8 REGULATORY COMPLIANCE

8.1 INTRODUCTION

In addition to complying with the NEPA and the MEPA, a number of state and federal permits are needed for the proposed South Coast Rail project. Table 8.1-1 lists the required state and federal permits, determinations, and approvals. All listed agencies also participate in the environmental review of the project through the NEPA and/or MEPA processes. In addition to being presented in a consolidated manner in this chapter they are also discussed in the resource chapters. This chapter focuses on the regulatory compliance of the Stoughton Electric Alternative as the Preferred and LEDPA.

Table 8.1-1 Required Permits and Approvals

Issuing Agency	Approval or Permit
U.S. Army Corps of Engineers	Clean Water Act, Section 404 Individual Permit
	Section 10 of the Rivers and Harbors Appropriation Act of 1899
U.S. Environmental Protection Agency	Clean Water Act, Section 402 National Pollutant Discharge Elimination System, General Permit for Construction Activities & Multi-Sector General Permit for Industrial Activities
U.S. Coast Guard	Section 9 of the Rivers and Harbors Appropriation Act of 1899 and the General Bridge Act of 1946
Massachusetts Office of Coastal Zone Management	Coastal Zone Management Act, Federal Consistency Certification
Massachusetts Executive Office of Energy and Environmental Affairs	Public Benefits Determination
Massachusetts Department of Environmental Protection	Massachusetts Wetlands Protection Act Variance
	Massachusetts Public Waterfront Act (Chapter 91) License(s)
	Clean Water Act, Section 401 Water Quality Certificate Variance
Massachusetts Department of Fish and Game	Massachusetts Endangered Species Act Conservation and Management Permit

The Secretary's Certificate on the DEIR included the following regulatory compliance requirements:

- The project will require several variances from Wetlands regulations performance standards. One of the three criteria for a variance is a demonstration that the variance is necessary to accommodate an overriding public interest. The FEIR should further refine how the proposed Stoughton Electric rail will advance the public interests identified in the DEIR/DEIS.

- To demonstrate eligibility for a variance MassDOT must also propose mitigation measures that will allow the project to be conditioned to Wetland Protection Act interests.

- The FEIR should include a comprehensive description of how MassDOT proposes to meet MESA regulatory requirements, including the standards for authorizing a take of a state-listed species through a Conservation and Management Plan.

- The FEIR should expand upon the evaluation in the DEIR/DEIS to demonstrate consistency with EEA Article 97 Land Disposition Policy.

- The FEIR should identify permits required for layover facilities and document how the proposed facilities will comply with applicable regulatory requirements. Consistency with Chapter 91 licensing requirements and requirements for location within a Designated Port Area (DPA) should be described as applicable.

- The FEIR should describe how the project will comply with the Massachusetts Stormwater Standards for work proposed in wetland resource areas and buffer zones pursuant to 310 CMR 10.05(6)(k) and 314 CMR 9.06(6), as well as other state and federal requirements (including Total Maximum Daily Load [TMDL] requirements) for stormwater discharges to existing outfalls and/or for the proposed layover facilities.

- The FEIR should include an assessment of the ability of the proposed project to meet the ten Massachusetts Stormwater Standards or specify if a variance to the standards specified at 310 CMR 10.05(6)(k) and 314 CMR 9.06(6) may be required.

- The FEIR should describe in detail how the project will meet licensing standards at 310 CMR 9.54 and 9.55 (for non-water-dependent) and 301 CMR 9.31-9.40 (for water dependent).

The following sections describe the required permits and approvals for the South Coast Rail project, and how the project complies with each.

8.2 CLEAN WATER ACT SECTION 404

This section describes the regulatory context, regulatory requirements, and how the South Coast Rail project would comply with the federal Clean Water Act[1] Section 404 permit program.

8.2.1 Regulatory Context

Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into "Waters of the United States," including adjacent wetlands. The South Coast Rail project would require the issuance of a Section 404 Individual Permit (i.e., would not be eligible for the Massachusetts Programmatic General Permit) as it would result in the loss of more than 1 acre of waters of the United States.

On May 8, 2008, MassDOT submitted an application to the USACE for Individual Permit authorization under the Section 404 program.

8.2.2 Regulatory Requirements

Fill activities are evaluated using the USEPA's Guidelines for Specification of Disposal Sites for Dredged or Fill Material promulgated pursuant to Section 404(b)(1) of the Clean Water Act[2] (Section 404(b)(1) Guidelines). The Section 404(b)(1) Guidelines are designed to avoid unnecessary filling of special aquatic sites, which are defined as:

[1] Formally, the Federal Water Pollution Control Act.
[2] 40 CFR 230 *et seq*.

"Geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region."[3]

Wetlands and riffle and pool complexes are both categories of special aquatic sites. The Guidelines state that "all practicable alternatives to the proposed discharge [of dredged or fill material], which do not involve a discharge into a special aquatic site, are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise." As described in 40 CFR 230.10 (with some exceptions),

- No discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences;
- No discharge of dredged or fill material shall be permitted if it:
    - Causes or contributes to violations of any applicable State water quality standard;
    - Violates any applicable toxic effluent standard or prohibition;
    - Jeopardizes the continued existence of species listed as endangered or threatened or results in the destruction or adverse modification of designated critical habitat; or
    - Violates any requirement to protect any designated marine sanctuary;
- No discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States; and
- No discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.

8.2.3 Regulatory Compliance

This section describes how the South Coast Rail project would comply with the four Section 404(b)(1) Guidelines listed above.

8.2.3.1 Practicable Alternatives

Practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose. The practicability of the alternatives is considered by the USACE in determining whether there is a less environmentally damaging practicable alternative to that which is proposed.

The overall project purpose is used by the USACE to evaluate whether there are less environmentally damaging practicable alternatives available. The overall project purpose for the South Coast Rail project

[3] 40 CFR 230.3(q-1)

is defined by the USACE as: "to more fully meet the existing and future demand for public transportation between Fall River/New Bedford and Boston, MA, and to enhance regional mobility." This definition is specific enough to define MassDOT's needs, but not so restrictive as to constrain the range of alternatives that must be considered under the Section 404(b)(1) Guidelines.

Chapter 3, *Alternatives*, describes the range of alternatives considered for the South Coast Rail project and identifies the Stoughton Electric Alternative as the recommended LEDPA. There are no less environmentally damaging practicable alternatives that meet the overall project purpose. The evaluation of the environmental impacts of the alternatives is provided in Chapter 4, *Affected Environment and Environmental Consequences*, and Chapter 5, *Indirect Effects and Cumulative Impacts*.

8.2.3.2 Water Quality

The South Coast Rail project has been designed by MassDOT to comply with Massachusetts Stormwater Standards. The project includes proposed stormwater management systems to minimize impacts to water quality by controlling runoff velocities and removing pollutants from the stormwater runoff discharging from the railroad bed, layover facilities, and station locations to downstream surface water resources. Due to the potential impacts to Outstanding Resource Waters (ORWs), the project would require a variance from the state water quality standards (Clean Water Act Section 401), as described in Section 8.8 of this chapter.

8.2.3.3 Threatened and Endangered Species

Section 7 of the Endangered Species Act requires Federal agencies to consult with the Secretary (of the Interior or Commerce Departments; generally as represented by the Fish and Wildlife Service and the National Marine Fisheries Service [NMFS], respectively) on any action that is likely to jeopardize the continued existence of a species listed or proposed for listing on federal threatened and endangered species lists. The South Coast Rail project would not affect any federally listed endangered species, because there are none within the action area. Since the publication of the DEIS, Atlantic sturgeon (*Acipenser oxyrinchus*; NY Bight population) has been listed as federally endangered. The Taunton River "mouth" is specifically named in the Federal Register listing (FR77-5912, Feb 6, 2012). Although the Taunton River crossings are upstream of the river mouth, the Corps contacted the NMFS to inquire about the possible effects of South Coast Rail on this species. NMFS has determined that "no species listed under [their] jurisdiction are likely to be exposed to any direct or indirect effects of the proposed project." Therefore, no further Section 7 consultation is required.

8.2.3.4 Waters and Wetlands

The Section 404(b)(1) Guidelines stipulate that "no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States." Measures to protect and avoid impacts to wetlands and water resources were incorporated into the conceptual design. Construction practices (such as use of BMPS) would be implemented in accordance with state and federal guidelines to prevent unnecessary impacts to wetland and water resources. Unavoidable impacts would be mitigated.

Avoidance was considered along the South Coast Rail project corridor when designing track layout at the current conceptual level. Tracks were kept within the existing railbed footprint where possible. Complete avoidance is only possible through the No-Build Alternative, which does not achieve the project purpose and need. Minimization was achieved through structures such as retaining walls to reduce grading of slopes where the existing railroad embankment was widened. Single track design was

used wherever possible to minimize widening of the right-of-way. Special construction techniques, such as retaining walls to minimize the lateral extent of the project footprint and the Hockomock Trestle to pass over the Hockomock Swamp, have been incorporated into the design of the Stoughton Alternative to minimize adverse impacts to wetlands.

For the Stoughton Electric Alternative, a total of just over 1 acre of palustrine emergent wetlands would be permanently impacted, requiring 2.1 acres of mitigation. A total of 0.9 acre of palustrine scrub-shrub wetlands would be permanently impacted, requiring 1.8 acres of mitigation. A total of 8.5 acres of palustrine forested wetlands would be permanently impacted, requiring 25.5 acres of mitigation. A total of 1.9 acres of open water would be permanently impacted, requiring 1.9 acres of mitigation. An additional 2.4 acres of temporary impacts to palustrine forested wetlands would require mitigation. Mitigation would seek to replace the functions and values lost due to wetland impacts. During final design, a comprehensive assessment of functions and values would be performed onsite including wildlife habitat assessments, in order to refine the information on functions and values provided by wetlands along the project corridor.

8.3 CLEAN WATER ACT SECTION 402

This section describes the regulatory context, regulatory requirements, and how the South Coast Rail project would comply with the Clean Water Act Section 402 requirements.

8.3.1 Regulatory Context

Section 402 of the Clean Water Act regulates the discharge of pollutants to surface waters. Under the National Pollutant Discharge Elimination System (NPDES) program that is authorized by Section 402, owners and operators of point source discharges and certain non-point discharges (such as stormwater runoff) are required to obtain a permit prior to discharging. The NPDES program includes both General and Individual Permits. The General Permit for Construction Activities regulates erosion control, pollution prevention, and stormwater management at construction sites over 1 acre. A Multi-Sector General Permit for Industrial Activities is appropriate for operations at sites such as the proposed South Coast Rail layover facilities, and regulates discharges of site-specific pollutants. An Individual Section 402 Permit is not required for the South Coast Rail project.

8.3.2 Regulatory Requirements

Two types of permits would be required to construct and operate the South Coast Rail project. The NPDES General Permit for Construction Activities requires construction contractors to prepare a Stormwater Pollution Prevention Plan (SWPPP) that describes the BMPs that will be implemented to minimize or eliminate discharges of pollutants from construction sites. A NPDES Multi-Sector General Permit for Industrial Activities would establish site-specific conditions that must be met by the site operator, and also include SWPPP requirements.

8.3.3 Regulatory Compliance

This section describes how the South Coast Rail project would comply with the NPDES General Permit for Construction Activities requirements and the Multi-Sector General Permit for Industrial Activities to address stormwater dischargers from each of the proposed layover facilities.

MassDOT would prepare a Notice of Intent (NOI) to request authorization for coverage of the South Coast Rail project under the NPDES General Permit for Construction Activities. A SWPPP would be developed by the construction contractor that specifies proper stormwater management procedures for any disturbed areas. Construction period impacts to water quality would be reduced or eliminated through the use of appropriate BMPs that would be documented in the SWPPP. The BMPs would include perimeter sedimentation controls (silt fence, hay bales, filter berms, siltation booms), temporary stabilization of disturbed areas, and temporary siltation basins where appropriate. The SWPPP would be completed during the final design phase and is required to be implemented by the project contractor.

MassDOT would also prepare a NOI to request authorization for coverage under the Multi-Sector General Permit for Industrial Activities for each of the proposed layover facilities. Both of the layover facilities have been conceptually designed to meet Massachusetts Stormwater Standards, and further refinement would be made during preliminary and final design. A site-specific SWPPP would be completed for each facility that provides an assessment of potential sources of pollutants in stormwater runoff and control measures that will be implemented at the layover facility to minimize the discharge of these pollutants in runoff from the site. These control measures include site-specific BMPs, maintenance plans, inspections, employee training, and reporting.

8.4 SECTION 10 OF THE RIVERS AND HARBORS ACT OF 1899

Section 10 of Rivers and Harbors Appropriation Act of 1899, (33 U.S.C. 403) requires a Department of the Army permit for structures and/or work in or affecting navigable waters of the United States. In the case of South Coast Rail, the Taunton River is a tidal navigable water of the United States up to the South Street East Bridge in Taunton, and the Mill River in Taunton is navigable to Spring Street in Taunton. Should the South Coast Rail proposal involve any placement of structures or work (except bridges) in or affecting the Taunton or Mill Rivers, it will be necessary for MassDOT to obtain Department of the Army authorization under Section 10, in addition to the authorization to discharge dredged or fill material under Section 404 of the Clean Water Act. On May 8, 2008, MassDOT applied for a Department of the Army permit and that application is accepted pursuant to Corps' authority under both Section 10 and 404.

