Location of Mayflower Wind Onshore Project Elements - Falmouth

Figure 2-3. Location of Mayflower Wind Onshore Project Elements - Brayton Point

3.0 Onshore Protected Lands

Onshore protected lands are properties, areas, or physical resources that are managed or otherwise regulated for protection by federal, state, and/or local agencies, or other NGOs. These lands have been designated for protection or identified for protection by virtue of their unique characteristics or the ecosystem services they provide. Descriptions of the various protected lands crossed by the Project and relevant alternates are detailed in the subsections that follow. Distances, where expressed, reflect the distance between the preferred Project routes and sites and the relevant onshore protected lands. Distances are not reported relative to alternates under consideration.

3.1 Federal Protected Lands

3.1.1 National Parks

The National Park Service (NPS) manages more than 400 areas across the United States and its territories that are commonly referred to as “parks”, including national battlefields, military parks, historic sites, rivers, scenic trails, seashores, and more (NPS, 2020a). Massachusetts is home to 21 different national historic sites, scenic trails, and recreation areas affiliated with the National Park System (NPS, 2020b). Rhode Island has four national historic sites, memorials, and historic trails affiliated with the National Park System (NPS, 2021).

3.1.1.1 Falmouth Onshore Project Area

The Cape Cod National Seashore is located 50 mi (80 km) to the north of the Lease Area and approximately 30 mi (48 km) to the east of the Falmouth Onshore Project Area. The Cape Cod National Seashore is comprised of approximately 40 mi (64 km) of sandy beach, marshes, ponds, and uplands supporting diverse species.

The Falmouth Onshore Project Area does not cross the Cape Cod National Seashore.

3.1.1.2 Brayton Point Onshore Project Area

The closest national park to the Brayton Point Onshore Project Area is the Roger Williams National Memorial in Providence, Rhode Island, located 11.5 mi (18.5 km) to the northwest of the Brayton Point landfall. Managed by the National Park Service, the Roger Williams National Memorial is a 4.5-acre (1.8 ha) urban park established in 1965 to commemorate the original settlement of Providence, Rhode Island by Roger Williams in 1636.

The Brayton Point Onshore Project Area does not cross the Roger Williams National Memorial.

3.1.2 National Forests

National Forests are managed by the United States Forest Service. No National Forests occur within the Project vicinity. Therefore, National Forests are not addressed further.

3.1.3 National Estuarine Research Reserves

The National Estuarine Research Reserves are a network of coastal sites established through the Coastal Zone Management Act to protect and study estuarine systems, particularly because estuaries contain unique plant and animal communities that have adapted to brackish water. The National Estuarine Research Reserve System is a partnership between the National Oceanic and Atmospheric Administration (NOAA) and coastal states (NOAA, 2020).

The Project does not cross any National Estuarine Research Reserves (Office for Coastal Management, 2020).

3.1.3.1 Falmouth Onshore Project Area

The closest National Estuarine Research Reserve to the Falmouth Onshore Project Area is the Waquoit Bay National Estuarine Research Reserve, which is approximately 3 mi (4.8 km) to the east of the Falmouth landfall locations.

3.1.3.2 Brayton Point Onshore Project Area

The Narragansett Bay National Estuarine Research Reserve is located approximately 4 mi (6.4 km) to the west of the Brayton Point ECC, in the center of the Narragansett Bay.

3.1.4 National Wildlife Refuges

The National Wildlife Refuge (NWR) System is administered by the United States Fish and Wildlife Service (USFWS) to conserve, manage, and restore fish, wildlife, and plant resources.

3.1.4.1 Falmouth Onshore Project Area

The closest onshore NWR to the Falmouth Onshore Project Area is the Mashpee NWR, located more than 5 mi (approximately 8 km) to the east of the preferred and alternate onshore substations (Figure 3-1). The Mashpee NWR, located in the towns of Mashpee and Falmouth, is part of the Eastern Massachusetts NWR Complex and was established to protect Waquoit Bay area waterfowl and wildlife. Nine federal, state and private conservation groups partner to manage the refuge, including salt marshes, cranberry bogs, Atlantic white cedar swamps, freshwater marshes, rivers and vernal pools (USFWS, 2019a). The Falmouth Onshore Project Area does not cross the Mashpee NWR.

3.1.4.2 Brayton Point Onshore Project Area

There are no national wildlife refuges in the vicinity of the Brayton Point Onshore Project Area.

