

**ENVIRONMENTAL ASSESSMENT FOR THE
DOWNEASTER PORTLAND NORTH EXPANSION PROJECT**

**ENVIRONMENTAL ASSESSMENT AND 4(f) STATEMENT
FOR THE DOWNEASTER PORTLAND NORTH EXPANSION PROJECT
PORTLAND TO BRUNSWICK CUMBERLAND COUNTY, MAINE**

Prepared Pursuant to 42 USC § 4332, 49 USC § 303, and 64 FR 28545

by the Federal Railroad Administration

and

Northern New England Passenger Rail Authority

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Date of Approval



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1.0 Purpose and Need

1.1 Introduction

The Northern New England Passenger Rail Authority (NNEPRA), in conjunction with the Federal Railroad Administration (FRA), is studying alternatives for the Downeaster Portland North Expansion project. The project consists of the rehabilitation of an approximately 30-mile long existing freight rail line between Portland, Maine and Brunswick, Maine (exhibit 1). The project would support the planned Amtrak Downeaster passenger rail service extension from its existing terminus at the Portland Transportation Center (PTC) to the proposed Maine Street Station in Brunswick.

Passenger rail service has the potential to play an important role in keeping Maine's economy competitive for the future by enhancing quality of life for Maine's employers, employees, residents and visitors. Investment in the passenger rail system helps fulfill State and Federal transportation policies. Improvements to the track infrastructure for the proposed project would also benefit the freight rail service, which uses the same line.



1.2 Project History

Regional rail service in Northern New England arrived when the Downeaster began service in December 2001 after ten years of planning by advocacy groups, the State of Maine, Amtrak, and the Federal Transit Administration (FTA). More than \$60 million of federal, state and local funds were invested in building and renovating stations and upgrading track and signal systems along the Downeaster corridor. Since 2001, more than \$7 million additional dollars have been invested to reduce travel time, increase frequency and improve reliability.

The Downeaster links ten communities in the extended Boston Metropolitan region with ten daily trips connecting to Amtrak's Northeast Corridor and various ferries, airports, subways, intercity and regional bus services. Approximately 40% of riders travel to or from Maine; Boston is the most popular destination. Nearly one-third of passengers travel on a multi-ride pass and more than half travel to and from their destination within a day.

Under a 20-year agreement with the NNEPRA, Amtrak operates five daily push-pull train sets along a 116-mile corridor over tracks owned by Pan Am Railways and the Massachusetts Bay Transportation Authority. Each trip between Portland and Boston takes 2 hours and 25 minutes. Four three-person Amtrak crews operate each daily round trip service, with three Amtrak ticket agents staffing the Portland Station.

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Although each train set usually consists of a locomotive, three passenger coaches, a café car and a non-powered control unit, additional coaches are sometimes added to increase passenger capacity during peak travel periods. The overall passenger train seating capacity is 232. The Downeaster has a layover each night at Portland's Sewall Street facility for servicing, cleaning and fueling. Equipment is rotated as needed among Amtrak's northeast equipment pool. The Downeaster's 160 million passenger-miles and two million passengers since service initiation provide evidence of the regional demand for rail service in northern New England. Ridership has grown 87 percent since FY2005 and is expected to reach 468,000 passengers in FY2009.

Although the increase in ridership may be partially attributed to economic trends (e.g., volatile gas prices), the NNERPA has undertaken service improvements in schedule, frequency and travel time in an effort to continue ridership gains. The Downeaster maintains on-time performance and has experienced strong public popularity.

The expansion of Downeaster service to Brunswick has been part of the state's passenger rail plan since 1991, when the Passenger Rail Service Act was adopted by the Legislature. The State Transit, Aviation and Rail Transportation Fund Act (MRSA Title 23 § 4210-B) was recently enacted to finance the expansion project.

In May 2008, the NNEPRA submitted the Downeaster Portland North Expansion Project Railroad Rehabilitation and Improvement Financing Program Application (RRIFPA) / Categorical Exclusion to the FRA for approval. A Categorical Exclusion evaluation (CE) is a National Environmental Policy Act (NEPA) document prepared for actions that will not individually or cumulatively have a significant effect on the quality of the human environment, as determined by the lead federal agency for the project (40 C.F.R. § 1508.4). After review, the FRA concluded in December 2008 that the NNEPRA should prepare an Environmental Assessment (EA).

1.3 Project Area

The project area consists of the existing rail corridor, which extends approximately 30 miles from the existing terminus at the PTC in Portland to Brunswick's Maine Street Station (exhibit 1). Pan Am Railways owns the majority of the line between the PTC and Brunswick, including approximately 12.6 miles of Freight Maine Line abutting approximately 14.8 miles on the Brunswick Branch to Church Road in Brunswick. The Rockland Branch, owned by the state of Maine and operated by the Maine Eastern Railroad, begins at Church Road and continues east to Rockland.

1.4 Project Purpose and Need

The purpose of the project is to enhance mobility and improve safety in the region and along the I-295 corridor by extending the Downeaster Amtrak passenger rail service from Portland to Brunswick.

There is a need to reduce congestion and enhance safety on the I-295 corridor, which has experienced substantial growth in traffic volume since the 1950s (MaineDOT 2008). The growth in traffic volume is projected to continue in the future; approximately 50,000 vehicles per day currently travel north of Portland on I-295, and traffic is expected to increase 20 percent by 2030 (MaineDOT 2008). Chronic congestion and delays occur due to inadequate roadway capacity. An increase in traffic incidents due to the high traffic volume creates hazards by temporarily reducing highway capacity and producing lengthy backups. Expansion of the I-295 corridor is unlikely due to the potential for a large number of displacements and other substantial environmental impacts. Instead, there is a need to consider alternate transportation modes that could expand regional capacity (NNEPRA 2006).

1.5 Decision to be Made

As proponents of an action supported by federal funds, the NNEPRA and the FRA must comply with NEPA. NEPA requires federal agencies to consider the impacts of their actions on the natural, social, economic and cultural environment and to disclose those considerations in a public document. The NEPA process is intended to help public officials make decisions based on an understanding of the environmental consequences and take actions that protect, restore, and enhance the environment (40 CFR 1500.1).

The purpose of this EA is to provide the FRA and the public with a full accounting of the environmental impacts of the alternatives developed to meet the project purpose and need. The EA serves as the primary document to facilitate review of the proposed project by federal, state and local agencies and the public.