The Corps does not have authority over bridges under the Rivers and Harbors Act of 1899, as that authority has been delegated to the U.S. Coast Guard (see below). Corps authority over bridges is limited to appurtenant structures such as abutments and bank stabilization, the construction of which may involve discharges of dredged or fill material, and as such are regulated under Section 404 of the Clean Water Act.

8.5 COASTAL ZONE MANAGEMENT ACT

This section describes the regulatory context, regulatory requirements, and how the South Coast Rail project would comply with federal Coastal Zone Management Act requirements and the Massachusetts Coastal Zone Management Standards and Policies.

8.5.1 Regulatory Context

Section 307(c) of the Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1456(c)) requires federal agencies conducting activities, including development projects, directly affecting a state's coastal zone, to comply to the maximum extent practicable with an approved state coastal zone management

program. The Act also requires any non-federal applicant for a federal license or permit to conduct an activity affecting land or water uses in the state's coastal zone to furnish a certification that the proposed activity will comply with the state's coastal zone management program. Generally, no permit will be issued until the state has concurred with the non-federal applicant's certification.

The Massachusetts Coastal Zone Management Plan (CZMP) and regulations implement the federal Coastal Zone Management Act. The Coastal Zone Management Act established federal statutory authority to manage the nation's coastal resources in order to balance economic development with environmental conservation. The Massachusetts Coastal Zone Management Act established local authority to implement the Massachusetts CZMP.

8.5.2 Regulatory Requirements

The following CZM regulations are applicable to the South Coast Rail project:

- 301 CMR 21.00 requires a federal consistency certification issued by the Office of Coastal Zone Management for projects in the coastal zone deemed likely to affect the coastal zone and that require a federal action.
- 301 CMR 23.00 establishes state procedures for the preparation of Municipal Harbor Plans. Approved plans provide municipalities a mechanism for modifying certain requirements of Chapter 91 Licensing.
- 301 CMR 25.00 establishes state authority to delineate DPAs within the coastal zone to protect the unique capacity of developed ports and port infrastructure to support water-dependent industrial activities.

These regulations, in concert with the Waterways Regulations (310 CMR 9.00), create a regulatory framework for planning, licensing and implementing projects in the Massachusetts Coastal Zone. The South Coast Rail project includes track, stations and layover facilities within the Massachusetts Coastal Zone and would require compliance with these regulations.

8.5.3 Regulatory Compliance

The following subsections describe how South Coast Rail project elements within the Massachusetts Coastal Zone and DPAs comply with applicable water quality policies, and the DPA regulations.

8.5.3.1 Compliance with Water Quality Policies

Compliance with state water quality policies is a requirement for federal consistency under the CZMP and 301 CMR 21.98. This regulation establishes the CZMP's programmatic policies and management principles which form the basis for federal consistency. Three water quality policies are applicable to the South Coast Rail project.

Water Quality Policy #1

Ensure that point-source discharges in or affecting the coastal zone are consistent with federally approved state effluent limitations and water quality standards.

Table 8.5-1 lists the applicable state and federal water quality regulations regarding point-source, nonpoint-source, and subsurface discharges at proposed stations and layover facilities. The South Coast Rail project has been designed to meet these environmental protection requirements through compliance with all applicable federal and state regulations governing sources of air and water pollution and wetland protection.

Water Quality Policy #2

Ensure that nonpoint pollution controls promote the attainment of state surface water quality standards in the coastal zone.

Compliance with the NPDES General Permit for Construction Activities would be achieved as described in Section 8.3.3; compliance with the Wetlands Protection Act stormwater regulations is described in Section 8.7.

Table 8.5-1 Water Quality Regulations

Law or Regulation	Program	Applicable?	Compliance
310 CMR 10.05(k)	Massachusetts Wetlands Protection Act: Stormwater Regulations	Applicable to all track, stations and layover facilities within 100 feet of state-regulated wetlands.	MassDOT would seek a Variance under the Wetlands Protection Act for wetland alteration but will comply with all applicable stormwater regulations. See Section 8.7.
314 CMR 3.00	Surface Water Discharge Permit Program	No	The project does not include any discharges to waters of the Commonwealth.
314 CMR 4.00	Surface Water Quality Standards	No	No discharges to surface water are proposed.
314 CMR 5.00	Groundwater Discharge Program	No	No discharges of pollutants to groundwater are proposed.
314 CMR 9.00	Clean Water Act Section 401 Water Quality Certification	The South Coast Rail project will require an Individual Water Quality Certificate.	The project would be designed and constructed in compliance with the Water Quality Certificate. See Section 8.8.
33 USC 1342 (Clean Water Act)	NPDES General Permit for Construction Activities	Yes	MassDOT would submit an NOI requesting authorization for stormwater discharges under the General Permit for Construction Activities. See Section 8.3.
	NPDES Multi-Sector General Permit for Industrial Activities	Yes	MassDOT would submit and NOI requesting authorization for stormwater discharges under the Multi-Sector General Permit for operations at the proposed layover facilities. See Section 8.3.
	NPDES Remediation General Permit (RGP)	TBD	An application for coverage under the RGP would be submitted as needed to authorize the collection, treatment and discharge for groundwater from applicable sites containing oil and hazardous materials.

Water Quality Policy #3

Ensure that activities in or affecting the coastal zone conform to applicable state requirements governing sub-surface waste discharges and sources of air and water pollution and protection of wetlands.

A summary of compliance with each of these conditions is provided below.

Subsurface Waste Discharges

The South Coast Rail project does not include any subsurface waste discharges.

Air Pollution

The South Coast Rail project would result in a net reduction in air pollution and a net benefit to regional air quality as described in detail in Chapter 4.9, *Air Quality.* The Stoughton Electric Alternative would not result in any direct project emissions from the locomotives, layover facilities, or stations. Motive power and electric service to proposed stations and layover facilities would be supplied by existing electric generating facilities with adequate capacity to serve the project without requiring expansion.

The South Coast Rail project would comply with the Clean Air Act Amendments (CAAA) and the Executive Office of EEA policy on greenhouse gas emissions, and is not anticipated to require any new local, state, or federal permit related to air pollution.

Water Pollution

The South Coast Rail project would meet all applicable local, state, and federal requirements regarding potential water pollution, and MassDOT would obtain all needed permits under these regulations as described in Table 8.5-1. No point source discharges are proposed. All stormwater collected at stations and layover facilities would be treated in accordance with the Massachusetts Stormwater Regulations and in accordance with applicable NPDES discharge requirements.

Wetland Protection

The South Coast Rail project would protect state and federally regulated wetlands by adherence to all applicable regulations. The project has been designed to avoid, minimize, and mitigate wetland impacts to the greatest extent practicable and are subject to permit requirements under Section 404 of the federal Clean Water Act, the Massachusetts Wetlands Protection Act, and Section 401 of the Clean Water Act (Water Quality Certificate), as described in Sections 8.2, 8.7, and 8.8, respectively.

8.5.3.2 Compliance with Designated Port Area Regulations

Massachusetts regulations at 301 CMR 25.00 establish state authority to delineate DPAs within developed industrial waterfronts. The purpose of delineating DPAs is to identify geographic areas of particular state, regional and national significance with respect to the promotion of commercial fishing, shipping and other vessel-related activities associated with water-bourne commerce, and of manufacturing, processing, and production activites.

The South Coast Rail project includes track work in the the Mount Hope Bay (Fall River) and New Bedford/Fairhaven DPAs. The only South Coast Rail project elements within these DPAs are the following existing track segments:

- Mount Hope Bay
    - Reconstruct 2,000 + LF of track south of the proposed Weaver's Cove East Layover Facility

- Reconstruct 500 + LF of track north of the proposed Battleship Cove Station

- New Bedford/Fairhaven
  - Reconstruct 500 + LF of track south of the proposed Wamsutta Layover Facility

The project-related work proposed within these DPAs is the reconstruction of existing track, ballast, and associated infrastructure. The South Coast Rail project has been designed to avoid construction of stations and layover facilities within the DPAs.

The CZM regulations include port and harbor infrastructure policies and management principles for projects located in the Massachusetts Coastal Zone. Two policies and management principles are applicable to the South Coast Rail project.

Ports Policy #3

Preserve and enhance the capacity of DPAs to accommodate water-dependent industrial uses, and prevent the exclusion of such uses from tidelands and any other DPA lands over which a state agency exerts control by virtue of ownership, regulatory authority or other legal jurisdiction.

Reconstructing the existing track, ballast and related infrastructure would result in a direct benefit to the DPAs' capacity to support water-dependent industrial uses by improving the railroad transportation infrastructure serving these ports. The South Coast Rail project would improve the freight transportation capacity on the New Bedford Main Line from Taunton to the Port of New Bedford and on the Fall River Secondary to Fall River. These improvements would improve the capacity of the DPAs to support water-dependent industrial uses without developing land within the DPAs for non-water dependent uses.

Ports Management Principle #1

Encourage, through technical and financial assistance, expansion of water dependent uses in designated ports and developed harbors, re-development of urban waterfronts, and expansion of visual access.

The proposed improvements within the Mount Hope Bay (Fall River) and New Bedford/Fairhaven DPAs will provide substantial financial assistance to these ports by replacing and upgrading existing rail infrastruture. These upgrades will substantially improve the load capacity of the existing tracks serving these ports, increasing the capacity for the DPAs to serve as as sea/land intermodal freight node and improve their potential to serve water-dependent industrial uses. The South Coast Rail project has been designed to avoid the construction of any non-water dependent use facilities within the DPAs while substantially improving transportation infrastructure.

The proposed track reconstruction will not adversely affect public views of the shoreline because the work is limited to the reconstruction of existing at-grade railroad infrastructure. No new stations or layover facilities are proposed in any DPA.

8.6 MASSACHUSETTS PUBLIC BENEFITS DETERMINATION

This section describes the regulatory context, regulatory requirements, and how the South Coast Rail project would comply with requirements to obtain a Public Benefit Determination.

8.6.1 Regulatory Context

Portions of the South Coast Rail project are subject to the requirements of Chapter 168 of the Acts of 2007[4] because they are located on landlocked filled tidelands. The South Coast Rail project exceeds review thresholds as defined in 301 CMR 11.03 and would require a Public Benefit Determination by the Secretary of the Executive Office of EEA in accordance with the regulations at 301 CMR 13.00. Projects subject to MEPA are required to consider potential impacts on groundwater and, in cases where projects are located in areas of known low groundwater, include measures to avoid, minimize, or mitigate potential impacts.

8.6.2 Regulatory Requirements

When making a Public Benefit Determination, the Secretary is required to consider the:

- Purpose and effect of the development;
- Impact on abutters and the surrounding community;
- Enhancement of the property;
- Benefits to the public trust rights in tidelands or other associated rights;
- Community activities on the development site;
- Environmental protection and preservation;
- Public health and safety, and
- General welfare.

The Secretary is also instructed by 301 CMR 13.00 to consider the differences between tidelands, landlocked tidelands and great ponds when assessing the public benefit and shall consider the practical impact of the public benefit on development.

8.6.3 Regulatory Compliance

The South Coast Rail project elements proposed within landlocked tidelands have been sited and preliminarily designed to protect the public interests in tidelands and result in public benefits. The project would result in substantial net benefits to the public interest in filled tidelands by revitalizing and expanding public infrastructure in a manner which meets all applicable state and federal environmental protection standards while minimizing potential impacts to abutters to these sites and the community.

The project elements that are located on filled tidelands, located at least 250 feet landward of existing flowed tidelands, and are completely separated from flowed tidelands by one or more intervening roads are:

- Battleship Cove Station,
- Whale's Tooth Station, and

[4] An Act Relative to Licensing Requirements for Certain Tidelands: Section 8, Chapter 168 of the Acts of 2007.

- Wamsutta Layover Facility.

The following sections describe how these project elements would provide public benefits and are adequately protective of the public's inherent rights in present and former waterways, held in trust by the Commonwealth for the benefit of the public.

8.6.3.1 Battleship Cove Station

The Battleship Cove Station would be a new station constructed at the southern terminus of the Fall River Secondary, on Water Street in Fall River. The station would be a platform-only station that would operate during peak hours. It would serve downtown Fall River and the Battleship Cove tourist area. The site is approximately 825 feet from the nearest flowed tidelands of the Taunton River. A portion of the site is located on filled tidelands entirely separated from the flowed tidelands by Water Street. The public benefits of the proposed Battleship Cove Station are described below.

Purpose and Effect of the Development

The purpose of the Battleship Cove Station is to provide new passenger rail access to the Fall River downtown and tourist waterfront area, improving access to the MBTA and regional public transportation network. The station would be accessible to passengers walking, biking, or driving to the station.