3.1.5 National Cemeteries

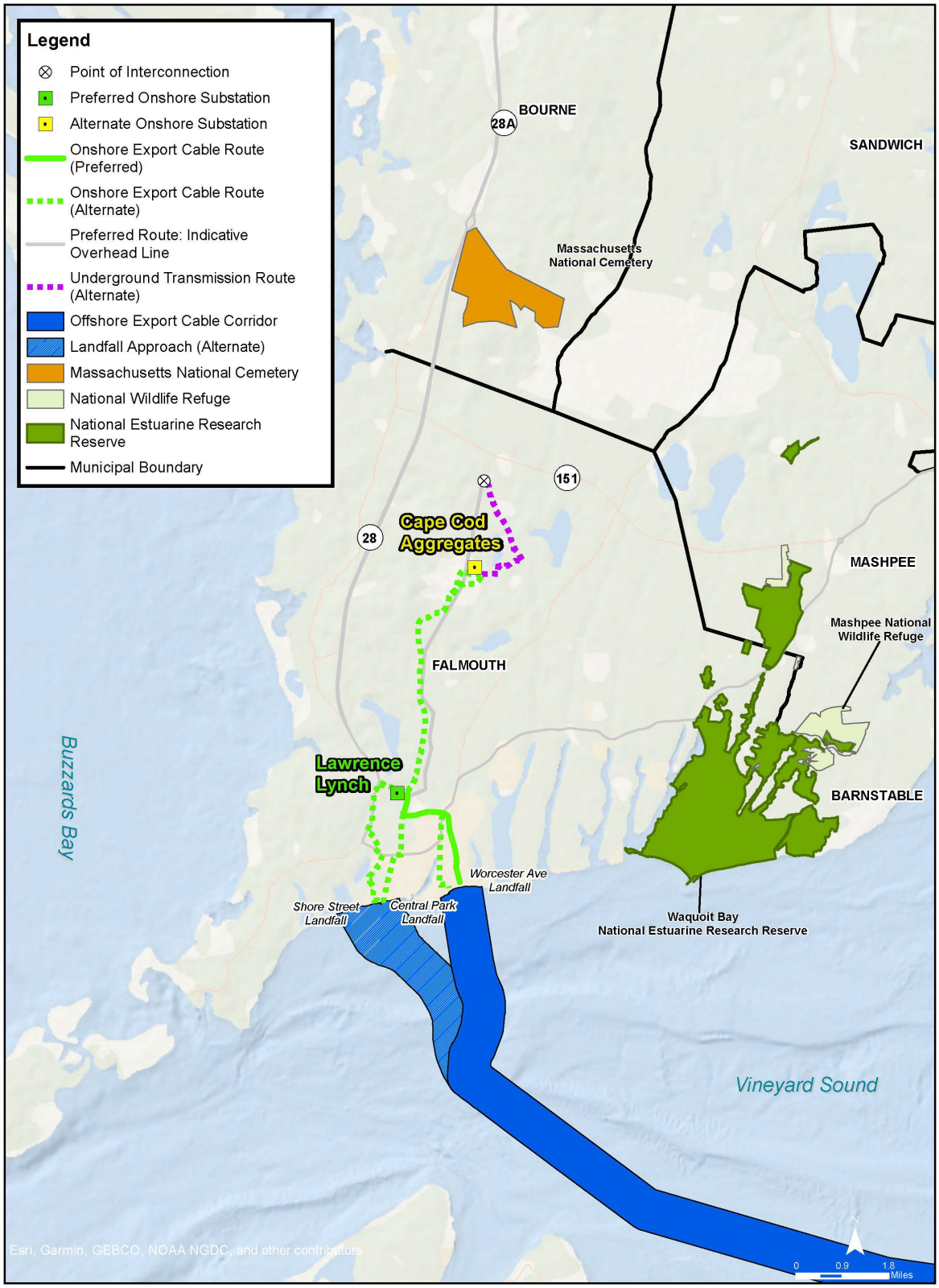
There are 155 national cemeteries in the United States that are managed by the Department of Veterans Affairs' (VA) National Cemetery Administration.

3.1.5.1 Falmouth Onshore Project Area

The closest national cemetery to the Project is the Massachusetts National Cemetery (MNC), a federally owned and managed national memorial site and cemetery for veterans of the armed forces. The MNC is owned by the United States Department of Veterans Affairs and is part of the National Cemetery Administration. The MNC is in the Town of Bourne on Joint Base Cape Cod (JBCC), approximately 2.3 mi (3.7 km) from the Falmouth POI.

3.1.5.2 Brayton Point Onshore Project Area

There are no national cemeteries in Rhode Island or the vicinity of the Brayton Point Onshore Project Area.



Data sources: USFWS, 2019b; Massachusetts Bureau of Geographic Information System (MassGIS), 2020a; Office for Coastal Management, 2020

Figure 3-1. Federal Protected Lands in the Vicinity of the Falmouth Onshore Project Area

3.2 State Protected Lands

This section for State protected lands includes those managed by the Commonwealth of Massachusetts in the vicinity of the Falmouth Onshore Project Area and in Somerset at the terminus of the Brayton Point ECC, and those managed by the State of Rhode Island within the vicinity of the onshore export cable route options across Aquidneck Island.

3.2.1 Commonwealth of Massachusetts

3.2.1.1 Areas of Critical Environmental Concern

Areas of Critical Environmental Concern (ACECs) are places in Massachusetts that receive special recognition because of the quality, uniqueness and significance of their natural and cultural resources.

Falmouth Onshore Project Area

There are no ACECs in the immediate vicinity of the Falmouth Onshore Project Area. The Pocasset River ACEC and Bourne Black River ACEC are located 4.5 mi (7.2 km) and 5.8 mi (9.3 km) from the proposed Falmouth POI, respectively (Figure 3-2).

Brayton Point Onshore Project Area

There are no ACECs in the vicinity of the Brayton Point Onshore Project Area.

3.2.1.2 State Parks and State Forests

The Massachusetts Department of Conservation and Recreation oversees the operation of all Massachusetts State Parks and State Forests.

Falmouth Onshore Project Area

There are no State Parks or State Forests in the vicinity of the Falmouth Onshore Project Area (Figure 3-2 and Figure 3-3). The closest State Park to the Project is the South Cape Beach State Park, located approximately 3.5 mi (5.6 km) to the east of the Worcester Ave landfall location. The closest State Forest is the Shawme-Crowell State Forest, located approximately 8.8 mi (14.2 km) from the Falmouth POI.

Brayton Point Onshore Project Area

There are no Massachusetts State Parks or State Forests in the near vicinity of the Brayton Point Onshore Project Area (for Rhode Island State Parks, see Section 3.2.2.1).