The EA process concludes with either a Finding of No Significant Impact (FONSI) or a determination to proceed to preparation of an Environmental Impact Statement. A FONSI is a document that presents the reasons why the agency has concluded that there are no significant environmental impacts projected to occur upon implementation of the action (CEQ 2007).

1.6 Connected Actions

The project proposes construction of platforms in Freeport and Brunswick. While not proposed as a part of this project, the Town of Freeport is investigating the potential for a station in the vicinity of the platform. One potential site under consideration is the use and/or expansion of the existing Freeport Merchant's Association Information Center in the Hose Tower Building. This building is in proximity to the platform near the intersection of Depot and Mill Streets.

In Brunswick, a station would be provided within the proposed Maine Street Station development project, which is situated south of and adjacent to the railroad tracks between Maine Street and Union Street. The construction of this station is not proposed as part of this project. The Maine Street Station development is planned to consist of six new buildings housing a total of 35,800 square feet (s.f.) of office space, 17,920 s.f. of retail space, four restaurants totaling 9,000 s.f., 25,900 s.f. of residential condominiums (assumed at approximately 1,000 s.f.

per unit) and a 40,000 s.f./75-room inn. The development would include approximately 185 parking spaces.

1.7 Applicable Regulations and Permits

The following statutes and orders apply to the proposed action and were considered during the preparation of the EA:

- Endangered Species Act, as regulated at 50 CFR 17
- Magnuson-Stevens Fishery Conservation and Management Act, 50 CFR part 600
- Public Law 91-190, National Environmental Policy Act of 1969, 42 USC § 4321 et seq., signed January 1, 1970
- Public Law 95-217, Clean Water Act of 1977, 33 USC § 1251-1376
- Sections 9 and 10 of the Rivers and Harbors Act of 1899, 33 USC 401
- Section 106 of the National Historic Preservation Act of 1966, as amended, 16 USC 470
- Section 4(f) of the U.S. Department of Transportation Act of 1966, 49 USC 303
- Section 404 of the Federal Water Pollution Control Act (CWA)
- Section 6(f) of the Land and Water Conservation Act of 1965, 16 USC 460
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, 42 USC 61
- Executive Order 11988, Floodplain Management, 42 FR 26951, signed May 24, 1977
- Executive Order 11990, Protection of Wetlands, 42 FR 26961, signed May 24, 1977
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, signed February 11, 1994
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, 65 FR 50121, signed August 11, 2000
- Federal Railroad Administration Procedures for Considering Environmental Impacts, 64 FR 28545 (May 26, 1999) and 49 CFR Part 260.35
- Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR parts 1500-1508, November 29, 1978
- Federal Register, Use of Locomotive Horns at Highway-Rail Grade Crossings; Final Rule, 49 CFR parts 222 and 229, April 27, 2005.
- Maine Department of Environmental Protection, Natural Resources Protection Act, 38 MRSA, Chapter 3 § 480 et seq.
- Maine Department of Environmental Protection/Maine Department of Transportation, Stormwater Memorandum of Understanding
- Maine Endangered Species Act, 12 MRSA § 7751
- Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 MRSA § 1301, 1979
- Maine Revised Statutes, Sensible Transportation Policy Act of 1991, 23 MRSA § 73

The NNEPRA would be required to obtain the following permits and approvals prior to the start of construction:

- **Section 404 General or Individual Permit** — The USACE administers Section 404 of the CWA on behalf of the U.S. Environmental Protection Agency. Section 404(b)(1) regulates activities in Waters of the United States, defined as navigable waterways and their tributaries. Waters of the United States can include wetlands with a surface water connection to a navigable waterway. A Section 404 individual permit would be required from the USACE for the discharge of dredged or fill material into Waters of the United States.
- **Natural Resources Protection Act (NRPA) Permit-by-Rule (PBR)** — The Maine Department of Environmental Protection (MDEP) issues PBRs for projects adjacent to protected natural resources, placement/maintenance of outfall pipes and ditches, and the replacement of permanent structures. Section 480-Q(2) of the NRPA exempts maintenance and minor repair of structures from permitting, provided erosion control measures are installed, fish passage is unimpeded, no additional intrusion to the protected natural resource occurs, the dimensions of repaired structure do not exceed the current structure, and less than 50 percent of the structure will be repaired.
- **Section 401 Water Quality Certification** — Section 401 of the CWA requires that an applicant for a federal permit that may result in a discharge to Waters of the U.S. must first obtain certification from the state. The MDEP issues a Section 401 Water Quality Certification when the project is shown to comply with state water quality standards. Typically, the 401 Water Quality Certification would be issued by the MDEP concurrently with the NRPA Permit.
- **Coastal Zone Management Act (CZMA) Consistency Determination** — Federal actions that have reasonably foreseeable coastal zone impacts are required to be consistent, to the extent practicable, with the CZMA of 1972 and the state's federally approved coastal-management program. The Maine State Planning Office (SPO) administers the Maine Coastal Program (MCP). The SPO would perform its consistency review and issue its CZMA Consistency Determination following review and approval of the NRPA permit application by the MDEP. Receipt of necessary state and municipal permits generally constitutes the State's determination that the project is consistent with the enforceable policies.

2.0 Alternatives

2.1 Introduction

The NNEPRA consulted with the city of Portland, the Towns of Freeport and Brunswick, Pan Am Railways, MaineDOT, and public stakeholders during the development of alternatives. The alternatives were identified and evaluated by their ability to meet the project purpose and need, meet engineering design criteria and avoid or minimize adverse environmental impacts. Three alternatives were considered; one was dismissed and two were retained for detailed study: the No-build and Preferred Alternatives.

2.2 No-build Alternative

The No-build alternative would consist of the operation of the current track, with the present level of maintenance and no appreciable change to the current track configuration or operating conditions. The No-build alternative would not meet the project purpose and need because it would not enhance mobility or improve safety in the I-295 corridor by increasing transportation capacity. The chronic congestion and delays on I-295 north of Portland would continue and worsen as traffic volume increased through 2030. The potential for greater frequency of traffic incidents, possibly resulting in personal injury or loss of life, would increase as traffic volume increased. Travel cost savings from reduced congestion would not be realized.

The No-build alternative was retained for detailed analysis, and its consequences were fully developed, to allow equal comparison to the preferred alternative, and to help decision-makers and the public understand the ramifications of taking no action.

2.3 Preferred Alternative

The Preferred Alternative would consist of the rehabilitation of an approximately 30-mile long existing freight rail line between Portland and Brunswick in order to support the planned Amtrak Downeaster passenger rail service extension from its existing terminus at the PTC to the proposed Maine Street Station in Brunswick. The Preferred Alternative would consist of track upgrades, special trackwork, the construction of platforms in Freeport and Brunswick, the rehabilitation of three stone arch culverts, the replacement or repair of 14 culverts, drainage improvements at the 'deep cut' north of Freeport, and signal upgrades.