The effects of the development would be:

- Creation of a new public transportation facility providing regional commuter rail service to downtown Fall River and the Battleship Cove area where none presently exists; and
- Construction within approximately 10,000 square feet of filled tidelands for the platform.

Impact on Abutters and Community

The Battleship Cove Station is expected to be a net benefit to abutting properties and the Fall River community. Adverse impacts to abutters are expected to be minimal because the adjacent private uses are light commercial/industrial and warehousing. Beneficial impacts to the community would result from revitalizing the existing rail infrastructure and providing a new transportation link to the regional MBTA system. There would be no impact on the existing Ponta Delgada Monument and plaza.

Enhancement of the Property

The Battleship Cove Station would enhance the site by rehabilitating the existing rail infrastructure along this section of the Fall River Secondary and activating the property for public transportation use.

Benefits to the Public Trust Rights in Tidelands or Other Associated Rights

The Battleship Cove Station would benefit public trust rights in filled tidelands at the site by providing new access to the planned passenger rail network and adjacent land. The site contains an open grassy landscaped area adjacent to the Ponta Delgada Monument and plaza, and is open to the public. Access to these areas would not be affected by the station.

Community Activities on the Site

The Battleship Cove Station would increase community activities at the site by providing new access to the regional rail transportation network. The MBTA estimates that approximately 240 passengers would use the station on a daily basis.

Environmental Protection/Preservation

The Battleship Cove Station would meet all local, state, and federal environmental protection and preservation requirements and comply with all applicable regulations.

Public Health and Safety

Providing passenger rail service to the Battleship Cove Station and adjacent downtown Fall River area would result in net benefits to public health and safety resulting from a reduction in single passenger vehicle trips, air pollution, and regional traffic.

General Welfare

The Battleship Cove Station would promote the general welfare by providing new public access to the proposed regional transportation system. MassDOT would use public funds to provide direct and tangible benefits to the residents and visitors in the Battleship Cove area. The station has been designed to promote use by local residents. The potential for traffic impacts has been mitigated by limiting the number of parking spaces at the station site to the required handicapped-accessible spaces only, and by promoting pick-up/drop-off and local bus connections.

Protection of Groundwater

The Battleship Cove Station site is not within an area of known low groundwater, and would not have any adverse impacts to the existing groundwater conditions. The station would be a platform constructed essentially at-grade. No subsurface construction such as a basement, extensive excavation, or groundwater cut-off wall are proposed and no short- or long-term impacts to groundwater are anticipated.

8.6.3.2 Whale's Tooth Station

Whale's Tooth Station would be a new train station constructed in New Bedford. It would be located near the intersection of Acushnet Avenue and Hillman Street, near the southern terminus of the New Bedford Main Line. The City of New Bedford has constructed a parking lot on the approximately 14-acre site in anticipation of the South Coast Rail project.

The majority of the Whale's Tooth Station would be located on landlocked filled tidelands because the station site is entirely separated from the mean high water mark of New Bedford Harbor by interconnected public ways and is at least 250 feet landward of the mean high water mark. The public benefits of the proposed Whale's Tooth Station are described below.

Purpose and Effect of the Development

The purpose of the Whale's Tooth Station is to provide new passenger rail access to the New Bedford downtown waterfront area, improving access to the MBTA and regional public transportation network. The station would be adjacent to an existing City of New Bedford parking lot and would be accessible to passengers walking, biking, or driving to the station.

The effects of the development would be:

- Creation of a new public transportation facility providing commuter rail service to the downtown New Bedford area; and
- Activation of filled tidelands for public use for construction of the proposed station and vehicle circulation areas.

Impact on Abutters and Community

The Whale's Tooth Station would result in minimal adverse impacts to abutters and a net benefit to the New Bedford community. Adjacent properties consist primarily of a highway, industrial and trucking properties, vacant land and the Greater New Bedford Career Center; none of these existing uses are likely to be disrupted either by construction or operation of the station.

The New Bedford community at large would benefit by gaining short-term construction related jobs and long-term improved access to the regional transportation network.

Enhancement of the Property

The Whale's Tooth Station would enhance the property by providing new public transportation infrastructure adjacent to an existing paved parking lot.

Benefits to the Public Trust Rights in Tidelands or Other Associated Rights

The Whale's Tooth Station would provide a net benefit to the public trust rights in filled tidelands at the site by providing new access to the planned passenger rail network. The proposed station would enhance the public's use of the landlocked tidelands by increasing utilization of the site and providing access to additional regional transportation options.

Community Activities on the Site

The Whale's Tooth Station would increase community activities at the site by increasing utilization of the existing 14-acre paved parking facility.

Environmental Protection/Preservation

The Whale's Tooth Station construction would meet all local, state and federal environmental protection and preservation requirements and comply with all applicable regulations.

Public Health and Safety

Providing passenger rail service to the site and the downtown New Bedford area would result in net benefits to public health and safety resulting from a reduction in single passenger vehicle trips, air pollution, and regional traffic.

General Welfare

The Whale's Tooth Station would promote the general welfare by providing area residents with new public access to the proposed regional transportation system. MassDOT would use public funds to provide direct and tangible benefits to the residents and visitors to New Bedford. The station's proximity to Route 18 and existing local bus services would take advantage of the existing road network, reducing potential adverse transportation impacts that could result from the South Coast Rail project. The 14-

acre surface parking lot constructed by the City of New Bedford at the site would minimize potential impacts to parking in the vicinity of the site.

Protection of Groundwater

The Whale's Tooth Station site is not within an area of known low groundwater, and would not have any adverse impacts to the existing groundwater conditions. The station would be a single platform constructed at grade. No subsurface construction such as a basement, extensive excavation or groundwater cut-off walls are proposed and no short- or long-term impacts to groundwater are anticipated.

8.6.3.3 Wamsutta Layover Facility

The Wamsutta Layover Facility would be constructed near the southern terminus of the New Bedford Main Line, near the intersection of Wamsutta Street and Herman Melville Boulevard. This location is just north of the Whale's Tooth Station site described above. A portion of the site is currently an active CSX rail yard used for freight. The existing and proposed rail yard is located on top of a capped hazardous waste landfill.

The Wamsutta Layover Facility would be entirely within landlocked tidelands because the site is entirely separated from the water sheet of New Bedford Harbor by Herman Melville Boulevard (a public way in existence on January 1, 1984) and it is located at least 250 feet from the existing mean high water mark.

The public benefits of the proposed Wamsutta Layover Facility are described below.

Purpose and Effect of the Development

The purpose of the Wamsutta Layover Facility is to provide an overnight storage site for equipment needed for the early morning trains departing from New Bedford for Boston. Making use of a terminal layover facility avoids the need to run empty equipment to Boston for overnight storage and then back to New Bedford in the morning for the first northbound train. This would reduce fuel consumption, operation and maintenance costs, and potential environmental impacts with extra late night and early morning trains.

Potential impacts to the community are expected to be minimal because the proposed site is currently an active CSX freight rail yard located along the waterfront in an area dominated by commercial, industrial, and warehouse properties. No air quality effects are anticipated because the preferred rail alternative would use electric motive power. No diesel locomotives or power generation is proposed at the facility.

Impact on Abutters and Community

The Wamsutta Layover Facility would have minimal adverse impacts to abutters, a net benefit to the New Bedford community, and a substantial benefit to abutters in other communities along the New Bedford Main Line and the Stoughton Line. Adverse impacts to abutters are expected to be minimal because the site is currently used as an active freight rail yard and construction would be limited.

The Wamsutta Layover Facility would result in a net benefit to each community adjacent to the New Bedford Main Line and the Stoughton Line because the layover facility would eliminate the need to shuttle empty passenger trains, reducing the potential for noise impacts to these communities.

Enhancement of the Property

The proposed Wamsutta Layover Facility would marginally enhance the property by replacing one rail use with another.

Benefits to the Public Trust Rights in Tidelands or Other Associated Rights

The Wamsutta Layover Facility would improve the capacity of the site to protect the public trust rights in filled tidelands by converting a private freight rail yard to a public transportation facility. As a matter of public safety, the existing use precludes public access for any purpose. While the proposed facility would also prohibit public access to these filled tidelands, the change in use would benefit trust rights in these lands by providing a vital transportation infrastructure facility.

Community Activities on the Site

The Wamsutta Layover Facility would not increase community activities at the site because all public access with continue to be prohibited as a matter of public safety.

Environmental Protection/Preservation

The Wamsutta Layover Facility construction and operation would meet all local, state, and federal environmental protection and preservation requirements and comply with all applicable regulations.

Public Health and Safety

The cap for the soils containing oil and hazardous materials present at the site would remain in place under the Wamsutta Layover Facility. The site would be fenced and lighted to further protect public health and safety. Additionally, siting an overnight layover facility at the New Bedford Main Line terminus would eliminate the need to shuttle empty trains, reducing the potential for noise impacts.

General Welfare

The Wamsutta Layover Facility would promote the general welfare by activating the filled tidelands at the site for a public purpose and reducing extra train trips which would otherwise be required, resulting in fewer potential environmental impacts and substantial saving in fuel and operations and maintenance costs for the life on the project.

Protection of Groundwater

The Wamsutta Layover Facility is not within an area of known low groundwater, and would not have a discernible impact on groundwater because the location is a capped hazardous materials disposal site that is designed to prevent infiltration of surface runoff to groundwater.

8.7 MASSACHUSETTS WETLANDS PROTECTION ACT

This section describes the regulatory context, regulatory requirements, and how the South Coast Rail project would comply with requirements of the Massachusetts Wetlands Protection Act.

8.7.1 Regulatory Context

The South Coast Rail project would require a Variance under the Wetlands Protection Act pursuant to 310 CMR 10.05(10), subject to approval by the MassDEP Commissioner. The Commissioner may waive certain regulations when mitigating measures are proposed that would allow the project to be

conditioned so as to contribute to the public interests in wetlands. The project would also be required to meet Wetlands Protection Act stormwater standards, or require a waiver if certain standards could not be met.

8.7.2 Regulatory Requirements

The South Coast Rail project would not meet the Wetlands Protection Act performance standards for any of the wetland resource areas affected by the project because the proposed project would exceed the area (acreage) thresholds for alteration, would result in short- or long-term impacts to the habitat of state-listed rare wildlife species, and would not provide compensatory mitigation in strict accordance with the performance standards for Bordering Vegetated Wetland (BVW) or, potentially, other resource areas.

MassDOT would seek a variance under the Wetlands Protection Act, in accordance with 310 CMR 10.05(10), for wetland alteration and would comply with all applicable stormwater regulations. This section describes the applicable variance criteria and stormwater management standards.

The Wetlands Protection Act regulations establish performance standards for work proposed within the wetland resource areas, and require review of any work proposed within 100 feet of a wetland resource to determine if that work will result in the alteration of wetland resources. “Alteration” is defined to “include a change in vegetation, hydrology, or water quality of the wetland.”

Three criteria of the Wetlands Protection Act regulations (310 CMR 10.05) must be met to grant a Variance request:

- Demonstrate that there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with the wetlands regulations;
- Propose mitigation measures that will allow the project to be conditioned so as to contribute to the protection of the interests identified in the Wetlands Protection Act; and
- Demonstrate that the variance is necessary to accommodate an overriding community, regional, state or national public interest, or that it is necessary to avoid an Order that so restricts the use of property as to constitute an unconstitutional taking of property without compensation

8.7.3 Regulatory Compliance

The Stoughton Alternative would comply with the Wetlands Protection Act Variance criteria and stormwater standards, as described below.

8.7.3.1 Variance Criteria

The project would directly impact wetlands as a result of reconstructing the existing active and inactive rail lines. In some cases, it is necessary to widen the existing berm where sections of multiple tracks are planned. Retaining walls, regraded existing slopes, and replaced or upgraded culverts and bridges will all have permanent and/or temporary impacts on wetlands.

The Stoughton Electric Alternative would impact 9.6 acres of BVW, exceeding the 5,000-square foot threshold of area of alteration to BVW and requiring the Commissioner of MassDEP to issue a variance

from the performance standards of the Wetlands Protection Act regulations. The variance regulation allows performance standards to be waived if the following three criteria are met.

Criterion 1: There are no reasonable conditions or alternatives that would allow the project to proceed in compliance with 310 CMR 10.21 through 10.60.

An extensive alternatives analysis was undertaken for the South Coast Rail project, as described in Chapter 3. Seven alternatives were examined to determine whether they could meet the project purpose and would be practicable to construct and operate. Six of the alternatives were dismissed from further consideration because they could not meet the project purpose and/or would not be practicable to construct and operate. MassDOT has identified the Stoughton Alternative as the Preferred Alternative, and was directed by the Executive Office of Energy and Environmental Affairs to advance the Stoughton Electric Alternative. This alternative best meets the project purpose and would be practicable to construct and operate.

None of the alternatives considered could be constructed in strict compliance with the Wetlands Protection Act regulations; all of the alternatives would have unavoidable impacts to wetland resource areas that would exceed the relevant performance standards in 310 CMR 10.21 through 10.60, as documented in Chapter 4.16, *Wetlands*. As noted above, the Stoughton Electric Alternative would impact 9.6 acres of BVW, well in excess of the 5,000 square foot threshold.