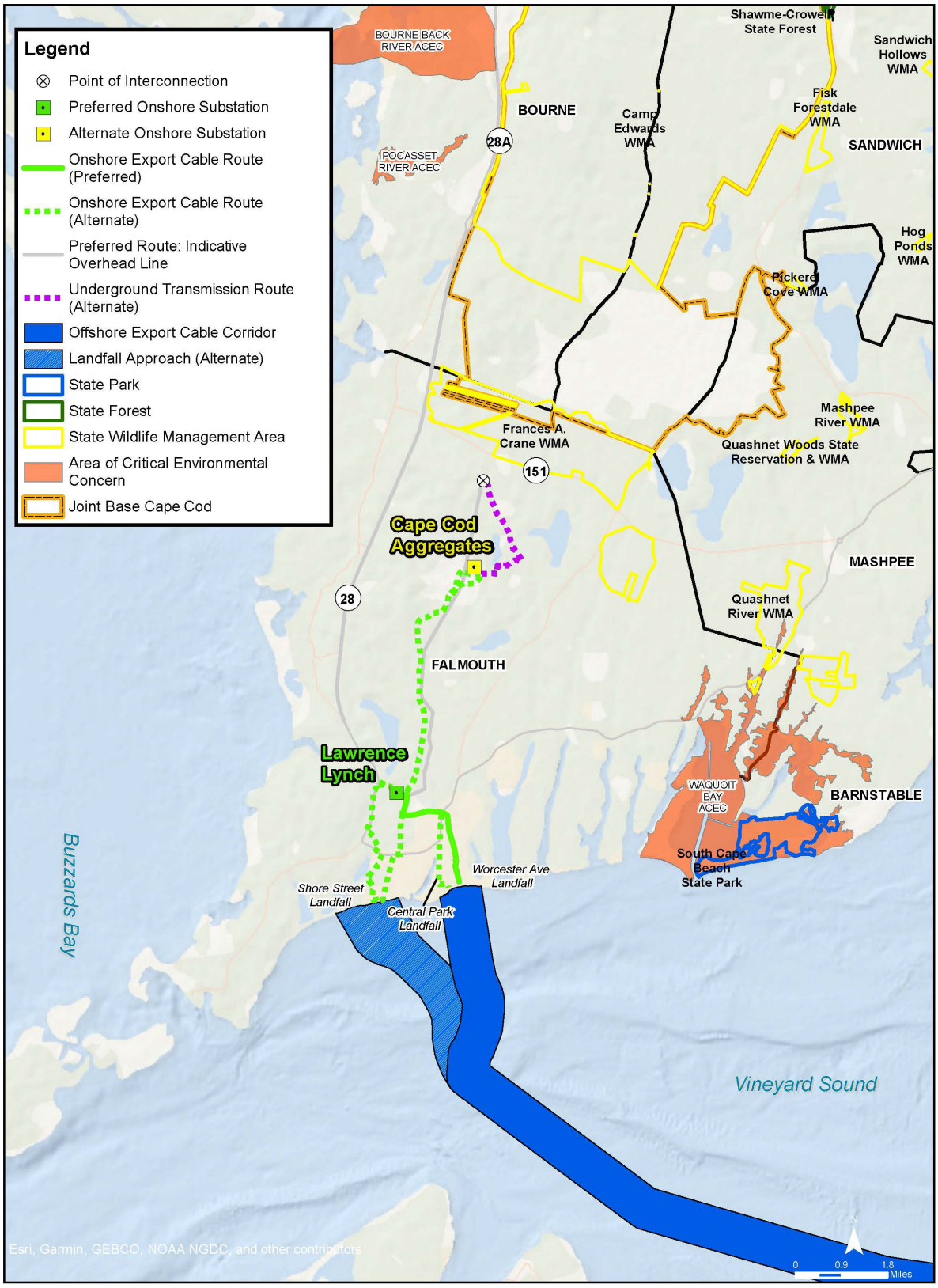
3.2.1.3 Wildlife Management Areas

The Massachusetts Division of Fisheries and Wildlife (MA DFW) owns and manages more than 200,000 acres (80,900 ha) of Wildlife Management Areas (WMAs). These WMAs are protected for the conservation of freshwater fish and wildlife, including endangered plants and animals. They are open to recreation such as hunting, fishing, and trapping, with specific hunting and fishing regulations applied within the WMAs (MA DFW, 2020).

Falmouth Onshore Project Area

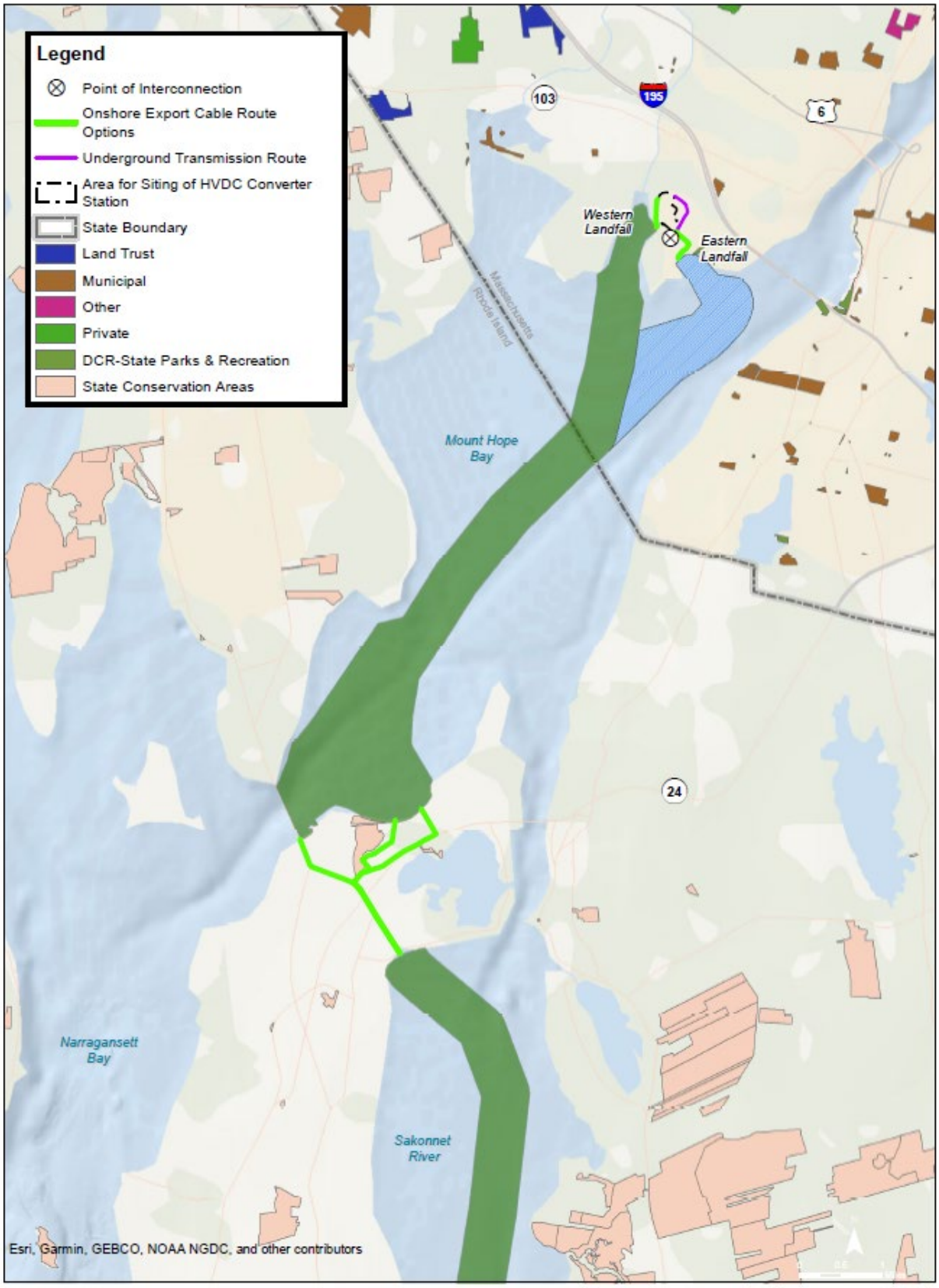
There are two Massachusetts WMAs in the vicinity of the Falmouth Onshore Project Area: Camp Edwards WMA, and Francis A. Crane WMA (Figure 3-2).