Track Upgrades

- The existing jointed rail would be replaced with new continuous welded rail for approximately 29 miles of track.

Special Trackwork

- Grade crossings at 27 locations would be reconstructed.
- Turnout replacement work at several locations.

- Brunswick Passing Siding – A rail siding would be constructed in the vicinity of the proposed Brunswick platform on the north side of the existing track between Maine and Union Streets, running across Union Street to connect to an existing siding, to be used by freight trains passing the platform area. The area impacted by the proposed siding is within the existing railroad right-of-way between the existing track and an access road and parking area for existing commercial development.

Culvert Rehabilitation and Repair Work

- Culvert Rehabilitation
 - Davis Brook Stone Arch – install a liner and point up (add filler and mortar to) voids
 - Todd's Brook Stone Arch – point up voids
 - Cousin's River Stone Arch – repair north headwall and point up arch
- Culvert Repair and/or replacement
 - At 14 locations, the existing culverts would be repaired or replaced in kind, at the same location, with a structure of similar or greater diameter to eliminate backwater restrictions.
 - o Four 2 ft. x 2 ft. single box culverts would be replaced with 24 in. galvanized aluminum pipes
 - o Two 20 in. corrugated iron pipe would be replaced with 24 in. galvanized aluminum pipes
 - o One 3 ft. x 3 ft. single box culvert would be replaced with a 36 in. galvanized aluminum pipe
 - o One 36 in. culvert would be replaced with a 36 in. galvanized aluminum pipe
 - o One 18 in. culvert would be replaced with an 18 in. galvanized aluminum pipe
 - o One 12 in. corrugated metal pipe would be replaced with a 15 in. galvanized aluminum pipe
 - o One 15 in. reinforced concrete pipe would be replaced with a 15 in. galvanized aluminum pipe
 - o One 30 in. corrugated iron pipe would be replaced with a 30 in. galvanized aluminum pipe
 - o One 36 in. corrugated metal pipe would be replaced a with 36 in. galvanized aluminum pipe
 - o Pour new concrete floor into one 8 ft. asphalt coated corrugated metal pipe

‘Deep Cut’ Drainage Correction

- Remove approximately 1,200 feet of ledge and replace with ballast to improve drainage and prevent surface water from ponding.

Signal Upgrades

- The Preferred Alternative has 22 protected grade crossings along the mainline, and 13 protected grade crossings on the Brunswick Branch. Thirteen of these grade crossings (seven on the mainline and five on the Brunswick Branch) would require complete reconstruction. The remaining grade crossings would be gated and upgraded with advanced technology. The Preferred Alternative would also consist of upgrades to the existing signal system by replacing seven miles of older high-maintenance aerial pole lines with new electronic (coded) track circuits.

Platforms

- Platforms would be constructed for stops in Brunswick and Freeport. Each platform would be approximately 400 feet long and would be equipped with a simple shelter and ticket machine. The platforms would be ADA compliant. The MaineDOT would manage the design of the platforms.
 - In Brunswick, the proposed platform would be constructed adjacent to the south side of the tracks between Union and Maine Streets; the Maine Street Station redevelopment project proposed by others would be designed to accommodate the proposed platform. Several alternative locations for the platform were considered. The proposed platform location was selected cooperatively by the Town of Brunswick in consultation with Brunswick Economic Development Corporation, Amtrak and Pan Am Railways due to its strategic location near Downtown Brunswick, Bowdoin College and the Maine Street Station redevelopment project. See Section 3.3.2 for more information on land use surrounding the proposed platform location.
 - In Freeport, the proposed platform would be constructed adjacent to the west side of the existing track between West and Bow Streets. No station is proposed as part of the project, however, the Town of Freeport is investigating the potential for a station in the vicinity of the platform. Several alternative locations for the platform were considered. The proposed platform location was selected cooperatively by the Town of Freeport in conjunction with the Freeport Economic Development Corporation, Amtrak and Pan Am Railways due to its strategic location near Downtown Freeport, L.L. Bean and the Freeport Village Station redevelopment project. See Section 3.3.2 for more information on land use surrounding the proposed platform location.

2.4 Alternatives Considered but Eliminated from Detailed Analysis

An alternative alignment that more closely followed I-295 between Portland and Yarmouth was considered. This alignment would have required the development of a new rail corridor in the designated alignment beginning at the PTC, crossing Forest Avenue and then running parallel to I-295 through the Bayside area of Portland, construction of a new 1,700-foot rail bridge over Back Cove, and a connection to the St. Lawrence and Atlantic Railroad freight line, which would be rehabilitated between Portland and Yarmouth Junction. At Yarmouth Junction, this alternative would connect with the Brunswick Branch and continue on the same alignment as the preferred alternative. Because it required the construction of new rail and a new 1,700-foot rail bridge, the alternative had a substantially higher cost and the potential for greater adverse environmental impacts than the preferred alternative, and was dismissed from detailed analysis.

3.0 Affected Environment and Environmental Consequences

This section categorizes the existing resources within the project area and analyzes the potential beneficial and adverse impacts to these resources from the two alternatives retained for detailed study. For purposes of the analysis, the project area was defined as the 30-mile existing freight rail corridor between Portland and Brunswick. For certain resources, such as noise, Environmental Justice, and secondary and cumulative impacts, the project area was expanded to areas adjacent to the rail corridor, to municipal boundaries or other appropriate limits.

This EA focuses only on those resources that have a reasonable likelihood to be affected by, or to affect, the proposed action. Because the proposed action would not affect geology, soils, farmlands, demographic or housing trends, these resources were not inventoried or analyzed within the document.

3.1 Physical Environment

3.1.1 Air Quality

The project area is located in Cumberland County, which is listed as an Attainment Area for ozone, pursuant to the Clean Air Act amendments of 1990 (USEPA, 2009).

Vehicles emit primarily carbon monoxide (CO), hydrocarbons (also known as volatile organic compounds, or VOCs), oxides of nitrogen (NO_x), and, to a much lesser extent, respirable particulate matter (PM₁₀), sulfur dioxide (SO₂), and lead (Pb). To determine compliance with the National Ambient Air Quality Standards (NAAQS), the MDEP Bureau of Air Quality Control conducts long-term air-quality monitoring. The MDEP operates several continuous monitoring sites that measure ambient concentrations of criteria pollutants.