Although the loss of wetlands has and will continue to be minimized through preliminary and final design, there are no reasonable conditions that would allow the project to proceed in compliance with these regulations due to the length of the corridor and the proximity of wetlands to the railbed.

Criterion 2: Mitigating measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in M.G.L. c.131, §40.

Proposed mitigation measures are described in Chapter 7, *Proposed Mitigation Measures and MassDOT Proposed Section 61 Findings*, as well as in Chapter 4.16, *Wetlands*. In summary, wetland restoration or establishment at up to seven potential sites is proposed to meet state 2:1 mitigation goals by providing mitigation of at least:

- 19.2 acres of wetlands to offset impacts to BVW;
- 1.9 acres of wetlands to offset impacts to land under water (LUW); and
- 6.7 acres of wetlands or compensatory flood storage to offset impacts to bordering land subject to flooding (BLSF). Final design of BLSF mitigation will also assess the volume of compensatory storage to be provided.

While the areas under consideration for mitigation are larger than the required mitigation, MassDOT would commit to constructing the amount of mitigation necessary to satisfy the required mitigation goals. At the current level of design for the project, mitigation plans are not sufficiently accurate to determine the amount of wetland establishment that is practicable in a given area and will likely change when detailed field conditions are evaluated. The proposed mitigation plans cover larger areas than are required and allow for changes or reductions in the area of wetland mitigation from unknown site constraints.

MassDOT would further refine the mitigation measures during preliminary and final design. The proposed wetland mitigation plan identifies specific locations to serve as suitable wetland resource mitigation areas, demonstrates its ability to successfully replicate wetland functions and ecological values, and provides wetland mitigation at a ratio of 2:1 or greater.

In addition, a list of potential wetland preservation sites has been developed to identify candidates for wetland preservation to address USACE-specific mitigation requirements of state requirements. Wetland preservation is one of a suite of mitigation options to meet the USACE-specific mitigation requirements, in addition to the wetland establishment and restoration discussed above.

Criterion 3: The variance is necessary to accommodate an overriding community, regional, state or national public interest; or that it is necessary to avoid an Order that so restricts the use of the property as to constitute an unconstitutional taking without compensation.

Regulation 310 CMR 10.05(10) provides that the Commissioner may waive the application of the regulations if it is found "that the variance is necessary to accommodate an overriding community regional, state or national public interest ..." This first element of the criterion requires a showing that the project is being pursued by, or under the auspices of, a public authority or a private entity found to be serving a public function. Since the MBTA is pursuing this project, the first element of this test is met in that the applicant is a public entity pursuant to MGL Chapter 161A, Section 2.

The second element of this criterion requires that the applicant show that the project is one of such unusual merit or necessity in serving a public interest that it overrides MassDEP's interest in enforcing its wetland regulations. The public interest served by the Stoughton Electric Alternative is that it would address the need for public transportation from the South Coast region to Boston and provide benefits to the South Coast region in terms of public transit equity, service distribution and ridership, air quality and climate change improvements, and opportunities for smart growth and sustainable development as an alternative to sprawl.

This FEIS/FEIR documents the need for transportation improvements in the South Coast region (see Chapter 2, *Purpose and Need*). The South Coast Rail project is an initiative of MassDOT and the MBTA who have defined its purpose as “to more fully meet the existing and future demand for public transportation between Fall River/New Bedford and Boston, and to enhance regional mobility, while supporting smart growth planning and development strategies in affected communities.” The need for the project establishes the public benefits that would be met. The current transportation system serving the South Coast region is inadequate to meet the current needs of the region and will not meet the future demand placed upon it, as indicated by increasing traffic congestion and accidents. Major transportation needs and deficiencies that would be addressed by the South Coast Rail project include:

- Lack of transportation capacity to downtown Boston;
- Congestion on highway and transit facilities serving the region; and
- Air quality that does not meet federal Clean Air Act standards.

Overriding public interests that arise from these from a MEPA perspective include:

- Improving regional air quality;

- Adding transportation capacity between Fall River, New Bedford, and downtown Boston;
- Reducing congestion on highway and transit facilities;
- Improving travel times;
- Improving regional mobility;
- Improving access to jobs;
- Providing equity to Environmental Justice populations; and
- Promoting smart growth planning.

The commuter rail would increase the number of travelers that would choose to use public transit for work trips from the South Coast to Boston and Cambridge and reduce the vehicle miles of travel by automobiles. The improvements to public transportation services in the South Coast Rail corridor are consistent with regional goals that envision diversion of auto trips to transit, and rely on improved transit services to provide more attractive and lower-impact travel choices to peak period travelers as the regions highway system becomes increasingly congested due to the growth in automobile travel.

Transportation benefits of the proposed commuter rail line include a reduction in automobile trips to access transit (since feeder bus service would provide rides to new stations and current South Coast residents accessing commuter rail in Stoughton will be able to walk to or make a shorter trip to closer stations); fewer side trips made by automobile commuters during the day since they would not be driving their cars; and diversion of commuters from automobile or other transit services that would reduce the demand for parking in downtown Boston and at major transit stations.

Air quality would benefit from the South Coast Rail project, as described in Chapter 4.9. Vehicle miles traveled (VMT) would be reduced as commuters shift travel mode from private automobiles to public transit, reducing emissions from cars. The electric motive power of the trains would not emit air pollutants, and emissions from remote power plants to produce the electric power would be lower than those of diesel-powered trains. The mode shift would also reduce greenhouse gas emissions, with less of an impact on climate than the No-Build Alternative.

The project would also support smart growth development, reducing sprawl as compared to the No-Build Alternative. The new station locations were selected in part to support TOD, and station sites are near development blocks. The Corridor Plan outlines measures that the municipalities served by the South Coast Rail may take, with support from the Commonwealth, to promote smart growth development in selected areas and preserve open space in other areas. The Commonwealth will support municipalities through incentives and technical assistance. Executive Order 525 directs state agencies to implement Corridor Plan when making decisions affecting the South Coast region.

On November 8, 2002, MassDEP issued a Variance under its Wetlands Protection Act regulations for the Greenbush Project. Like the proposed South Coast Rail project, the 2002 project was undertaken to improve the regional transportation system. The reasoning behind the 2002 MassDEP Variance Decision remains current and applicable to the South Coast Rail project now proposed, even though the South Coast Rail project is not a component of the State Implementation Plan (SIP, for air quality). The 2002 MassDEP Variance Decision for the Greenbush Project concluded that:

> *"In sum, the proposed project has demonstrated an overriding public interest because it will provide additional transit services in the South Shore region, reduce automobile use and vehicle miles traveled, and allow for compliance with the [Central Artery/Tunnel] commitments and the SIP."*

As MassDEP has found in this previous Variance, transit improvements constitute an overriding public need. The South Coast Rail project would improve transit and therefore serves an overriding public interest.

8.7.3.2 Stormwater Management Standards

The Stoughton Alternative is currently at a conceptual level of design. The preliminary designs for the track, stations, and layover facilities have been developed to demonstrate that the project would comply with the MassDEP Stormwater Management Standards. During the final design, each element of the South Coast Rail project would be developed in full compliance with the Standards. Based on the current level of design, the Standards and how the South Coast Rail project would comply with each one are provided below.

Standard 1: No new stormwater conveyances may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

BMPs proposed upgradient from any new discharge have been designed in accordance with the Massachusetts Stormwater Handbook and provide the required treatment volume. All proposed stormwater outlets and conveyances have been designed to not cause erosion or scour to wetlands or receiving waters.

Standard 2: Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. This Standard may be waived for discharges to land subject to coastal storm flowage as defined in 310 CMR 10.04.

Stormwater BMPs with volume storage are proposed at each location where post-development peak discharges would require attenuation. Sites with discharges to coastal waters (Fall River Depot Station, Battleship Cove Station, Whale's Tooth Station, Weaver's Cove East Layover Facility, and Wamsutta Layover Facility) may waive this standard and are not required to incorporate attenuation structures.

Standard 3: Loss of annual recharge to ground water shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook.

Groundwater recharge requirements would be met for each project element. Environmentally Sensitive Site Design (ESSD) techniques and LID features have been incorporated into the conceptual design of each station site and layover facility. ESSD techniques include reducing impervious area by removing unnecessary pavement, maintaining existing drainage patterns, and maintaining existing mature vegetation. LID features include disconnecting runoff from impervious surfaces, using sheet flow and

surface conveyances instead of closed drainage systems, and promoting groundwater recharge through bioretention and infiltration basins.

Standard 4: Stormwater management systems shall be designed to remove 80 percent of the average annual post-construction load of Total Suspended Solids (TSS). This Standard is met when:

- Suitable practices for source control and pollution prevention are identified in a long- term pollution prevention plan, and thereafter are implemented and maintained;
- Structural stormwater BMPs are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook; and
- Pretreatment is provided in accordance with the Massachusetts Stormwater Handbook.

Structural practices such as deep sump catch basins with hoods, oil/grit separators, and gravel and grass filter strips have been incorporated as appropriate in each site design in order to provide pretreatment of stormwater flows. Bioretention swales, bioretention basins, and infiltration basins have been incorporated as appropriate in each site design to provide treatment that meets or exceeds the 80 percent TSS removal requirement.

The only location where the water quality volume and 80 percent TSS removal requirement would not be met is along the Hockomock Swamp Trestle. Runoff from the trestle would be treated to the extent practicable and would meet all of the requirements of the *de minimis* standard described in Volume 3 of the Massachusetts Stormwater Handbook.

In order to comply with the on-going requirements of this standard, a long-term SWPPP would be included as part of the final design.

Standard 5: For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention all land uses with higher potential pollutant loads cannot be completely protected from exposure to rain, snow, snow melt, and stormwater runoff, the proponent shall use the specific structural stormwater BMPs determined by the Department to be suitable for such uses as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53 and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00.

Three sites qualify as Land Uses with Higher Potential Pollutant Loads (LUHPPLs): North Easton Station, Weaver's Cove East Layover Facility, and Wamsutta Layover Facility. These sites incorporate structural stormwater BMPs such as deep sump catch basins with hoods, oil/grit separators and sediment forebays. The layover facilities also incorporate drip pans beneath the layover tracks to catch drips or spills from the trains stored at the facility.

Appropriate source control and pollution prevention measures must be documented in a post-construction SWPPP. This plan would be completed in conjunction with the NOI for authorization of stormwater discharges under the NDPES Multi-Sector General Permit for Industrial Activities, prior to stormwater discharges from the layover facilities.

Standard 6: Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply and stormwater discharges near or to any other critical area require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area, if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A "storm water discharge" as defined in 314 CMR 3.04(2)(a)1 or (b) to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited unless essential to the operation of a public water supply.

Stormwater discharges to ORWs would receive treatment and would be set back from the receiving water to the maximum extent practicable. Discharges to ORWs are limited to locations along the Hockomock Swamp Trestle and along track segments located near vernal pools. No discharges are proposed within a Zone 1 or Zone A of a public water supply. Appropriate treatments for each location would be selected during final design as part of detailed grading plans and drainage analysis.

Standard 7: A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.

All but three of the station sites (North Easton Station, Taunton Depot Station, and Freetown Station) and both of the layover facilities qualify as redevelopment projects. The station sites where new parking lots are proposed (Raynham Park and Taunton) and the Weaver's Cove East Layover Facility have been designed to fully comply with all of the stormwater standards.

Standard 8: A plan to control construction related impacts including erosion, sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation, and pollution prevention plan) shall be developed and implemented.

The project would obtain coverage under the NPDES General Permit for Construction Activities prior to the start of earthmoving activities. A construction-period SWPPP would be developed during final design as part of the NOI submittal. Recommended construction period BMPs are described in Chapter 4.17 of this FEIS/FEIR.

Standard 9: A long-term operation and maintenance plan shall be developed and implemented to ensure that stormwater management systems function as designed.

MassDOT would develop a detailed Operations and Maintenance Plan (O&M Plan) during final design as part of the NOI submittal.

Standard 10: All illicit discharges to the stormwater management system are prohibited.

Proposed stations and layover facilities have been designed so that they are in full compliance with current standards. In locations where previous development has occurred, storm drainage structures remaining from those developments would be removed within the redevelopment area. New sanitary facilities at the two layover facilities would be designed in accordance with the sanitary code.

8.8 CLEAN WATER ACT SECTION 401—MASSACHUSETTS CLEAN WATER ACT

This section describes the regulatory context, regulatory requirements, and how the South Coast Rail project would comply with requirements of Section 401 of the Clean Water Act as administered by MassDEP under the Massachusetts Clean Water Act and implementing regulations.

8.8.1 Regulatory Context

Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification from the state in which the discharge originates or would originate, that the discharge would comply with the applicable (i.e., Commonwealth of Massachusetts) effluent limitations and water quality standards.