The Camp Edwards WMA is the 15,000 acre (6,070 ha) military training area known as Camp Edwards located on JBCC (see Section 3.2.1.4.2 below). The boundary of the Camp Edwards WMA is consistent with the Camp Edwards boundary within JBCC and is located 3.8 mi (6.1 km) north of the Falmouth POI.



Data sources: MassGIS, 2020a; MassGIS, Department of Conservation and Recreation, and Coastal Zone Management, 2018

Figure 3-2. State Protected Lands Crossed by the Falmouth Onshore Project Area



Data source: RIGIS, 2018a

Figure 3-3. State Protected Lands in the Vicinity of the Brayton Point Onshore Project Area

The Frances A. Crane WMA is located approximately 2.0 mi (3.2 km) north of the Falmouth POI. It is divided into two separate parcels commonly referred to as "Crane North" and "Crane South" and totals more than 1,800 acres (730 ha). The WMA contains a range of different habitats from a pitch pine/scrub oak woodland to sandplain grasslands. It provides hunting opportunities for most game animals with an emphasis on upland game birds, and is stocked with ring-necked pheasant.

Brayton Point Onshore Project Area

There is one Massachusetts WMA in the vicinity of the Brayton Point Onshore Project Area. Brayton Point WMA is a 2.16 acre (0.87 ha) area established in 1992 and managed for hunting by the Massachusetts Department of Fish and Game. The WMA is approximately 0.47 mi (0.76 km) from the western landfall and 0.06 mi (0.10 km) from the eastern landfall location (Figure 3-3).

3.2.1.4 JBCC/Camp Edwards

The Falmouth POI is located approximately 3.8 mi (6.1 km) south of JBCC and Camp Edwards (Figure 3-2). Details on JBCC and the protected lands associated with the base are provided below. JBCC and Camp Edwards are located in proximity to the Falmouth Onshore Project Area; there is no part of JBCC or Camp Edwards located near the Brayton Point Onshore Project Area.

3.2.1.4.1 JBCC

Joint Base Cape Cod is a 22,000 acre (8,900 ha) joint-use military base located in parts of the towns of Bourne, Sandwich, Mashpee, and Falmouth. It contains five military commands (listed below) from the Department of the Air Force, the United States Coast Guard, the Army National Guard, and the Air National Guard:

- Massachusetts Army National Guard (MA ARNG) at Camp Edwards;
- Massachusetts Air National Guard at Otis Air National Guard Base;
- 253rd Combat Communications Group, also at Otis Air National Guard Base;
- 6th Space Warning Squadron phased array radar site at Cape Cod Air Force Station; and
- United States Coast Guard at Air Station Cape Cod.

JBCC is used for training for national and international missions, conducting airborne search and rescue missions, and intelligence command and control. It is situated on land owned by the Commonwealth of Massachusetts Division of Capital Asset Management and Maintenance. The Massachusetts Department of Fish and Game, Division of Fisheries and Wildlife is responsible for the care, custody and control of the land and the MA ARNG holds a license to use the land (MA ARNG, 2020a).

Environmental management at JBCC is enacted through both federal and state oversight (Massachusetts National Guard [MA NG], 2020a), as follows:

- The **Environmental Management Commission**, part of the Massachusetts Executive Office of Energy and Environmental Affairs, monitors military and other activities in the Upper Cape Water Supply Reserve and protects the drinking water supply and wildlife habitat on the base;
- The **United States Environmental Protection Agency** provides compliance assistance and regulatory guidance to the military commands and is involved with the cleanup and community involvement programs; and
- The **Massachusetts Department of Environmental Protection (MassDEP)** also works with the JBCC military commands by providing assistance and guidance to ensure compliance with environmental regulations.

3.2.1.4.2 Camp Edwards

Camp Edwards, located on JBCC, contains 15,000 acres (6,070 ha) of undeveloped training area used for maneuvering and patrol training; small arms ranges; helicopter landing zones; nuclear, biological, and chemical training bunkers; and convoy and driver training (MA NG, 2020b). It has a variety of natural

communities, including pitch pine/scrub oak barrens called Pine Barrens. Plant communities on Camp Edwards are mid- to late-successional forest including pitch pine-oak forest woodland, pitch pine-scrub oak community, black oak-scarlet oak forest/woodland, and scrub oak shrubland (MA ARNG, 2020b).

Camp Edwards has unique environmental conditions and vegetative communities that provide habitat for 41 state-listed plants and animals, six species on the unofficial watch list, and one candidate species for federal listing, the New England cottontail (*Sylvilagus transitionalis*). Four main habitat types support these rare species: large unfragmented sections of forest, shrublands, wetlands, and grasslands (MA ARNG, 2020c).