The No-build Alternative would not worsen air quality in the near future. Over time, air quality would worsen as congestion increases on the roads and highways between Portland and Brunswick.

The Preferred Alternative, with six additional train trips per day along the 30 mile corridor, would result in a negligible increase in emissions. The Preferred Alternative would have no significant impact on current or future air quality standards or lead to the establishment of a non-attainment area. The Preferred Alternative would potentially improve the air quality in the region by diverting vehicles from the roads and highways between Portland and Brunswick.

3.1.2 Water Quality

Although the streams of the project area have not been individually surveyed, streams are, by default, classified Class B streams as described in 38 MRSA 470 (17) (exhibit 2). Class B waters must be suitable for drinking water supply after treatment, fishing, agriculture, recreation in and on the water, industrial processes and cooling water supply, hydroelectric power generation (except as prohibited under Title 12, section 403), navigation, and as habitat for fish and other aquatic life. The habitat must be characterized as “unimpaired.”

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Exhibit 2 – Water Quality Classifications

<i>Classification</i>	<i>Class</i>	<i>Designated Uses</i>	<i>Habitat</i>	<i>Aquatic Life/Bacteria</i>	<i>Discharge of Pollutants</i>
1	AA	drinking water after disinfection, fishing, recreation and navigation, habitat for aquatic life	free flowing and natural	as naturally occurs	none allowed, except stormwater
2	A	all uses of AA, hydroelectric power generation, industrial process and cooling water supply	natural	as naturally occurs	permitted only if effluent will be equal to or better than the water quality of receiving waters
3	B	same as Class A	unimpaired	mean amount of bacteria of human origin may not exceed 64 ppm	receiving waters shall be of sufficient quality to support all aquatic species indigenous to the receiving water
4	C	same as Class A	unimpaired	mean amount of bacteria of human origin may not exceed 142 ppm	may cause some changes to aquatic life, but receiving waters must be of sufficient quality to support all aquatic species indigenous to the receiving water

The No-build Alternative would not cause a change in the water quality Class B classification.

The Preferred Alternative would not permanently impact water quality and would not cause a change in the water quality Class B classification. The Preferred Alternative would temporarily impact water quality, with 17 waterways temporarily impacted by the repair and replacement of fourteen culverts and three stone arches. These impacts would cease when construction was completed. Temporary impacts to waterways would be minimized by the use of best management practices and by following the standards for culvert replacement under the Maine Natural Resources Protection Act.

3.1.3 Water Bodies and Waterways

The perennial surface waters crossed by the rail line are the Presumpscot River, two unnamed waterways from the Presumpscot River, the Piscataqua River, nine unnamed waterways to the East Branch of the Piscataqua River, the Royal River, Pratts Brook (locally known as Davis Brook), one unnamed waterway to Pratts Brook, an unnamed waterway to Cousins River, Harvey Brook (locally known as Todd's Brook), Cousins River, an unnamed waterway to the Harraseeket River, Frost Gully Brook, one unnamed waterway to Frost Gully Brook, Allen Range Brook, and Mill Stream. The rail line crosses four intermittent waterways, unnamed tributary to Mill Stream, two unnamed waterways to Bunganuc Stream, and an unnamed waterway to Androscoggin River (which is crossed twice). The East Branch of the Piscataqua River and one unnamed intermittent waterway to Merrill Brook are located near the

project area, but are not crossed by the rail line. These waterways are not considered navigable by the USACE.

The No-build Alternative would not impact water bodies and waterways.

The Preferred Alternative would not permanently impact waterways. Seventeen waterways would be temporarily impacted during the repair and replacement of the culverts and stone arches. Several culverts convey flow under the rail line from waterways not indicated on U.S. Geological Survey mapping. Culverts convey flow from an unnamed tributary to the East Branch Presumpscot River, an unnamed tributary to Davis Brook, and Mill Stream. The Davis Brook, Todd's Brook, and Cousins River Stone Arches convey flow from their respective waterways.

Temporary impacts would cease immediately after the activity is completed. Some specific construction impacts cannot be estimated at this time because they depend on several factors that would be determined either during final design or by the contractor before or during construction. Impacts to waterways would be minimized by following best management practices and the standards for culvert replacement under the NRPA. Permits or approvals would be required from the USACE and MDEP (See section 1.7).

3.1.4 Floodplains

Federal protection of floodplains is afforded by Executive Order 11988, "Floodplain Management," and by implementation of federal regulations under 44 CFR 9.00. These regulations direct federal agencies to undertake actions to avoid impacts on floodplain areas by structures built in flood-prone areas. In accordance with these federal directives, the FHWA has enacted federal-aid policy guidance and regulations under 23 CFR 650.

The Federal Emergency Management Agency (FEMA) has primary responsibility for identifying flood-prone areas. FEMA conducted flood studies for Cumberland County to locate the extent of the flooding from a 100-year storm.

There are floodplains in the project area. The primary flood areas within Zone A (i.e., areas with a 1 percent annual chance of flooding and a 26 percent chance of flooding over the life of a 30-year mortgage) are adjacent to the Presumpscot River, Piscataqua River, East Branch of the Piscataqua River, several unnamed waterways to the East Branch of the Piscataqua River, the Royal River, Davis Brook and two of its unnamed waterways, Todd's Brook, the Cousins River, Frost Gully Brook and one of its unnamed waterways, and Allen Range Brook. The location of the proposed freight siding in Brunswick and the station platforms in Freeport and Brunswick are not within a flood zone.

The No-build Alternative would not impact 100-year floodplains.

The Preferred Alternative would not permanently impact 100-year floodplains, but would cause a temporary impact to these floodplains during culvert replacement and stone arch repair at Davis Brook and two of its unnamed waterways, Todd's Brook and Cousins River. Temporarily impacted areas would be restored following construction.

3.1.5 Wetlands

Executive Order 11990, “Protection of Wetlands,” requires federal agencies to avoid, to the extent practicable, short and long-term impacts associated with the destruction or modification of wetlands. More specifically, it directs federal agencies to avoid new construction in wetlands unless there is no practical alternative. It further states that where wetlands cannot be avoided, the proposed action must include all practical measures to minimize harm to the wetlands. Section 404 of the CWA provides protections for Waters of the United States and wetlands, including special aquatic sites. The definition of special aquatic sites consists of mudflats, which are vegetated shallows harboring areas of permanently inundated, rooted aquatic vegetation such as eelgrass. Work in or affecting navigable waters is regulated under Section 10 of the U.S. Rivers and Harbors Act.