Under the Clean Water Act, MassDEP is required to issue Water Quality Certifications for projects that result in discharge of fill to a wetland or waterbody, pursuant to the Massachusetts Clean Water Act (MGL Ch. 21 § 26-53). MassDEP executes its responsibilities pursuant to Section 401 under the Massachusetts Clean Water Act (M.G.L. c 21 §§ 26-53) and is the final arbiter as to whether a water quality certification will be issued, denied, or waived. The Order of Conditions issued by local conservation commissions automatically assumes the issuance of a water quality certificate for projects impacting less than 5,000 square feet of wetlands. This project would require MassDOT to obtain an Individual Water Quality Certificate from MassDEP as impacts would exceed 5,000 square feet. However, because the project cannot meet two performance criteria, as described in Section 8.8.3, MassDOT will seek a Variance from certification.

8.8.2 Regulatory Requirements

Massachusetts regulations[5] cover construction, operation, and maintenance of activities related to dredged or fill material within waters of the United States within the Commonwealth of Massachusetts, and discharge of waters to wetlands and waterways subject to state and federal jurisdiction if a NPDES permit is required for a project. Any activity that would result in a discharge of dredged material, dredging, or dredged material disposal greater than 100 cubic yards that is also subject to federal regulation under Clean Water Act Section 404 must obtain a Clean Water Act Section 401 Water Quality Certification.

There are seven criteria for the evaluation of applications for discharge of dredge or fill material (314 CMR 9.06):

[5] 314 CMR 9.00, 401 Water Quality Certification for Discharge of Dredged or Fill Material, Dredging, and Dredged Material Disposal in Waters of the United States Within the Commonwealth. http://www.mass.gov/dep/service/regulations/314cmr09.pdf, accessed 28 June 2012.

- No discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem;

- No discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which would minimize potential adverse impacts to the bordering or isolated vegetated wetlands or land under water, including a minimum of 1:1 restoration or replication of isolated or bordering wetlands;

- No discharge of dredged or fill material shall be permitted to ORWs, except for the activities specified in 314 CMR 9.06(3)(a) through (l), which remain subject to an alternatives analysis and other requirements of 314 CMR 9.06;

- Discharge of dredged or fill material to an ORW specifically identified in 314 CMR 4.06(1)(d) (e.g., vernal pools, within 400 feet of a water supply reservoir and any other area so designated) is prohibited as provided therein unless a variance is obtained under 314 CMR 9.08;

- No discharge of dredged or fill material is permitted for the impoundment or detention of stormwater for the purposes of controlling sedimentation or other pollutant attenuation;

- Stormwater discharges shall be provided with BMPs to attenuate pollutants and provide a set back from receiving water or wetland; and

- No discharge of dredged or fill material shall be permitted in the rare circumstances where the activity meets the criteria for evaluation but would result in substantial adverse impacts to the physical, chemical, or biological integrity of surface waters of the Commonwealth.

8.8.3 Regulatory Compliance

The Stoughton Alternative would comply with five of the seven criteria outlined above for the discharge of dredged or fill material within waterways or wetlands.

- As described in Section 8.2.3.1 of this chapter, there are no practicable alternatives to the Stoughton Electric Alternative that would have less adverse impact on aquatic ecosystems.

- As described in Chapter 7.3, all appropriate and practicable steps have been taken to minimize adverse impacts to bordering or isolated vegetated wetlands and land under water. The proposed mitigation measures described in Section7.4.9 include the creation or restoration of up to 89 acres of wetlands at up to seven sites, at ratios determined in consultation with MassDEP, USACE, and the EPA, depending on cover type, for no net loss of wetland functions and values. Additionally, MassDOT will select and preserve wetlands at Priority Preservation Area sites if the area of federal wetland mitigation needed would not be fully achieved by wetland establishment and restoration.

- As described in Chapter 4.17, *Water Resources*, stormwater discharges would be managed in accordance with Massachusetts Stormwater Management Regulations. No dredged or fill material would be discharged into wetlands for the impoundment or detention of stormwater for the purposes of controlling sedimentation or other pollutant attenuation.

- Also as described in Chapter 4.17, stormwater discharges would be provided with BMPs to attenuate pollutants and would be set back from receiving waters and wetlands, in accordance with Massachusetts Stormwater Management Regulations.

- The South Coast Rail project would not result in substantial adverse impacts to the physical, chemical, or biological integrity of surface waters of the Commonwealth.

The Stoughton Alternative would require fill in ORWs (vernal pools) and would not meet either of the performance standards prohibiting the discharge of dredged or fill material in ORWs. This alternative would also require fill in wetlands associated with Fall Brook, a public water supply ORW. MassDOT would seek a Variance from Clean Water Act Section 401 Certification, in accordance with 314 CMR 9.08, for placement of fill into ORWs. The MassDEP Commissioner may issue a Variance of the criteria for evaluation of Section 401 Certification applications if the applicant demonstrates that:

- All reasonable measures have been proposed to avoid, minimize, and mitigate adverse effects on the environment; and

- The Variance is justified by an overriding public interest or necessary to avoid a certification that so restricts the use of property as to constitute an unconstitutional taking without compensation.

The MassDEP Commissioner may consolidate variance decisions under 314 CMR 9.00 (Section 401 Certification regulations), 310 CMR 10.36 and 10.58 (Wetlands Protection Act regulations), and 310 CMR 9.21 (Waterways regulations). These criteria are met pursuant to the description of the Variance from Wetlands Protection Act regulations provided in Section 8.7.3.1. The proposed project avoids impacts to the extent practicable, has minimized impacts, will mitigate for unavoidable wetland impacts, and serves an overriding public interest.

8.9 MASSACHUSETTS PUBLIC WATERFRONT ACT LICENSE (CHAPTER 91)

This section describes the regulatory context, regulatory requirements, and how the South Coast Rail project would comply with requirements of the Massachusetts Public Waterfront Act, as codified in MGL Chapter 91.

8.9.1 Regulatory Context

Chapter 91 is the Commonwealth's primary tool for protection and promotion of public use of its tidelands and other waterways. The South Coast Rail project would require approvals under the waterways licensing program of Chapter 91 and the waterways regulations at 310 CMR 9.00 for construction, reconstruction, minor modifications to existing structures, changes in use of filled tidelands and culvert and bridge replacement within non-tidal rivers and streams. No work is proposed within flowed tidelands.

Chapter 91 Sections 1 through 63 require a waterways license, issued by MassDEP, for work on or use of fill or structures within the geographic jurisdiction of Chapter 91. That jurisdiction extends to:

- All waterways of the Commonwealth subject to tidal action;

- All filled tidelands up to and including the historic high water mark, except for landlocked tidelands as defined by Chapter 168 of the Acts of 2007; and

- Navigable portions of non-tidal rivers and streams upon which public funds have been spent for channel improvement, flood control, or stream clearance.

8.9.2 Regulatory Requirements

Chapter 91 regulations at 310 CMR 9.31 establish minimum licensing standards for projects requiring a new Waterways license under Chapter 91. They include the following:

- **Basic Requirements**—The regulations at 310 CMR 9.31 establish the basic licensing requirements for all projects subject to Chapter 91. This regulation requires compliance with all applicable standards contained in 310 CMR 9.32 through 310 CMR 9.40.

- **Proper Public Purpose Requirements**—The regulations at 310 CMR 9.31(2) require MassDEP to determine that all projects requiring a Waterways license meet a proper public purpose which provides greater benefit than detriment to the inherent public rights in said land. Water Dependent Use projects are assumed by 310 CMR 9.31(2)(a) to meet this standard. Non-water dependent use projects must comply with the standards at 310 CMR 9.51 through 310 CMR 9.55, as applicable to demonstrate they serve a proper public purpose.

The South Coast Rail project includes 22 locations where the track crosses a non-tidal river or stream subject to the jurisdiction of Chapter 91, and are therefore considered infrastructure crossing facilities per 310 CMR 9.02. The proposed Weaver's Cove East Layover Facility is also subject to licensing under Chapter 91 because it meets the regulatory definition of an infrastructure facility provided in 310 CMR 9.02.

8.9.3 Regulatory Compliance

This section describes the South Coast Rail project elements subject to licensing or other Chapter 91 approvals, their water dependency and provides a summary of how each would comply with the applicable waterways regulations at 310 CMR 9.00 and the municipal harbor planning process described at 301 CMR 23.00. The Stoughton Alternative includes existing track, ballast, and drainage structures located within filled tidelands subject to jurisdiction under 310 CMR 9.04(2), and bridges and culverts crossing non-tidal rivers and streams subject to jurisdiction under 310 CMR 9.04(1)(e). Many of the existing bridge crossings are presently licensed under Chapter 91. The smaller stream crossings are generally not licensed. The proposed Weaver's Cove East Layover Facility is also not yet licensed under Chapter 91.

8.9.3.1 Infrastructure Crossing Facilities

The South Coast Rail project includes 22 bridges or culverts that span a Chapter 91 jurisdictional water body from one bank to the opposite bank.[6] These crossings therefore meet the regulatory definition of infrastructure crossing facilities provided in 310 CMR 9.02. Table 8.9-1 summarizes the proposed bridge and culvert replacements that would be subject to Chapter 91.

[6] The bridge over the Taunton River at MP 34.73 crosses a small cove along the west side of the river and does not span the river itself.

Table 8.9-1 Proposed Bridge and Culvert Replacement Subject to Chapter 91

Waterbody	Presently Licensed	Proposed Alteration	Anticipated Chapter 91 Application
Pequit Brook	No	No change to historic arch structure. Addition of second track, expansion of footprint over waterway, no change in navigability.	New License
Beaver Meadow Brook	No	No change to abutment location. New structure proposed above or adjacent to existing historic arch.	New License
Whitman Brook	No	New abutments would be constructed behind existing abutments, which would then be removed.	Maintenance
Black Brook (CV-ST 10.95)	No	Replacement of existing culvert, not presently designed.	Maintenance
Unnamed tributary to Black Brook (CV-ST 11.59)	No	Replacement of existing culvert, not presently designed.	Maintenance
Black Brook (CV-ST 12.68)	No	New bridge would be constructed to replace washed out culvert.	New License (if deemed navigable)
Unnamed tributary to Pine Swamp Brook (CV-ST 16.00)	No	Replacement of existing culvert, not presently designed.	Maintenance
Pine Swamp Brook (CV-ST 17.37)	No	Replacement of existing culvert, not presently designed.	Maintenance
Taunton River	Lic. 3118 Oct. 19, 1906	Reconstruction of existing crossing outside existing structure, removal of existing abutments.	New License or License Amendment
Taunton River	Lic. 3118 Oct. 19, 1906	Existing piles to be replaced by one mid-stream concrete pier. New abutments to be constructed outside existing structure which would then be removed.	New License or License Amendment
Taunton River	Lic. 2909 Nov. 1, 1904	Existing piles to be replaced by one mid-stream concrete pier. New abutments to be constructed outside existing structure which would then be removed.	New License or License Amendment
Mill River	Lic. 3118 Oct. 19, 1906	Reconstruction of existing crossing outside existing structure, removal of existing abutments.	New License or License Amendment
Taunton River	Yes	Bridge replacement: existing piles would be removed and one new cast-in-place concrete pier would be constructed in the center span. New abutments would be constructed behind existing abutments which would then be removed.	New License
Unnamed tributary to Cotley River (CV-NB 14.52)	No	Replacement/expansion of existing culvert.	New License
Cotley River	No	Bridge replacement: New abutments would be constructed behind the existing abutments, which would then be	New License

Waterbody	Presently Licensed	Proposed Alteration	Anticipated Chapter 91 Application
		removed.	
Cotley River	No	Bridge replacement: New abutments would be constructed behind the existing abutments, which would then be removed.	New License
Unnamed tributary to Cedar Swamp River (CV-NB 17.89)	No	Replacement of existing culvert, not presently designed.	Maintenance
Assonet River	No	Bridge replacement: existing piles to be replaced by one mid-stream concrete pier. New abutments to be constructed outside existing structure which would then be removed.	New License
Cedar Swamp River	No	New abutments would be constructed behind the existing abutments, which would then be removed.	New License
Unnamed tributary to Fall Brook	No	Replacement of existing culvert, not presently designed.	Maintenance
Fall Brook	No	Bridge replacement: new abutments would be constructed behind existing abutments, which would then be removed.	Minor modification
Unnamed (CV-NB 26.96)	No	Replacement of existing culvert, not presently designed.	Maintenance

The 22 locations where the track crosses a non-tidal river or stream subject to the jurisdiction of Chapter 91 meet the regulatory definition of Infrastructure Crossing and must comply with three Chapter 91 licensing requirements (water dependence, public purpose, and reconstruction) as well as the basic requirements, as described in the following subsections.

Water Dependence

Pursuant to 310 CMR 9.12(d), infrastructure crossing facilities may be determined to be water dependent by MassDEP only upon a finding by the Secretary that such facilities cannot be located away from such waters. The Stoughton Alternative includes use of existing railroad corridors which require numerous bank-to-bank crossings of jurisdictional non-tidal rivers and streams. A range of alternatives were previously considered and all would require numerous non-tidal river and stream crossing to extend passenger rail service as dictated by the project.