Camp Edwards is also a designated Massachusetts WMA (Section 3.2.1.3) and is managed as such by the MA DFW.

3.2.2 State of Rhode Island

The only part of the Project that passes through the State of Rhode Island is associated with the Brayton Point ECC as the export cable crosses the northern portion of Aquidneck Island. The following subsections apply to the Brayton Point Onshore Project Area, including Aquidneck Island.

3.2.2.1 State Parks and State Forests

The Rhode Island Department of Environmental Management (RIDEM) Division of Parks manages over 8,200 acres (3,320 ha) of land, including parks, beaches, campgrounds, bike paths, historic sites, picnic areas, trails, athletic fields, dams, fishing access, and boat ramps (www.riparks.com). The Brayton Point Onshore Project Area crosses two state-managed areas via HDD on Aquidneck Island (Figure 3-3):

- Black Regiment Memorial Park, managed by RIDEM, is within the corridor of onshore export cable route, Route Option 1 (westernmost option over Aquidneck Island). The underground export cable route would be installed via HDD within the roadway crossing through the park.
- Bertha K. Russel Preserve and Town Pond Management Area is owned by RIDEM and held for conservation and recreation. The onshore export cable route, Route Option 2, over Aquidneck Island would cross under the conservation area.

The Brayton Point Onshore Project Area also crosses in the vicinity of one State Conservation Area:

- Gull Cove Fishing Area is a 3.6 acre (1.5 ha) State Conservation Area maintained for public fishing access. The onshore export cable route, Route Option 3, over Aquidneck Island would be installed approximately 0.05 mi (0.08 km) from Gull Cove fishing area.

3.2.2.2 Wildlife Management Areas

RIDEM manages 61,000 acres (24,685 ha) of land, including 30 WMAs (RIDEM, 2021). These areas are protected for conservation and recreation purposes, including hunting and fishing activities. The Brayton Point Onshore Project Area crosses the Boyd Marsh WMA on Aquidneck Island (Figure 3-3).

Boyd Marsh WMA is a 56 acre (22 ha) saltmarsh restoration site in North Portsmouth, RI along Mt Hope Bay. The onshore export cable route, Route Option 2, on Aquidneck Island would cross under the edge of the WMA via HDD. Boyd Marsh is considered important coastal marsh waterfowl habitat as well as prime habitat for migratory bird species (Atlantic Coast Joint Venture, 2005).

3.3 Municipal Protected Lands

This section discusses the presence of municipal protected lands in the Onshore Project Areas including the towns and municipalities within the Falmouth Onshore Project Area (Falmouth, MA) and the Brayton Point Onshore Project Area (Portsmouth, RI and Somerset, MA).

3.3.1 Municipal Conservation Lands and Open Space

The primary function of municipal conservation lands and open spaces is to protect and preserve natural lands and/or return developed lands to their natural state for the benefit of the public to enjoy outdoor recreation or to protect specific or sensitive resources that exist on the land. Conservation protections on these properties vary, but a primary practice includes Conservation Restrictions or Agricultural Preservation Restrictions. Conservation Restrictions are legal agreements between a landowner and non-profit land trust or government agency that may permanently limit some uses of the land in order to protect ecosystem services or conservation values that the land provides, often in exchange for the landowner receiving tax benefits. Each Conservation Restriction is unique to the land that it is protecting. Some may entirely prohibit development, while others may protect the land for farmland or forestry purposes.

The Mayflower Wind onshore export cables (both the preferred and alternates) for the Falmouth and Brayton Point Onshore Project Areas are primarily routed within roadway ROWs and would not cross any municipal-owned conservation land or protected local open space properties. Where the proposed routes border municipal conservation lands or open space, the limits of disturbance would be limited to the road ROW to avoid crossing into these properties.