The MDEP regulates activities in wetlands under the NRPA (38 MSRA §§ 480-A through 480-BB). This act provides protection for resources that are defined to include coastal dune systems; coastal wetlands; significant wildlife habitat; freshwater wetlands; great ponds; and rivers, streams, and brooks. These requirements are implemented through a state regulatory framework that includes the Chapter 310 Wetlands Protection rules as codified in Maine regulations (06-096 CMR 310). Activities that have a greater potential of affecting certain protected resources—including coastal wetlands under the NRPA and other “freshwater wetlands of special significance,” as defined under Chapter 310 of the wetlands rules—are generally subject to more extensive and restrictive permitting requirements. For these activities, the hierarchical analysis of avoidance, minimum alteration, compensation, and no unreasonable impact would apply.

There are wetlands in the project area, which were identified using the U.S. Fish and Wildlife Service’s (USFWS) National Wetland Inventory (NWI) mapping. Detailed field investigations were not performed. Wetlands are adjacent to the Presumpscot River, the East Branch of the Piscataqua River and several of its unnamed waterways, the Royal River, Todd’s Brook, the Cousins River, Mill Stream, and at the headwaters of an unnamed waterway to Bunganuc Stream (near Deep Cut). The location of the proposed freight siding in Brunswick and the station platforms in Freeport and Brunswick do not contain wetlands.

The No-build Alternative would not impact wetlands.

The Preferred Alternative would not permanently impact wetlands. Four wetlands would be temporarily impacted during the repair and replacement of the culverts and stone arches, and the excavation at Deep Cut. The wetlands that would be temporarily impacted are adjacent to the Presumpscot River, an unnamed waterway to the East Branch of the Piscataqua River, Todd’s Brook, the Cousins River, and Mill Stream. The Deep Cut excavation would temporarily impact the headwaters of the unnamed waterway to Bunganuc Stream. Underdrains would convey water into the wetland east of Deep Cut, but as this is a minor redirection of water that is already present onsite, no adverse impact would be expected. The temporary impacts would cease immediately after the activity is completed. Some specific minor construction impacts cannot be estimated at this time because they depend on several factors that would be determined either

during final design or by the contractor before or during construction. Temporary impacts to wetlands would be minimized by using best management practices and by following the standards for culvert replacement under the NRPA.

3.1.6 Coastal Zones

Maine's coastal zone encompasses all political jurisdictions in Maine that have land along the coast or a tidal waterway, such as a river or bay. Because the municipalities in the project area are located in Maine's coastal zone, a federal consistency review under the CZMA is required. Under the CZMA, the SPO is delegated the authority to perform the federal consistency review using the enforceable policies of the approved MCP. The enforceable policies of the MCP are the 20 Maine statutes listed in appendix A of the Maine Guide to Federal Consistency Review, Maine 2006, including the NRPA, Erosion and Sedimentation and Control, Storm Water Management, Maine Rivers Act, and Coastal Management Policies Act.

The NNEPRA has coordinated with the SPO with regard to a consistency review for the project. The SPO has stated that CZMA review for this action is not required at this time. As described previously in Section 1.8 – Applicable Regulations and Permits, the SPO would perform its consistency review and issue its CZMA Consistency Determination at a later stage in the project following review and approval of the NRPA permit application by the MDEP.

The No-build and Preferred Alternatives would not impact coastal zones.

3.1.7 Noise and Vibration

Freight rail activity at existing crossings and vehicular traffic on adjacent roadways account for the majority of the noise present in the project area. Existing noise levels were estimated as part of noise studies conducted for the Preferred Alternative and are described below.

The No-build Alternative would not create additional noise impacts.

A noise assessment was performed for the proposed project in accordance the FTA's *Transit Noise and Vibration Impact Assessment Manual* (FTA, 2006). Noise sensitive areas and receivers of interest within the project area were identified based on the FTA screening procedure for determining potential impacts, a review of available information and aerial mapping, and a fieldview. Freight rail activity at existing crossings and vehicular traffic on adjacent roadways account for the majority of the existing noise present in the project area.

The FTA screening distance for mainline commuter rail is 750 feet for an unobstructed line of sight. However, this screening distance is based on an assumption of higher train frequency than the number of trains proposed under the Preferred Alternative (three roundtrips). An FTA spreadsheet model was used to calculate an appropriate screening distance for the proposed project; the new screening distance was determined to be approximately 120 feet for the commuter rail mainline (i.e., without the horn blown) in the Quiet Zone area that extends from Congress Street in Portland to Falmouth Road in Falmouth.

The FTA screening distance for a commuter rail-highway grade crossing with horns and bells is 1,600 feet for an unobstructed line of sight. However, this screening distance is based on

assumption of higher train frequency (26 trains) than the number of trains proposed under the Preferred Alternative (three roundtrips). Using the FTA spreadsheet model, a new screening distance of 500 feet was established for the at-grade highway crossings. Residences defined as Category 2 receivers fall within these screening distances either for the commuter rail on the mainline or the commuter rail with horn at grade crossings. Due to the presence of these receivers, additional noise analysis was required, and a general noise assessment for the project was performed to determine potential noise impacts.

Noise impact is assessed based on a combination of existing ambient noise exposure and additional noise exposure that would result from the proposed project. To estimate existing noise in the project area, data on freight schedules was used in combination with information on noise exposures from the FTA manual (based on population density). The ambient sound level for urban areas (City of Portland) was estimated at 60 dBA, and the ambient sound level for rural areas was estimated at 50 dBA.

The existing freight train operation consists of six trains per day (three locomotives and 50 cars per train) between Portland and Royal Junction, and two trains per week (one locomotive and six cars per train) between Royal Junction and Brunswick. It was assumed the freight train speed varies between 25 - 40 mph (exhibit 3). Existing sound levels due to the freight trains range from 63 to 73 dBA (A-weighted decibel) within the project area.

Noise levels from the proposed project were predicted for receivers within the identified screening distances. Predicted noise levels were based on an assumption that there would be six new passenger trains over a 24-hour period. The new passenger trains would consist of five trains between 7:00 a.m. and 10:00 p.m., and one train between 10:00 p.m. and 7:00 a.m. Speeds of between 30 and 60 mph were assumed (exhibit 3).

The No-build Alternative would not create additional noise impacts.

The Preferred Alternative would result in moderate noise impacts to 83 sensitive receivers (residences) due to the train horn blowing at grade crossings; passenger rail without the horn would not cause moderate or severe impacts. There would be no severe noise impacts. Total exposure noise levels would generally be higher within rural portions of the project area due to low background noise levels and the absence of the shielding effects provided by rows of buildings near the tracks (typically not present in rural areas). Noise impacts within distinct portions of the project area are described below.