MassDOT has requested that the Secretary determine that all existing and proposed bank-to-bank rail crossings of jurisdictional non-tidal rivers cannot be relocated away from inland waters, authorizing MassDEP to find them to be water dependent pursuant to 310 CMR 9.12(2)(b).

Public Purpose

310 CMR 9.31(2) requires projects on tidelands and Great Ponds to serve a proper public purpose which provides greater benefit than detriment to the rights of the public. Water-dependent use projects are presumed to meet this requirement under the provisions of 310 CMR 9.31(2)(a). All of the existing and

proposed infrastructure crossing facilities over non-tidal rivers and streams are presumed to meet this standard.

Proposed Reconstruction

As listed in Table 8.9-1, new Chapter 91 Licenses are anticipated where there would be substantial structural alteration (enlargement) of an existing exempt structure to accommodate a second track. New or amended licenses would be required when there would be substantial structural alteration to an existing structure in terms of size, configuration, materials and design and fabrication parameters, but the number of tracks would not change. Reconstructing structures would be considered "maintenance" where it includes replacement of an existing exempt structure needed to restore the serviceability of existing railroad infrastructure without substantial enlargement.

Basic Requirements

The list below provides the applicable Basic License Requirements referenced in 310 CMR 9.31(1) and identifies the standards that apply to the proposed non-tidal river and stream crossings listed in Table 8.9-1 and provides a rationale for compliance. Only standards applicable to the South Coast Rail project are included.

310 CMR 9.31(1)(a): No new fill is permitted in flowed tidelands for non-water dependent use projects.

All existing and proposed South Coast Rail crossings are water dependent infrastructure crossing facilities pursuant to 310 CMR 9.02 and 310 CMR 9.12(2)(d).

310 CMR 9.31(1)(b): Projects must comply with all applicable state environmental protection requirements.

The South Coast Rail project would obtain all required state and federal permits and approvals.

310 CMR 9.31(1)(c): Projects must comply with applicable local zoning and Municipal Harbor Plans (MHPs).

Section 8.9.3.3 describes the South Coast Rail project's consistency with local economic plans and MHPs. Although two South Coast Rail project elements (Wamsutta Layover Facility and Whale's Tooth Station) are within an MHP area, they are not subject to Chapter 91 licensing as they would be located on landlocked filled tidelands.

310 CMR 9.31(1)(d): This standard prohibits projects from significantly interfering with:

- Public rights of navigation which exist in all waterways;
- Free passage over and through the water; and
- Access to town landings.

Existing culverts along the South Coast Rail corridor crossing non-tidal rivers and streams provide limited navigation. The existing bridges are generally licensed structures and provide passage for small vessel navigation. Proposed culvert and bridge improvements would maintain or enhance existing navigability at jurisdictional crossings.

310 CMR 9.31(1)(e): The project shall preserve the availability and suitability of tidelands, Great Ponds and other waterways that are in use for water-dependent purposes, or which are reserved primarily as locations for maritime industry or other specific types of water-dependent use. The project shall not significantly interfere with littoral or riparian property owners' rights to approach their property from a waterway and to approach the waterway from said property.

The South Coast Rail project does not include any new non-tidal river and stream crossings and therefore would not significantly interfere with any littoral or riparian property owners' rights of access. Existing crossings would be maintained or upgraded to support passenger rail traffic. Where feasible, upgrades would widen culverts to improve wildlife passage resulting in a net benefit to navigation.

310 CMR 9.31(1)(e): The project shall not significantly disrupt any water-dependent use in operation, as of the date of license application, at an off-site location proximate to the vicinity of the project site.

The South Coast Rail project would enhance the capacity for the existing water-dependent infrastructure crossing facilities to support public transportation and this public service project.

310 CMR 9.31(1)(e): The project shall not displace any water-dependent use that occurred on the site within the last five (5) years.

The existing South Coast Rail railroad crossings are all located on land owned and/or operated as a railroad for many years. The project would restore, maintain or enhance these existing water-dependent infrastructure crossing facilities.

8.9.3.2 Infrastructure Facility

The proposed Weaver's Cove East Layover Facility is the only project infrastructure facility potentially subject to licensing under Chapter 91. This facility meets the regulatory definition in 310 CMR 9.02:

> *"Infrastructure Facility means a facility which produces, delivers, or otherwise provides electric, gas, water, sewage, transportation, or telecommunications services to the public."*

The Weaver's Cove East Layover Facility compliance with applicable Chapter 91 licensing requirements is provided below.

Water Dependency

The Weaver's Cove East Layover Facility would be a non-water dependent infrastructure facility, as defined by 310 CMR 9.55. This facility does not meet the regulatory criteria at 310 CMR 9.12(2) defining water-dependent use projects because it does not require access to or located in tidal or inland waters.

MassDEP has confirmed that the Weaver's Cove East Layover Facility would be subject to licensing under 310 CMR 9.55 (Standards for Nonwater-Dependent Infrastructure Facilities.)

Public Purpose

310 CMR 9.31(2) requires projects on tidelands and Great Ponds to serve a proper public purpose which provides greater benefit than detriment to the rights of the public. Non-water dependent projects are reviewed under the requirements of 310 CMR 9.31(2)(b).

The Weaver's Cove East Layover Facility would comply with the requirements of 310 CMR 9.55 and the additional standards contained in 310 CMR 9.54, and is consistent with the applicable programmatic policies and management principles of the Massachusetts CZMP, which is described in Section 8.5.

Standards for Non-Water Dependent Infrastructure Facilities

The regulations at 310 CMR 9.55 waive the provisions of 310 CMR 9.51 through 310 CMR 9.53 for non-water dependent infrastructure facilities. The regulations at 310 CMR 9.55(1) requires projects to include mitigation and/or compensation measures as deemed appropriate by MassDEP to ensure that all feasible measures are taken to avoid or minimize detriments to water-related interest of the public.

The proposed Weaver's Cove East and Wamsutta layover facilities meet the definition of non-water dependent use infrastructure facilities and are therefore potentially subject to 310 CMR 9.55. The proposed Wamsutta Layover Facility would be constructed on landlocked filled tidelands and would not be subject to licensing. The proposed Weaver's Cove East Layover Facility would be located on filled tidelands and is subject to licensing and review under 310 CMR 9.55.

The public interests protected by 310 CMR 9.55(1) and listed below describe how the proposed Weaver's Cove East Layover Facility would comply with each.

Protection of Maritime Commerce, Industry, Recreation and Associated Public Access

The proposed Weaver's Cove East Layover Facility site is undeveloped and does not provide public access to the shoreline due to the presence of the existing Fall River Secondary rail corridor. The site is separated from the Taunton River by the Fall River Secondary and does not support any maritime commerce or industry.

Protection, Restoration, and Enhancement of Living Marine Resources

The proposed layover facility is located on filled tidelands approximately 100 feet from the Taunton River shoreline and approximately 20 feet above the river. Since it was filled between 1865 and 1893, the site does not support the protection, restoration or enhancement of living marine resources.

Attainment of Water Quality Goals

The proposed layover facility will meet all applicable state and federal water quality standards and will comply fully with this standard.

Reduction of Flood and Erosion-Related Hazards on Lands Subject to the 100-Year Storm Event or Sea Level Rise

The proposed layover facility will be located approximately 20 feet above the Taunton River, well above the 100-year storm event. The site is not subject to inundation during predicted storm events or sea level rise and is not damage prone or a natural buffer area.

Protection or Enhancement of Public Views and Visual Quality in the Natural And Built Environment of the Shoreline

The primary public views of the Taunton River shoreline potentially affected by the proposed layover facility are from the North Main Street corridor east of the site and the adjacent private residences and

side-streets. These public views, and the associated visual quality will not be substantively affected by the project because the North Main Street corridor is approximately 20 feet above the elevation of the proposed site. The ground elevation continues to rise east of North Main Street to approximately 80 feet above the site at Route 79.

The public views of the layover facility could be further mitigated by screening if deemed necessary during licensing. However, this would be of limited effect in light of the small potential changes in public views resulting from the project.

Preservation of Historic Sites and Districts, Archaeological Sites, and Other Significant Cultural Resources Near Waterways

The proposed layover facility site is filled land and does not contain any known site, district, archaeological site, or other culturally significant resource.

8.9.3.3 Municipal Harbor Plans

The municipal harbor planning process is voluntary, established by the regulations at 301 CMR 23.00. Municipalities may implement local planning goals for their waterfronts. An approved MHP is intended to guide state agency actions related to waterfront development, permitting, and planning, and provides a formal mechanism for local input to the Chapter 91 licensing process. Approved MHPs may substitute numerical provisions regarding building height, setbacks, open space, and ground floor uses within Commonwealth tidelands.

The South Coast Rail project includes construction activities and changes in use within the geographic planning area for two MHPs:

- New Bedford/Fairhaven Municipal Harbor Plan, and
- Fall River Municipal Harbor and Downtown Economic Development Plan.[7]

The following sections describe the South Coast Rail project's consistency with these MHPs.

New Bedford/Fairhaven Municipal Harbor Plan

The New Bedford/Fairhaven MHP was prepared through a collaborative effort by the Cities of New Bedford and Fairhaven, OCZM, MassDEP, and the Seaport Advisory Council. The New Bedford/Fairhaven MHP was approved by the Secretary of Energy and Environmental Affairs on June 14, 2012.

This planning area includes the proposed sites for the Wamsutta Layover Facility and the Whale's Tooth Station. However, these facilities are not subject to licensing under Chapter 91 as they would be located on landlocked filled tidelands; they are not required to be consistent with the approved MHP to comply with the provisions of 310 CMR 9.34.

Pursuant to 301 CMR 23.05(3), MassDOT has been an active participant in the development of the New Bedford/Fairhaven MHP as it relates to the South Coast Rail project. The MHP recognizes the importance of restoring rail service as a critical component of transportation and industrial infrastructure in the port of New Bedford.

[7] The Fall River Harbor and Downtown Economic Development Plan is not an approved plan under 301 CMR 23.00 or 310 CMR 9.00.

The New Bedford/Fairhaven MHP identifies the combined Whale's Tooth Station as a suitable location to support commuter rail, local and regional bus service, taxis, and waterfront trolley service, and potentially accommodate future rail and pedestrian links to a water terminal.

Fall River Harbor and Downtown Economic Development Plan

In October 2002, the City of Fall River completed an Economic Development Plan in consultation with a diverse group of regional stakeholders including the OCZM and MassDEP. The plan was prepared with the goal of obtaining approval by the Massachusetts Secretary of Energy and Environmental Affairs under the provisions of Municipal Harbor Plan Approval regulations (301 CMR 23.00). While the Economic Development Plan was submitted to the Secretary for approval, it was not approved, pending further revisions. Therefore, the Economic Development Plan does not meet the regulatory criteria for approved harbor plans and does not serve as formal regulatory guidance for the licensing process.

None of the bridges or culverts subject to Chapter 91 licensing (as listed in Table 8.9-1) are located within Fall River. Nonetheless, the South Coast Rail project has been planned and conceptually designed in a manner consistent with the Fall River Harbor and Downtown Economic Development Plan in terms of supporting water dependent uses and improving public access to the Fall River waterfront while avoiding non-water dependent uses in the DPA or filled tidelands subject to licensing.

8.10 MASSACHUSETTS ENDANGERED SPECIES ACT

This section describes the regulatory context, regulatory requirements, and how the South Coast Rail project would comply with requirements of the MESA protecting state-listed rare species.

8.10.1 Regulatory Context

MESA protects rare plants and animals and their designated critical habitats; the Massachusetts Wetlands Protection Act protects wildlife habitat. NHESP has determined that the Stoughton Alternative would result in a "take" of state-listed rare species and would require a Conservation and Management Permit (CMP). There would be no impacts to federally listed endangered species.

8.10.2 Regulatory Requirements

MESA prohibits "taking" any state-listed rare plants and animals unless specifically permitted for scientific, educational, or propagation purposes, or where a CMP is issued. "Take" includes protection of rare species habitat, and is defined as "*in reference to animals to harass, harm, pursue, hunt, shoot, hound, kill, trap, capture, collect, process, disrupt the nesting, breeding, feeding or migratory activity or attempt to engage in any such conduct, or to assist such conduct, and in reference to plants, means to collect, pick, kill, transplant, cut or process or attempt to engage or to assist in any such conduct. Disruption of nesting, breeding, feeding or migratory activity may result from, but is not limited to, the modification, degradation or destruction of Habitat.*"

The regulations implementing MESA (321 CMR 10.05) state that "[a]ll State Agencies shall review, evaluate, and determine the impact on Endangered, Threatened and Special Concern species or their habitats… and use all practicable means and measures to avoid or minimize damage to such species or their habitats." State agencies are responsible for demonstrating to the Secretary that all practicable means and measures to protect rare species and their habitats have been incorporated into the project

design. A project that would result in a "take" requires a CMP from the NHESP. Additional regulatory requirements of MESA are:

- 321 CMR 10.23(2)(a) requires that an applicant adequately assess alternatives to both temporary and permanent impacts to State-listed species.
- 321 CMR 10.23(2)(b) requires that a CMP may only be issued where "an insignificant portion of the local population would be impacted by the Project or Activity".
- 321 CMR 10.23(2)(c) requires that a CMP may only be issued where "the applicant agrees to carry out a conservation and management plan that provides a long-term Net Benefit to the conservation of the State-listed species".
- 321 CMR 10.23(7) establishes certain performance standards including mitigation ratios to achieve the long-term Net Benefit performance standard. These ratios are based on the amount of habitat impacted and the category of State-listed species:
    - Endangered species require a mitigation ratio of 3:1 (three times the amount of affected habitat).
    - Threatened species require a mitigation ratio of 2:1.
    - Special Concern species require a mitigation ratio of 1.5:1.