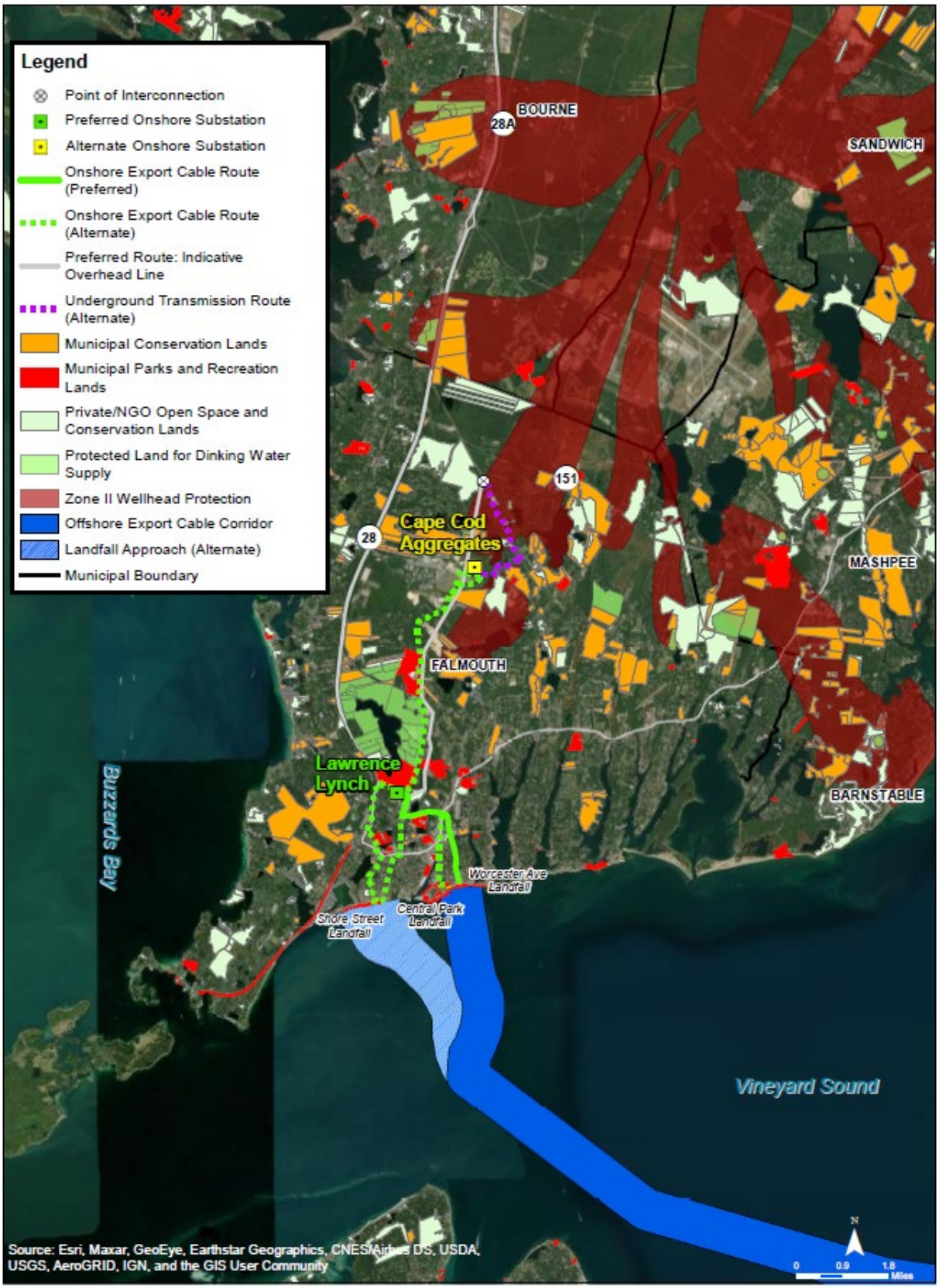
3.3.1.1 Falmouth Onshore Project Area

The corridors for the onshore export cable routes do not cross any properties designated for protection as conservation land and open space by the Town of Falmouth.

Municipal conservation lands and open space parcels in the vicinity of the Falmouth Onshore Project Area are shown on Figure 3-4.

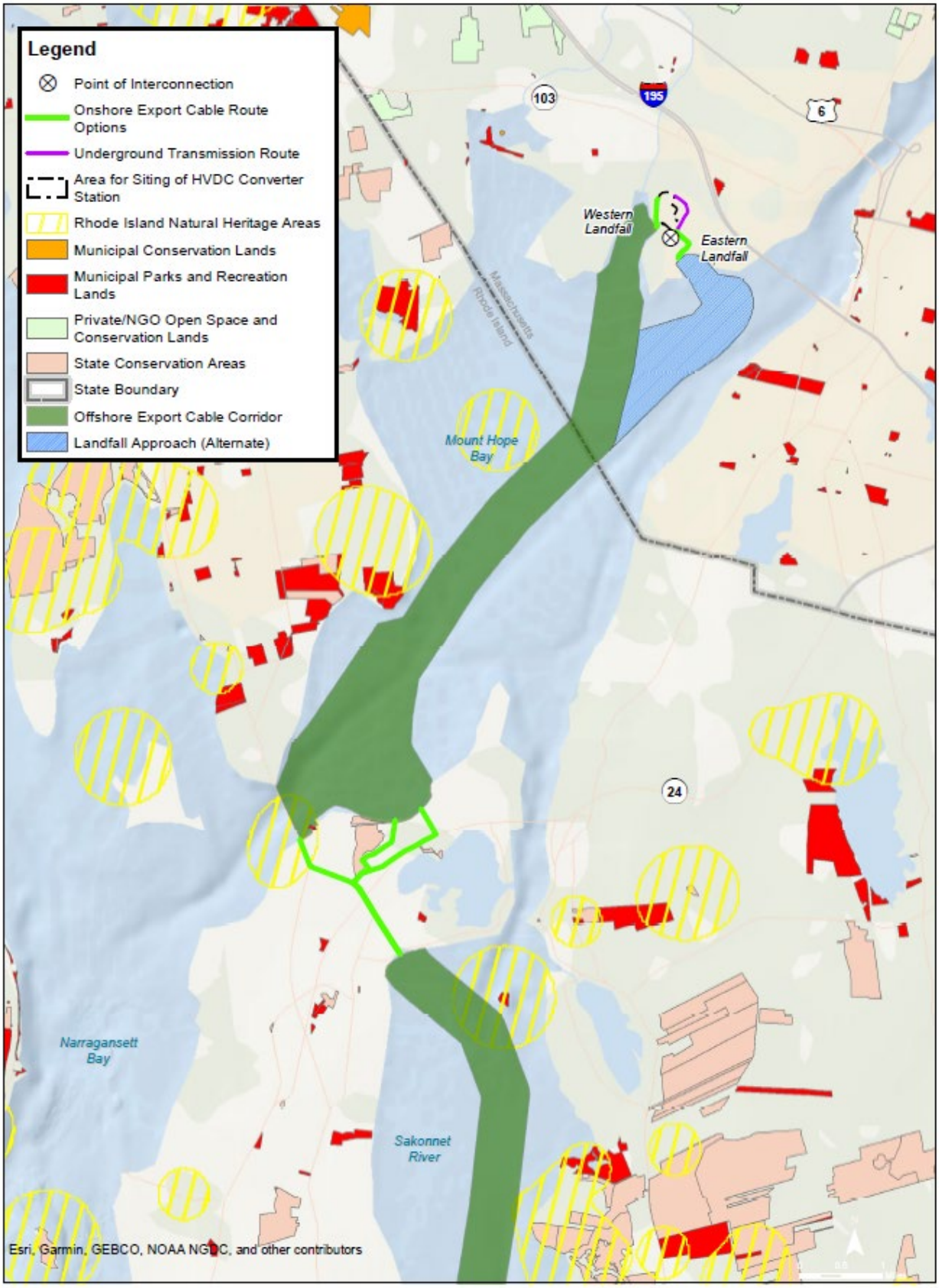
3.3.1.2 Brayton Point Onshore Project Area

The Brayton Point Onshore Project Area does not cross any municipal-owned conservation lands in the communities of Portsmouth, RI or Somerset, MA. Municipal conservation lands and open space parcels in the vicinity of the Brayton Point landfalls are shown on Figure 3-5.