The project area was divided into several sections based on established Quiet Zones and varying passenger train speeds within the 30-mile corridor. The first section extends from Congress Street in Portland and to Falmouth Road in Falmouth. Proposed passenger train speed would be approximately 30 mph. In this section, no noise impact would result from the proposed project because total exposure noise levels would not exceed 65 dBA at 100 feet. The lack of impact can be attributed to the high existing freight train sound level and implementation of a Quiet Zone in this portion of the corridor.

The second section, a predominantly rural area with low population densities, extends from Fields Road in Falmouth to Sligo Road in Yarmouth. Proposed passenger train speed would be

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approximately 60 mph. The total exposure noise levels in this section would be 74 and 70 dBA at 100 feet and 200 feet, respectively. This noise level would result in moderate noise impacts to 22 sensitive receivers (exhibit 3). However, the number of impacted residences would not exceed five per grade crossings.

Exhibit 3 – Noise Summary Table

The third section extends from East Elm Street in Yarmouth to North Road in Yarmouth.

Section	Street Name	City/Town	Freight Train Speed	Passenger Train Speed	Max. Total No. Trains (Day)	Max. Total No. Trains (Night)	Quiet Zone	Moderate Impacts	Severe Impacts
1	Congress Street	Portland	25	30	9	5	N	0	0
	Brighton Avenue	Portland	30	30	9	5	Y	0	0
	Prospect Street	Portland	30	30	9	5	Y	0	0
	Ashmont Street	Portland	30	30	9	5	Y	0	0
	Coyle Street	Portland	30	30	9	5	Y	0	0
	Lincoln Street	Portland	30	30	9	5	Y	0	0
	Revere Street	Portland	30	30	9	5	Y	0	0
	Woodford Street	Portland	30	30	9	5	Y	0	0
	Saunders Street	Portland	30	30	9	5	Y	0	0
	Forest Avenue	Portland	30	30	9	5	Y	0	0
	Walton Street	Portland	30	30	9	5	Y	0	0
	Read Street	Portland	30	30	9	5	Y	0	0
	Allen Avenue	Portland	30	30	9	5	Y	0	0
	Riverside Street	Portland	40	60	9	5	Y	0	0
	Blackstrap Road	Falmouth	40	60	9	5	Y	0	0
	Falmouth Road	Falmouth	40	60	9	5	Y	0	0
2	Fields Road	Falmouth	40	60	9	5	N	4	0
	Woodville Road	Falmouth	40	60	9	5	N	4	0
	Murifield Road	Falmouth	40	60	9	5	N	5	0
	Main Street	Cumberland	40	60	9	5	N	4	0
	Tuttle Road	Cumberland	40	60	9	5	N	1	0
	Greely Road	Cumberland	40	60	9	5	N	3	0
3	Sligo Road	Yarmouth	40	60	9	5	N	1	0
	E. Elm Street	Yarmouth	25	30	5	2	N	5	0
4	North Street	Yarmouth	25	30	5	2	N	8	0
	Webster Road	Freeport	25	50	5	2	N	1	0
5	Hunter Road	Freeport	25	50	5	2	N	0	0
	West Street	Freeport	25	30	5	2	N	6	0
	Bow Street	Freeport	25	30	5	2	N	3	0
	School Street	Freeport	25	30	5	2	N	8	0
6	East Street	Freeport	25	30	5	2	N	7	0
	Upper Mast Landing Road	Freeport	25	50	5	2	N	7	0
	Fernald Road	Freeport	25	50	5	2	N	3	0
	Highland Road	Brunswick	25	50	5	2	N	1	0
7	Grant Road	Brunswick	25	50	5	2	N	0	0
	Church Road	Brunswick	25	30	5	2	N	4	0
	Standwood Street	Brunswick	25	30	5	2	N	8	0
	Union Street	Brunswick	25	30	5	2	N	0	0

This section consists of a predominantly rural area with low population densities and some commercial and industrial development in close proximity to the rail line. Proposed passenger train speed would be approximately 30 mph. Total exposure noise levels would be 71 and 66

dBA at 100 feet and 200 feet, respectively. This noise level would result in moderate noise impacts to 13 sensitive receivers (exhibit 3). However, the number of impacted residences would not exceed eight per grade crossing.

The fourth section, predominantly rural with low population densities, extends from Webster Road to Hunter Road in Freeport. Proposed passenger train speed would be approximately 50 mph. Total exposure noise levels would be 71 and 66 dBA at 100 feet and 200 feet, respectively. This noise level would result in a moderate noise impact to one residence (exhibit 3).

The fifth section extends from West Street to East Street in downtown Freeport. The section is predominantly suburban with moderate population densities and a mix of commercial, industrial and residential uses in close proximity to the rail line. Proposed passenger train speed would be approximately 30 mph. Total exposure noise levels would be 71 and 66 dBA at 100 feet and 200 feet, respectively. This noise level would result in moderate noise impacts to twenty-four sensitive receivers as shown in exhibit 3. However, the number of impacted residences would not exceed eight near any single grade crossing.

The sixth section, predominantly rural with low population densities, extends from Upper Mast Landing Road in Freeport to Grant Road in Brunswick. Proposed passenger train speed would be approximately 50 mph. Total exposure noise levels would be 71 and 66 dBA at 100 feet and 200 feet, respectively. There would moderate noise impacts to eleven sensitive receivers (exhibit 3). The number of impacted residences would not exceed seven per grade crossing.

The seventh section extends from Church Road to Union Street in downtown Brunswick. This section is suburban with moderate population densities and a mix of commercial, industrial, and residential uses in close proximity to the rail line. Proposed passenger train speed would be approximately 30 mph. Total exposure noise levels would be 71 and 66 dBA at 100 feet and 200 feet, respectively. This noise level would result in moderate noise impacts to 12 sensitive receivers (exhibit 3). The number of impacted residences would not exceed eight per grade crossing.

Based on an evaluation of noise impacts and crossings associated with the proposed project, the NNEPRA proposes the following mitigation plan:

- The corridor located between Congress Street in Portland and Falmouth Road in Falmouth is already an established Quiet Zone. The noise along this densely populated section of the corridor is already mitigated.
- Crossings between Fields Road in Falmouth and Hunter Road in Freeport are in rural areas. No additional mitigation is proposed for these areas.
- Crossings between West Street and East Street in Freeport are located in a mixed commercial/residential area and horns on trains passing some of these crossings have the potential to create a negative impact. At this time, officials from the Town of Freeport fully support the restoration of train service and are not requesting that noise mitigation measures be included in the initial expansion project. Should negative noise impacts arise as a result of the expanded Downeaster service, then the NNEPRA and the Town of

Freeport would work to mitigate those impacts, most likely through the installation of wayside horns.