The Director may approve an alternative mitigation approach that differs from these ratios where the alternative approach is appropriate, considering factors that include but are not limited to:

- The size and configuration of the habitat impact;
- The threats to the affected State-listed species posed by uses or activities located adjacent to or in close proximity to the project;
- The size, configuration and quality of the habitat proposed to be protected;
- The population density of the affected State-listed species; and
- The habitat management and research needs associated with the affected species.

8.10.3 Regulatory Compliance

NHESP has determined that the Stoughton Alternative would result in a "take" of three state-listed rare species: Blanding's turtle, eastern box turtle, and blue-spotted salamander. The amount of habitat impacted would be determined during the permitting process, based on actual field delineation of rare species habitat, and would include a detailed analysis of actual habitat boundaries. Coordination with NHESP would continue through the selection of a final design and development of a detailed mitigation plan, as described in Chapter 7 of this FEIS/FEIR.

As documented in Chapter 3, MassDOT has evaluated four route alternatives (Attleboro, Stoughton, Whittenton, and Rapid Bus) and determined that none of these alternatives would avoid impacts to rare

species habitat. The USACE has determined that the Stoughton Electric Alternative is the LEDPA, as all of the other alternatives would not meet the project purpose, not be practicable or not be less environmentally damaging than the Stoughton Electric Alternative or a combination of the above. The As demonstrated in Chapter 4.15, *Threatened and Endangered Speices*, the impacts to habitat of each of the state-listed species affected by the Stoughton Alternative would be a negligible portion of the total available habitat.

The Stoughton Electric Alternative is not anticipated to affect the long term persistence of these species' populations. MassDOT has developed a draft Conservation and Management Plan, which has been provided to NHESP for review and comment. MassDOT would implement the final, approved Plan to provide a long-term benefit to impacted species. Elements of the Plan include:

- On and/or off-site permanent habitat protection;
- On and/or off-site habitat restoration and management;
- Measures to protect listed species during construction and to mitigate for barrier effects of the reconstructed track system;
- Research to enhance conservation efforts and rare species recovery; and
- Contribution toward development or implementation of an off-site conservation and protection plan for the impacted species.

Species-specific mitigation ratios and measures for direct impacts that achieve the net-benefit standard are:

- For Blanding's turtle (State Threatened), a 2:1 mitigation ratio is required. To provide a net benefit, MassDOT has agreed to provide funding to protect 25 acres of land potentially used by the Hockomock Swamp population of Blanding's turtle, as well as to fund a study of this population that would determine the size and status of the population, identify nesting areas, identify important non-breeding areas, and identify locations where migratory pathways cross Route 138.
- For eastern box turtle (State Special Concern), a 1.5:1 mitigation ratio is required. To provide a net benefit, MassDOT has agreed to provide funding to the eastern box turtle mitigation bank equivalent to protecting 17 acres, or to protect 17 acres of habitat available to this population.
- For the blue-spotted salamander (State Special Concern), a 1.5:1 mitigation ratio is required. To provide a net benefit, MassDOT has agreed to provide funding to protect approximately 11 acres of land potentially used by the Hockomock Swamp population of blue-spotted salamander.
- MassDOT anticipates that the land protection for the Blanding's turtle and blue-spotted salamander may overlap, and may be combined with wetlands preservation required for wetland mitigation.

NHESP has determined that minor impacts to the habitat of invertebrate species, and other species present along the active New Bedford Main Line and Fall River Secondary (the Southern Triangle), would not constitute a "take" based on the conceptual design.

Implementation of the CMP will ensure that the affected species will realize a net benefit from the South Coast Rail project.

8.11 WILD AND SCENIC RIVERS ACT

Section 7(a) of the Wild and Scenic River Act (16 U.S.C. 1278 *et seq.*) provides that no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the secretary charged with its administration (33 CFR 320.3(l)).

As discussed in Chapter 4.5, *Visual Resources*, the South Coast Rail project is subject to the Wild and Scenic Rivers Act since portions of the Taunton River were designated as "scenic" or "recreational" river areas under the Act in March 2009. Specifically, the segment along the Fall River Secondary and the segment through Taunton from Weir Street to Route 24 were designated as a "recreational river area," which is defined by the Act as a segment with a partially developed shoreline and ready access.

Consultation with the NPS would be necessary to obtain concurrence that the effects of the South Coast Rail project on the recreational values of the Taunton River would be neither invaded nor unreasonably diminished. The applicability of this consultation requirement for the Stoughton Alternative is summarized below.

The Stoughton Electric Alternative includes the New Bedford Main Line, which crosses the Taunton River just south of Weir Junction. The Stoughton Line also crosses the Taunton River at three locations north of Weir Junction, as well as a tributary to the Taunton River (the Mill River) within 0.25 mile of the Taunton River's main stem. Bridge replacement at all of these locations would affect the visual environment of the Taunton River as regulated by the NPS under the Wild and Scenic Rivers Act. The layover facility site along the Fall River Secondary (Weaver's Cove East) also would affect the visual environment of the Taunton River. The NPS was contacted for consultation. A meeting between MassDOT and representatives from the NPS Wild and Scenic Rivers Program was held in January 2012 to discuss the proposed project. Detailed descriptions of the South Coast Rail project's potential impacts to the Taunton River from the proposed bridge replacement and Fall River Depot Station were provided to the NPS and are described in Chapter 4.10, *Protected Open Space and Areas of Critical Environmental Concern*. Further consultation with NPS is anticipated as the project advances through the design process.

Determining if a project would result in a direct and adverse effect to a designated river requires consideration of aspects of the project potentially impacting the river, and the scope of the evaluation should be consistent with the magnitude and complexity of the project. The evaluation of the potential impact to the Wild and Scenic River designation that may result from the proposed replacement of the Taunton River bridges under the Stoughton Electric Alternative, as required by Section 7[8], is presented below.

[8] Interagency Wild and Scenic Rivers Coordinating Council. 2004. Appendix C: Evaluation Procedure Under "Direct and Adverse."

1. Define the proposed activity.

   The project proponent, MassDOT, proposes to replace four bridges over the Taunton River because the existing bridges are in deteriorating condition and do not meet the safety and performance requirements for the South Coast Rail project. The four bridges are located in Taunton, Massachusetts, as shown on Figure 4.10-23. The bridge replacement project would require 4 years to complete and the bridges would be in operation indefinitely thereafter. The existing multi-span bridges, piers, and abutments would be removed; new abutments and superstructure would be installed. The replacement bridges would be one- or two-span structures. The riverbank would be graded to allow for wildlife passage.

2. Describe how the proposed activity will directly alter within-channel conditions.

   The replacement activities would be conducted at the locations of the existing four bridges, largely within the footprint of the existing bridges. The new abutment locations, behind the existing abutment sites, would slightly extend the bridge length. There would be no changes to the active channel location, channel geometry, channel shape, channel form, or water quality parameters. Navigability of the river would be improved by replacing multi-span structures by one- or two-span structures. There would be no adverse impacts to outstanding resources values of the river channel.

3. Describe how the proposed activity will directly alter riparian and/or floodplain conditions.

   New abutments would be constructed behind the existing abutments, expanding the riparian area and floodplain slightly. The riverbank at these locations would be re-graded consistent with the slope of the bank up- and downstream from the bridge location. The floodplain would be slightly expanded as a result of replacing the abutments. There would be no adverse impacts to outstanding resources values of the riparian area.

   Describe how the proposed activity will directly alter upland conditions.

   The project would not alter upland conditions. The work would be conducted within the existing railroad footprint, using rail-mounted equipment.

5. Evaluate and describe how changes in on-site conditions can/will alter existing hydrologic or biologic processes.

   The project would not adversely alter existing hydrologic or biologic processes. All aspects of the bridge replacement would improve river flow characteristics by replacing the existing multi-span structures with one- or two-span bridges and moving the abutment locations up-bank. Potential impacts to water quality during construction would be managed in accordance with regulatory requirements of the National Pollutant Discharge Elimination System program, specifically described in a project-specific Stormwater Pollution Prevention Plan.

6. Estimate the magnitude and spatial extent of potential off-site changes.

   There would be no off-site changes from the bridge replacement activities that would impact the river.

7. Define the time scale over which steps 3 through 6 are likely to occur.

The bridge construction activities are expected to require 4 years to complete. The bridges would be used indefinitely thereafter.

8. Compare project analyses to management goals.

   The bridge replacements are not expected to adversely affect the achievement or timing of achievement of the management goals and objectives for the Taunton River, as described in the *Taunton River Stewardship Plan*.[9]

9. Make the Section 7 determination.

   The bridge replacements would improve riparian area and floodplain conditions, and would not affect water quality, outstanding resources values, or the recreational river classification. Replacing and using four bridges over the Taunton River is not expected to result in a direct and adverse effect to the recreational nature of the Taunton River in this reach.

8.12 NATIONAL HISTORIC PRESERVATION ACT AND MASSACHUSETTS GENERAL LAW CHAPTER 9

As discussed in detail in Chapter 4.8, cultural resources are regulated at the federal and state levels and are always considered in NEPA and MEPA analyses. At the federal level, Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800) provides the regulatory framework for the compliance guidelines for the identification and evaluation of cultural resources. At the state level, Massachusetts General Laws Chapter 9, Chapter 254, Sections 26-27C, as amended; and 950 CMR 71.00, 950 CMR 70.00 provides the regulatory framework for the state compliance guidelines, under the jurisdiction of the Massachusetts Historical Commission (MHC). Other relevant legislation and regulations include the National Environmental Policy Act of 1969, as amended;[10] Executive Order 11593, "Protection and Enhancement of Cultural Environment;"[11] Sections 106 and 110 of the National Historic Preservation Act of 1966, as amended,[12] implementing regulation 36 CFR 800, as revised January 2001; and, the Procedures for the Protection of Historic Properties (Appendix C) at 33 CFR Part 325 - Processing of Department of the Army Permits.

The historic and archaeological resources intensive surveys for the South Coast Rail project were undertaken in accordance with the Secretary of the Interior's *Standards and Guidelines for Identification* (48 FR 44720-23), the Massachusetts Historical Commission (MHC) standards and guidelines set forth in *Public Planning and Environmental Review: Archaeology and Historic Preservation* (MHC 1985), and the MHC historic resources survey standards. The survey complies with the standards of the MHC, state archaeologist's permit regulations (950 CMR 70), the Secretary of the Interior's *Standards and Guidelines for Identification* (48 FR 44720-23), The Standards of the Massachusetts State Register of Historic Places (State Register), and NPS guidelines for assessing eligibility for listing in the National Register, specifically *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation*. While the surveys conducted to date have informed the impact analysis, additional surveys

[9] Taunton River Stewardship Council. 2005. *Taunton River Stewardship Plan, Taunton River Wild & Scenic River Study.* Prepared by the Taunton Wild and Scenic River Study Committee, Southeastern Regional Planning & Economic Development District, and National Park Service-Northeast Region.

[10] National Environmental Policy Act of 1969, as amended (42 .S.C. $$ 4321-4347).

[11] Executive Order No. 11593. "Protection and Enhancement of the Cultural Environment," CFR 154 (1971) reprinted in 16 U.S.C.$470 note.

[12] Advisory Council on Historic Preservation. Sections 106 and 110 of the National Historic Preservation Act of 1966 (January 2001) 36 CFR 800.

will be conducted as necessary when more design information is available to further and more specifically assess potential impacts to cultural resources.

8.12.1 National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966 (NHPA) seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among agency officials and other parties with an interest in the effects of the undertaking on historic properties. The goal of the consultation is to identify historic properties with the potential to be impacted by the undertaking, assess its effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties. [13]

As the lead federal agency for the South Coast Rail project, the Corps has compliance responsibilities regarding cultural resources under the Procedures for the Protection of Historic Properties (Appendix C) at 33 CFR Part 325 - Processing of Department of the Army Permits, Section 106 of the NHPA as amended, the regulations of the Advisory Council on Historic Preservation (Council) at 36 CFR 800, and NEPA.