Data sources: MassGIS, 2020a, 2020b

Figure 3-4. Municipal, Private, and NGO Protected Lands Crossed by the Falmouth Onshore Project Area



Data sources: RIGIS, 2018a, 2018b

Figure 3-5. Municipal, Private and NGO Protected Lands Crossed by the Brayton Point Onshore Project Area

3.3.2 Municipal Parks and Recreation Areas

3.3.2.1 Falmouth Onshore Project Area

The community of Falmouth manages its municipal-owned parks and recreation properties primarily through the recreation departments; however, public beaches owned by the Town of Falmouth are managed by the Beach Department. These town-owned parks, recreation, or beach properties may or may not have protections on them in the form of conservation restrictions or other such mechanisms.

Project components, including the onshore export cables (preferred and alternates) and the alternate underground transmission route would cross or be located on parks and recreation lands owned by the Town of Falmouth. In most cases, the cables are proposed for installation in roadways bordering or crossing the municipal properties. These properties include:

- Worcester Park;
- Surf Drive Beach (parking lot);
- Falmouth Heights Beach;
- Central Park;
- Crescent Park; and
- Goodwill Park.

Municipal parks and recreation areas crossed by the Falmouth Onshore Project Area are shown on Figure 3-4.

3.3.2.2 Brayton Point Onshore Project Area

There are no parks or recreation areas crossed by the Brayton Point Onshore Project Area. The Brayton Point onshore export cable route options over Aquidneck Island will cross land in the town of Portsmouth, RI via HDD in the northern portion of the island. The Island Park Recreation Area is located approximately 0.32 mi (0.51 km) from the underground export cable route options.

Two small municipal parks, the Ripley Street Parcel and Angus Street Right-of-Way, are located approximately 0.2 mi (0.32 km) and 0.3 mi (0.48 km), respectively, from the eastern landfall in Somerset, MA.

Municipal parks and recreation areas in the vicinity of the Brayton Point Onshore Project Area are shown on Figure 3-5.

3.3.3 Municipal Drinking Water Supply Protection Lands

In the community of Falmouth, Massachusetts, the municipal water department owns and operates public water supply systems that distribute clean drinking water to residents and businesses within the town limits. Drinking water supplies are provided from multiple sources and include both surface waters and groundwater pumped from wells. Municipal water departments responsible for managing public water supply systems are also regulated by the MassDEP Drinking Water Program that oversees development of public water supplies by a municipality, conducts independent testing of water quality, and ensures compliance with drinking water supply laws and regulations.

As part of the MassDEP Wellhead Protection Program, water suppliers are required to own the land within 400 ft (122 m) of a wellhead (Zone I Wellhead Protection Area) in order to protect the recharge area for the well. If the land is not available for purchase, the water supplier is required to control land uses and activities through a Zone I conservation restriction required to be reviewed and approved by MassDEP. This requirement is intended to protect drinking water supplies from potential threats to water quality that could otherwise occur in the recharge area of the well, including sources of viruses, bacteria, nitrates, chemical compounds, petroleum oils and other hazardous materials (MassDEP, 2001).

For surface water sources, the MassDEP requires water suppliers to develop a Surface Water Supply Protection Plan to protect the water quality of the surface water source and upstream contributory watershed area. A primary mechanism for protection involves direct control of lands surrounding the water source and within the watershed, including through purchase of the land, or by acquiring control through other means,

such as conservation restrictions, easements, purchase of development rights, or other written agreements (MassDEP, 2000).

The alternate underground transmission route in Falmouth will cross portions of the Zone II Wellhead Protection Area in Falmouth. Land protected for drinking water supplies that are crossed by the Project are shown on Figure 3-4.

There are no Zone I or Zone II Wellhead Protection Areas in the immediate vicinity of the Brayton Point landfalls.

The Brayton Point Onshore Project Area does not cross through any areas designated as drinking water (GAA or GA) by RIDEM.

3.4 Other Protected Lands

Other protected lands include those privately-owned lands protected for recreation, open space or other conservation purposes. These properties may be owned by private individuals, real estate trusts, or other NGOs and are typically protected through a conservation restriction or similar protection mechanism.

3.4.1 Falmouth Onshore Project Area

Corridors for the underground onshore export cable/transmission routes in Falmouth would be installed in roadways, some of which border privately-held protected areas. The routes do not cross into any privately held protected lands.

Privately held protected lands bordered by the Falmouth Onshore Project Area are shown on Figure 3-4.

3.4.2 Brayton Point Onshore Project Area

The Brayton Point Onshore Project Area does not cross any other protected lands, but is located in the near vicinity of two of these areas:

- The Brayton Point ECC passes approximately 0.25 mi (0.40 km) from the Gould Island Rookery, located on Gould Island and owned by the Audubon Society of Rhode Island. The ECC passes through a Natural Heritage Area (NHA) buffer applied to the island. NHAs do not have a designated protection status, but represent areas where state-listed species may be present (see COP Appendix J for further details).
- The onshore export cable route, Route Option 1, on Aquidneck Island is located approximately 0.18 mi (0.30 km) from Mount Hope Park, managed by Aquidneck Land Trust. The onshore export cable route and offshore Brayton Point ECC likewise cross through an NHA in the vicinity of the park.

Other protected lands in the vicinity of the Brayton Point Onshore Project Area are shown in Figure 3-5.

4.0 Effect Characterization

4.1 Effects Characterization Approach

Each of the potentially affected DPAs are the subject of separate technical studies. Therefore, resource sensitivity and potential effects of the Project on these DPAs are addressed separately within the COP and related appendices. Section 4.2 provides a summary list of the potentially affected DPAs, and Section 4.3 provides a cross reference table which lists the COP section or appendix where the detailed assessment is presented.