- Crossings between Upper Mast Head Landing in Freeport and Union Street in Brunswick are located in either rural or commercial/industrial areas. No additional noise mitigation is proposed for these areas.
- Although the Downeaster does not cross Maine Street in Brunswick, it would travel up to that crossing. Maine Street is currently designated as part of a Quiet Zone. The upgraded signals and gates installed as part of this project would provide for the Town of Brunswick to apply to extend the Quiet Zone to Stanwood Street if they deemed it necessary.

Existing vibration levels along the Preferred Alternative result from the existing freight traffic along the corridor, which includes six trains per day (three locomotives and 50 cars per train) between Portland and the Royal Junction (located approximately one-third of the way between Portland and Brunswick), and two trains per week (one locomotive and six cars per train) between the Royal Junction and Brunswick. The freight train speed varies between 30 - 40 mph.

The Preferred Alternative includes track upgrade to continuously welded rail (CWR along the entire corridor. CWR track produces less vibration relative to other track configurations, such as jointed rail which currently exists in the corridor. In light of the installation of CWR and existing freight traffic, the addition of 6 passenger trains per day running up to 60 mph but with an average speed of approximately 40 mph will not result in significant vibration impacts.

3.2 Biological Environment

3.2.1 Ecological Systems

The NRPA, administered by the MDEP, provides protection for certain natural resources, including significant wildlife habitat (ecological systems) (38 MRSA 480B). Under the NRPA, the habitats defined as significant and subject to protection are:

- habitat for federal- or state-listed threatened or endangered animal species
- high- and moderate-value deer-wintering areas and travel corridors
- critical spawning and nursery areas for Atlantic sea-run salmon, as defined by the Maine Department of Marine Resources (MDMR)

The following are further defined in Chapter 335 of the Code of Maine Rules (06 CMR 96-335):

- significant vernal pools
- high- and moderate-value waterfowl and wading-bird habitats, including nesting and feeding areas
- shorebird nesting, feeding, and staging areas

- seabird nesting islands

Under the NPRA, the Maine Department of Inland Fisheries and Wildlife (MDIFW) has responsibility for defining the high and moderate- value deer-wintering areas; waterfowl and wading-bird habitats; shorebird nesting, feeding, and staging areas; and seabird nesting islands.

According to the MDIFW, the project area does not contain sensitive ecological systems (MDIFW 2009).

The No-Build and Preferred Alternatives would not impact ecological systems.

3.2.2 Threatened and Endangered Species

The U.S. Endangered Species Act (ESA) of 1973, as amended, provides protections for those species that are listed as threatened or endangered under the ESA. The Act grants the USFWS prime responsibility in administering the species designations and protections granted under the ESA. “Endangered” means that a species is in danger of extinction throughout all or a significant portion of its range. “Threatened” means that a species is likely to become endangered in the foreseeable future.

Various species receive federal and state protection to help repair previous damage to populations and attempt to return the species’ population to self-sustaining levels. Other species receive state protection if the limits of their distribution ranges are in Maine or if populations can only exist in a specific but uncommon habitat in Maine. Agency coordination was conducted to determine if federal or state-listed threatened or endangered species are known to exist in the project area.

According to the USFWS, there are no known, listed or proposed, federal threatened or endangered species in the project area. According to the MDIFW and the Maine Natural Areas Program (MNAP), there are no known state listed or proposed threatened or endangered species in the project area.

The No-build and Preferred Alternatives would not impact federal- or state-listed or proposed threatened or endangered species (MDIFW 2009).

3.3 Human Environment

3.3.1 Transportation

Rail Transportation and Regional Roadway Network

The project area is an approximately 30-mile long existing freight rail line between Portland and Brunswick. The existing freight train operation consists of six trains per day (three locomotives and 50 cars per train) between Portland and the Royal Junction, and two trains per week (one locomotive and six cars per train) between the Royal Junction and Brunswick. The freight train speed varies between 30 - 40 mph. Passenger rail is currently not available between Portland and Brunswick. Instead, I-295 is used for vehicular travel between these two locations.

The No-build Alternative would not impact freight or passenger rail transportation. However, the No-build Alternative would impact the I-295 corridor. Over time, vehicular congestion would

increase on the roads and highways between Portland and Brunswick. An alternate form of transportation, passenger rail, would not be available to residents and tourists in Portland, Freeport and Brunswick.

The Preferred Alternative would not have significant negative impacts on freight rail transportation. Current freight rail operations for the Freight Main Line, Brunswick Branch, or Rockland Branch would not be affected by six additional passenger train trips. Track rehabilitation would be performed according to best management practices to have minimal temporary impacts to existing freight rail operations during construction.

The Preferred Alternative would have a positive impact on passenger rail transportation by offering new service between Portland and Brunswick. The Preferred Alternative would also have a positive impact on vehicular transportation in the I-295 corridor by offering an alternate form of transportation to commuters, residents and tourists in Portland, Freeport and Brunswick. An alternate transportation mode would reduce congestion, thereby resulting in travel cost savings, as well as decreasing the potential for traffic incidents.

Local vehicular transportation

The project area crosses numerous two- to four-lane municipal roads along its 30-mile length. In addition, the two proposed platforms are located in downtown Freeport and Brunswick and would be accessed through the municipal road network. Vehicular traffic from the south and southeast destined for the Freeport platform would use Route 1 northbound and take a right turn onto West Street followed by a left turn onto Depot Street to access parking lots near the proposed platform. Traffic destined for the Freeport platform from the north and northwest would use Route 1 southbound and take a left turn onto Bow Street followed by a right turn onto Depot Street. Traffic from the east would use either West or Bow Streets to Depot Street. Depot Street is a low volume local road that carries an estimated 3,200 vehicles per day (based on the MaineDOT traffic count data from 2005).

Vehicular traffic destined for the Brunswick platform would use either Maine Street or Union Street. Access to the long-term parking lot would be via Cedar Street.

The No-build Alternative would not have a significant impact on local vehicular transportation.