8.12.2 Massachusetts General Law Chapter 9

MassDOT serves as the lead state agency and is responsible for identifying and evaluating properties through archaeological and historic architectural surveys in accordance with MGL Ch. 9 Sections 26-27C, as amended; 950 CMR 71.00, 950 CMR 70.00 and MEPA. MGL Chapter 9 Section 26 27C stipulates that any project that requires funding, licenses or permits from any state agency must be reviewed by the MHC.

8.13 GENERAL CONFORMITY WITH CLEAN AIR ACT AND NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

As discussed in Chapter 4.9, *Air Quality*, the South Coast Rail project is subject to General Conformity (Title 40 CFR Part 93, Subpart B). General conformity provisions only apply in nonattainment and maintenance areas. Given that the project area is nonattainment for the 8 -hour ozone standard, the relevant pollutants for consideration are the two ozone precursors: volatile organic compounds (VOC) and nitrogen oxides (NO_x). The long-term effect of the Stoughton Alternative on VOC and NO_x emissions is beneficial (e.g. reduced emissions relative to the No-Build alternative). Therefore, a conformity determination would not be required to address long-term operational emissions, even if such emissions could be practically controlled by USACE. As discussed in Section 4.9.1.2, long-term operation emissions (such as from diesel locomotives under the diesel rail alternatives), are not indirect emissions within the scope of General Conformity because USACE cannot control them and has no continuing program control over the rail line.

However, General Conformity also applies to peak year construction emissions. The construction-related emissions of this project are a reasonably foreseeable consequence of the USACE Section 404 permit decision. If construction emissions exceed certain *de minimis* criteria, a General Conformity determination could be required. The *de minimis* criteria for this project (ozone nonattainment area in an ozone transport region) are 50 tons/year for VOC and 100 tons/year for NO_x.

[13] Advisory Council on Historic Preservation. Section 106 of the National Historic Preservation Act of 1966 (June 17, 1999) 36 CFR 800.1(a).

The construction schedule and staging of the Stoughton Electric Alternative has not been defined in sufficient detail at this point in the development of the project to quantify construction period VOC and NO_x emissions for comparison to the *de minimis* criteria. The Corps will require the preparation of a General Conformity applicability analysis for peak construction year emissions of the preferred alternative prior to the NEPA Record of Decision. If the *de minimis* criteria are not exceeded, no further review will be required. If the criteria are exceeded, a General Conformity determination (including 30-day public review period) will be required prior to project implementation.

8.14 ARTICLE 97 OF THE COMMONWEALTH OF MASSACHUSETTS

The Secretary of the Executive Office of EEA has defined lands subject to Article 97 as "land or interests in … land owned or held by the Commonwealth or its political subdivisions"[14] that protect these interests. It is assumed that the publicly owned open spaces below that have been identified are Article 97 lands subject to the EEA Article 97 Land Disposition Policy.

The goal of the EEA Policy is to ensure no net loss of Article 97 lands. As a general rule, the EEA and its agencies "shall not sell, transfer, lease, relinquish, release, alienate, or change the control or use of any right or interest of the Commonwealth in and to Article 97 land." Exceptions to this goal are included in the EEA Policy; disposition of Article 97 land is not supported unless exceptional circumstances exist. All other options to avoid use of Article 97 land must be explored and no feasible and substantially equivalent alternatives exist.

The policy requires that EEA agencies minimize land disposition occurrences. All Article 97 land disposition proposals are to be coordinated with the EEA, and any Article 97 land disposition that is recommended must be justified and explained to the Secretary of the EEA. Any Article 97 land disposition must be authorized by enacted legislation and approved by all municipal, state, and federal agencies, authorities, or other governmental bodies as required and empowered.

According to the EEA Policy, Article 97 land disposition cannot be supported unless EEA and its agencies determine that exceptional circumstances exist. A determination of "exceptional circumstances" is subject to all of the following conditions being met:

- All other options to avoid the Article 97 disposition have been explored and no feasible and substantially equivalent alternatives exist;
- The disposition of the subject parcel and its proposed use do not destroy or threaten a unique or significant resource;
- As part of the disposition, real estate of equal or greater fair market value or value in use of proposed use, whichever is greater, and significantly greater resource value are granted to the disposing agency or its designee;
- The minimum acreage necessary for the proposed use is proposed for disposition and, to the maximum extent possible, the resources of the parcel proposed for disposition continue to be protected;

[14] EEA. *1998. Article 97 Land Disposition Policy.* Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs, Massachusetts Environmental Policy Act Office: Boston.

- The disposition serves an Article 97 purpose or another public purpose without detracting from the mission, plans, policies and mandates of EEA and its appropriate department or division; and

- The disposition of a parcel is not contrary to the express wishes of the person(s) who donated or sold the parcel or interests therein to the Commonwealth.

To the extent possible based upon readily available information and conceptual engineering plans, an evaluation of the project with respect to these six criteria is provided in Chapter 4.10, *Protected Open Space and Areas of Critical Environmental Concern*. The Stoughton Electric Alternative would require approximately 0.16 acre of Article 97 land acquisition. As described in Section 4.10.4.2, compliance with the Article 97 land disposition exceptional circumstances criteria would be completed for the selected alternative once the engineering design is finalized and replacement sites identified.

8.15 AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC) PROGRAM

As discussed in Chapter 4.10, *Protected Open Space and Areas of Critical Environmental Concern*, ACECs are "those areas within the Commonwealth where unique clusters of natural and human resource values exist and which are worthy of a high level of concern and protection."[15] ACECs are designated by the EEA, and the ACEC program is administrated by the Massachusetts Department of Conservation and Recreation.

Commonwealth regulations[16] indicate that all EEA agencies must take action, administer programs, and revise regulations in order to acquire useful scientific data on the ACEC; preserve, restore, or enhance the resources of the ACEC; and ensure that activities in or impacting on the ACEC are carried out so as to minimize adverse effects on seven environmental resources, as addressed in other chapters of this FEIS/FEIR:

- Marine and Aquatic Productivity: Chapter 4.18, *Chapter 91 Compliance and Coastal Zone Consistency*; Chapter 4.14, *Biodiversity, Wildlife, and Vegetation*; Chapter 4.15, *Threatened and Endangered Species*; Chapter 4.16, *Wetlands*; Chapter 4.17, *Water Resources*.

- Surface and Groundwater Quality: Chapter 4.17, *Water Resources*.

- Habitat Values: Chapter 4.14, *Biodiversity, Wildlife, and Vegetation*; Chapter 4.15, *Threatened and Endangered Species*.

- Storm Damage Prevention or Flood Control: Chapter 4.16, *Wetlands*.

- Historic and Archaeological Resources: Chapter 4.8, *Cultural Resources*.

- Scenic and Recreational Resources: Chapter 4.5, *Visual and Aesthetic Resources*.

- Other Natural Resource Values of the Area: Chapter 4.16, *Wetlands* and Chapter 4.11, *Farmland Soils*.

[15] EEA. 2009. 301 CMR 12.03 Areas of Critical Environmental Concern, General Provisions. Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs: Boston.

[16] EEA. 2009. 301 CMR 12.12: Effects of Designation. Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs: Boston.

The Stoughton Electric Alternative would require the acquisition of one publicly owned parcel within the Hockomock Swamp ACEC in Easton: 0.50 acre of the Southeastern Regional Vocational Tech School land. This land would be used for a traction power substation. The area represents a small proportion of the ACEC and acquisition would not substantively affect any of the resource areas of concern.

8.16 FARMLAND PROTECTION POLICY ACT

The FPPA, P.L. 9798,[17] authorizes the USDA to develop criteria to identify the effects of federal programs on the conversion of farmland to non-agricultural uses. If it is determined that farmland conversion may involve land protected under the FPPA, formal coordination is required per 7 CFR Part 658. The NRCS reviews potential impacts to farmland to determine if the land qualifies as prime or unique farmland or farmland of statewide importance. Forms AD-1006 and CPA-106, which outline direct and indirect impacts to farmland and assign an impact rating at each location, would be submitted by the project for review and scoring by the NRCS. Impacts with scores less than 160 are considered insignificant, between 161 and 200 potentially adverse, and scores over 200 are considered potentially significant. Scores over 160 may require the project to further assess the implications of the proposed action on the farmland and potentially consider alternatives to further minimize or avoid farmland losses. During the environmental review process, agencies having jurisdiction or special use expertise may provide a letter which may include recommended measures to mitigate project effects.

As discussed in Chapter 4.11, *Farmland Soils*, the NRCS has not been requested to complete a Farmland Conversion Impact Rating for any of the South Coast Rail project alternatives at this time because the impacts are not expected to be significant. Drafts of the NRCS Farmland Conversion Impact Rating Forms AD-1006 and CPA-106 have been prepared for sites larger than 2 acres where designed farmland soils may be impacted. These forms are included in Appendix 4.11-A. Subject to comments from agencies with jurisdiction or special use expertise concerning important farmland, mitigation measures may be developed as appropriate.

None of the sites that impact farmland soils resulted in a score greater than 160 on the draft Form AD-1006 or CPA-106. These findings indicate that the Stoughton Electric Alternative would not have a detrimental impact on agricultural lands nor would it convert land from active agricultural use to nonagricultural use.

8.17 MASSACHUSETTS EXECUTIVE ORDER 193

EO 193 directs state agencies to avoid conversion of agricultural lands to non-agricultural uses. Three criteria are evaluated to determine if a parcel is considered agricultural land for purposes of EO 193:

- the presence of soil types capable of supporting or contributing to present or potential commercial agriculture
- current and historic use for agriculture, and
- absence of non-farm development

Impacts to mapped areas of farmland soils were evaluated where conversion of previously undeveloped land is proposed as part of the South Coast Rail project. Although several sites are located within

[17] United States Department of Agriculture, Farmland Protection Policy Act, 1981, (Public Law 97-98, 7 U.S.C. 4201).

mapped areas of farmland soils, none are currently in agricultural production. All non-corridor sites are adjacent to existing rail corridors and public roadways and are located in areas that are at least partially developed and are therefore less suitable for conversion to agricultural usage.

The Stoughton Electric Alternative would not convert land from active agricultural use to nonagricultural use.

8.18 MASSACHUSETTS CONTINGENCY PLAN (310 CMR 40.0000)

As discussed in Chapter 4.12, *Hazardous Materials*, the spill or release of Oil or Hazardous Materials (OHM) in the process of constructing the South Coast Rail project is an unlikely event, and measures would be required to prevent and control any such spills. The construction contractors would implement a Spill Control Program in compliance with the Massachusetts Contingency Plan (310 CMR 40.0000, "the MCP") and MBTA policy. These measures would be employed both at the rail reconstruction sites and station construction sites.

Properties with confirmed OHM impacts are generally managed in accordance with the MCP, 310 CMR 40.0000 and associated policies or guidance issued by the DEP. However, depending on the type and concentrations of OHM present at a property, other regulations implemented by the Commonwealth of Massachusetts or the USEPA may apply.

The Stoughton Electric Alternative would require acquisition of properties with RECs that would require further investigation. In each case, remediation or soil/groundwater management during construction could be required.

For contaminated property owned by MassDOT, response actions would be required pursuant to the milestones outlined in the MCP. Notification to the DEP would be required if a reporting condition is identified as per the MCP or if OHM is detected in soil and/or groundwater above the applicable standards, referred to as the Reportable Concentrations. A Licensed Site Professional (LSP) would then most likely need to be retained to verify that notification is required, to further assess and manage the site, direct response actions, and specify procedures for work performed in the contaminated areas, such as soil excavation, in accordance with the MCP and, if need be, to render appropriate Opinions. The LSP would also determine if risk reduction measures are required.

To extend MCP deadlines for response action and report submittals so that the response actions can be coordinated with the construction of the stations, layovers, and expansion of the rail lines, the application for a Special Designation Permit (as per 310 CMR 40.0060 of the MCP) may be warranted.

At many sites containing impacted soil, it is often not possible to reach a regulatory endpoint by using soil excavation and off-site disposal as the only type of remediation. It is advisable to explore other options such as the re-use of soil in order to minimize the quantity of soil to be excavated and disposed off-site. For low levels of impacted soil where a risk assessment shows an unacceptable risk for current and future unrestricted use, a deed restriction consisting of an Activity and Use Limitation (AUL) may be implemented after construction is completed to meet a regulatory endpoint. As per 310 CMR 40.1012(3)(c) of the MCP, AULs are not required within railroad rights-of-way.

Soil impacted with OHM above the Reportable Concentrations that is encountered during the implementation of the South Coast Rail project would be managed appropriately in accordance with the MBTA Design Construction Standard Specifications, Section 02282, entitled "Handling, Transportation

and Disposal of Excavated Material." Preliminary assessment activities may assist in identifying the type and quantity of OHM impacted media which would require management under these protocols and help select the optimal disposal methods and/or destination prior to generation. A summary of the MBTA Specification is provided in the following sections of Chapter 4.12, *Hazardous Materials*:

- 4.12.4.1 Management of Impacted Soil
- 4.12.4.2 Management of Impacted Groundwater;
- 4.12.4.3 Management of Hazardous Demolition Debris and Used Railroad Ties
- 4.12.4.4 Health and Safety Requirements
- 4.12.4.5 Closure Reports