4.2 Potentially Affected Resources

Onshore protected lands potentially crossed by the Project were reviewed in Section 3.0 of this report. Of those reviewed, the following protected lands are not crossed by the Project, and as such are not considered further in this assessment.

- National Cemetery;
- National Parks;
- National Forests;
- National Estuarine Research Reserves;
- NWRs;
- MA Areas of Environmental Concern; and
- JBCC.

Those protected lands which are crossed by the preferred or alternate landfall location(s), onshore export cables, underground transmission route(s), or onshore substation/converter station sites include the following:

- Wildlife Management Areas;
- Municipal protected lands; and
- Other protected lands (see Section 3.4 for details).

4.3 Identification and Characterization of Effects

The Project components that may affect certain onshore protected lands are identified in Table 4-1. Resource sensitivity and potential effects of the Project on these onshore protected lands are addressed separately within the COP and related technical appendices. The relevant assessments are identified in Table 4-2. As such, potential impacts to these onshore protected lands will be addressed within the assessments listed below.

4.4 Mitigation Measures

As noted in Section 4.2, the Project will traverse several onshore protected lands. Onshore protected lands are the subjects of other technical reports. Therefore, the reader is referred to the specific COP section or appendix (see Section 4.3).

Table 4-1. Onshore Protected Lands Crossed by the Project

Conservation Area Information					Landfall Location(s)			Onshore Export Cable Routes			Brayton Point
Conservation Area (Type)	Site Address	Owner	Town	Protection Status [1]	Worcester Ave (Preferred)	Central Park (Alternate)	Shore Street (Alternate)	Worcester Ave Route (Preferred)	Central Park (Alternate)	Shore Street Route (Alternate)	Onshore Export Cable Route
Falmouth Heights Beach	Grand Ave	Town of Falmouth	Falmouth	In Perpetuity	X	X		X	X		
Worcester Park	Worcester Court	Town of Falmouth	Falmouth	Limited				X			
Surf Drive Beach	Surf Drive	Town of Falmouth	Falmouth	In Perpetuity			X			X	
Central Park	Grand Ave	Town of Falmouth	Falmouth	In Perpetuity					X		
Crescent Park	Crescent Ave	Town of Falmouth	Falmouth	TBD					X		
Goodwill Park	416 Gifford Street	Town of Falmouth	Falmouth	In Perpetuity					X		
Boyd Marsh WMA	Anthony Road	RIDEM	Portsmouth	N/A							X
Black Regiment State Park	Mussel Bed Shore Rd	RIDEM	Portsmouth	N/A							X
Town Pond State Park	Anthony Road	RIDEM	Portsmouth	N/A							X

No onshore protected lands are crossed by the preferred onshore substation site or the two alternate onshore substation sites evaluated.

1: Protection Status (MassGIS, 2020):

In Perpetuity - Legally protected in perpetuity and recorded as such in a deed or other official document. Land is considered protected in perpetuity if it is owned by the town's conservation commission or, sometimes, by the water department; if a town has a conservation restriction on the property in perpetuity; if it is owned by one of the state's conservation agencies (thereby covered by Article 97); if it is owned by a non-profit land trust; or if the town received federal or state assistance for the purchase or improvement of the property. Private land is considered protected if it has a deed restriction in perpetuity, if an Agriculture Preservation Restriction has been placed on it, or a Conservation Restriction has been placed on it.

Limited - Protected by legal mechanisms other than those above or protected through functional or traditional use. These lands might be protected by a requirement of a majority municipal vote for any change in status. This designation also includes lands that are likely to remain open space for other reasons (e.g., cemeteries and municipal golf courses).

Table 4-2. Potentially Affected Resources Within Onshore Protected Lands and Related Assessments

Potentially Affected Resources	Protected Lands	Related Assessments
Wildlife/wildlife habitat	Municipal conservation lands and open space	COP Section 6.3 – Terrestrial Vegetation and Wildlife COP Section 6.4 – Wetlands and Waterbodies Appendix J, Terrestrial Vegetation and Wildlife Assessment
Upland vegetation	All potentially affected onshore protected lands	COP Section 6.3 – Terrestrial Vegetation and Wildlife COP Section 6.4 – Wetlands and Waterbodies Appendix J, Terrestrial Vegetation and Wildlife Assessment
Surface water and groundwater quality	Other protected lands Municipal drinking water supply protection areas	COP Section 5.2 – Water Quality Appendix H, Water Quality Report
Air quality	All potentially affected onshore protected lands	COP Section 5.1 – Air Quality Appendix G, Air Emissions Report
Cultural resources	All potentially affected onshore protected lands (subject to confirmation based on ongoing cultural resource studies)	COP Section 7.2 – Terrestrial Archaeology COP Section 7.3 – Other Historic and Cultural Resources Appendix R, Terrestrial Archaeological Resources Assessment Appendix S, Analysis of Visual Effects to Historic Properties
Avian and bat species/habitat	Municipal conservation lands and open space Other protected lands	COP Section 6.1 – Coastal and Marine Birds COP Section 6.2 – Bats Appendix I1, Avian Exposure Risk Assessment Appendix I2, Bat Risk Assessment
Rare, threatened, and endangered species	Municipal conservation lands and open space Other protected lands	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 Appendix I1, Avian Exposure Risk Assessment Appendix I2, Bat Risk Assessment Appendix J, Terrestrial Vegetation and Wildlife Assessment
Wetlands, watercourses, and vernal pools	All potentially affected onshore protected lands (subject to field delineations)	COP Section 6.4 – Wetlands and Waterbodies Appendix J, Terrestrial Vegetation and Wildlife Assessment
Visual resources	Municipal parks and recreation areas Other protected lands	COP Section 8.0 – Visual Resources Appendix T, Visual Impact Assessment
Ambient noise	Municipal parks and recreation Municipal conservation lands and open space	COP Section 9.0 – Acoustic Resources Appendix U1, In-Air Acoustic Assessment
Hunting, trapping, fishing, or other outdoor recreation	Municipal conservation lands and open space Municipal parks and recreation areas Other protected areas	COP Section 10.3 – Recreation and Tourism

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