The Preferred Alternative would not have a significant impact on local vehicular transportation. The Preferred Alternative would not lower the Level of Service on roadways or at intersections near platforms, nor have a substantial adverse affect to pedestrians or cyclists. Signal and circuit upgrades performed as part of the track rehabilitation would occur within the railroad right of way, and would not substantially impact traffic on intersecting municipal roadways.

Vehicular traffic generated by the Freeport platform would be minimal (estimated at approximately 24 vehicle trips per day), as the stop is expected to operate as a destination point due to the presence of L.L. Bean and other popular nearby tourist and shopping destinations rather than an originating stop for commuters as the proposed schedule of trains would not be

favorable to commuters. The proposed vehicular traffic generated by the Freeport platform would be accommodated on the adjacent street system.

Vehicular traffic generated by the Brunswick platform would be minimal (estimated at approximately 40 vehicle trips per day) and would be accommodated using the adjacent street system and the proposed Station Avenue, which would be constructed as part of the project, and accessed using either Maine or Union Streets.

Parking

Approximately 3,000 parking spaces are currently provided for vehicular traffic in downtown Freeport, including several parking lots immediately adjacent to the proposed platform location. These parking spaces, while a mix of public and private ownership, are open to the public.

A MaineDOT Park and Ride Lot is situated about ¼ mile west of the proposed Brunswick platform along Cedar Street. The lot is also used for the Maine Eastern Railroad's seasonal passenger train service. The lot is lightly used except for a few seasonal events. The lot is currently gravel, and is proposed to be paved prior to Fall 2010. Once paved, the lot would accommodate approximately 170 parking spaces with the potential for an additional 60 spaces.

The No Build Alternative would not impact parking availability in downtown Freeport or Brunswick.

The Preferred Alternative would have a negligible impact on parking availability in downtown Freeport. The Preferred Alternative is expected to generate minimal parking demand of about 12 cars per day at the Freeport platform. The majority of the estimated 48 passengers per day taking the Downeaster to Freeport would not require parking upon arrival and would walk from the train to the Freeport commercial district, located within about ¼ mile of the platform. Of the estimated 12 riders per day originating from Freeport, it is assumed that the majority would drive to the platform area and park.

An additional 550 parking spaces would be provided by the nearby proposed Freeport Village Station commercial development, which is scheduled to be operational in April 2009. The new spaces would increase the parking available in downtown Freeport to more than 3,550 spaces, and further reduce the negligible impact from the proposed project.

The Preferred Alternative would have a negligible impact on parking availability in downtown Brunswick. The demand is estimated at 20 spaces per day for the estimated 20 riders originating from Brunswick. This parking demand could be easily accommodated by the MaineDOT Park and Ride lot.

It is assumed that the majority of the estimated 20 passengers per day destined for Brunswick would not require parking upon arrival and would walk from the train to the nearby commercial district about ¼ mile to the north/northeast or to Bowdoin College, situated within about ¼ mile southeast of the platform.

Brunswick Rail Siding

The rail siding would have a positive effect on existing and proposed freight rail traffic. The proposed rail siding may have a minor effect on traffic circulation and parking at the adjacent Hannaford's Supermarket and bank parking lot if a small strip take is needed from these properties for relocation of a chain link fence, which was built within the existing railroad right-of-way. It is envisioned that these impacts would be minor and not significant.

There would be minor temporary impacts to transportation during construction from the operation of equipment and the potential temporary short-term closure of Union Street to install a portion of the siding across the street. Proper implementation and maintenance of traffic control measures would be used to minimize the temporary impacts. These minor temporary impacts would cease upon completion of construction.

3.3.2 Land Use, Zoning, Property Acquisitions

The setting for the existing rail line consists of a mix of urban, suburban, and rural areas. The rail corridor passes through well established and heavily developed areas of Portland, rural and suburban residential areas of Falmouth, Cumberland, Yarmouth and Freeport, as well as the downtown district of Freeport. The rail corridor passes through rural residential and commercial areas of Brunswick, ending west of Maine Street and the town common in downtown Brunswick. Zoning designations vary along the corridor by community.

The No-build Alternative would not impact land use, be inconsistent with zoning, or acquire property.

The Preferred Alternative would not have a significant impact on land use, zoning consistency or property acquisition. The proposed Freeport platform would be located within a commercial zone, and immediately adjacent to the existing rail lines. The proposed project would not present a conflict with existing uses in the area and would not require property takings since the platform is planned within the right-of-way. The proposed Brunswick platform would be located on a site purchased by the town for the station. The site is zoned as a town center and a railroad station would be consistent with the surrounding commercial land uses. The proposed Brunswick siding would likely be located entirely within the existing rail line right of way. A minor strip of land might need to be acquired from the adjacent access drive for the Hannaford's Supermarket and from the parking area for the bank. The need for this minor strip take would be determined by the MaineDOT as they prepare the preliminary plan for the proposed rail siding.

3.3.3 Environmental Justice

Executive Order 12898 requires federal agencies to incorporate consideration of environmental justice into their planning processes. The executive order prohibits federal financial assistance for programs and activities that use criteria, methods or practices that discriminate on the basis of race, color or national origin. Its goal is to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations.

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Executive Order 12898 defines minorities as individuals of American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic racial heritage. Minority populations are defined as those where either (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

Within the project area municipalities, minority populations make up between 1.8 and 9.4 percent of the population. In comparison, minority populations make up 4.8 and 3.5 percent of the population in Cumberland County and the state of Maine. Between 3.0 and 14.1 percent of the population had an income below the poverty level among the project area municipalities. In Cumberland County and the state of Maine, approximately 7.9 and 10.9 of persons live below the poverty level (exhibit 4) (U.S. Census Bureau, 2009).

Exhibit 4 – Racial/Ethnic Distribution and Poverty Level

	<i>Percent Minority Persons</i>	<i>Percent of People Below Poverty Level</i>
Brunswick	6.5	8.0
Cumberland	1.8	3.0
Freeport	3.2	5.9
Portland	9.4	14.1
Falmouth	2.6	3.7
Yarmouth	2.0	4.4
Cumberland County	4.8	7.9
Maine	3.5	10.9

U.S. Census Bureau (2000)

The No-build Alternative would not have disproportionate adverse impacts on minority or low impact populations. However, the No-build Alternative would not encourage or provide increased public transportation improvements that may be of value to low-income residents who may not be able to afford reliable personal transportation to travel to employment opportunities.

The Preferred Alternative would not result in disproportionate adverse impacts to minority or low-income residents or populations. The Preferred Alternative would benefit residents by providing additional public transportation services between communities, employment and shopping centers, and recreational amenities within the region.

3.3.4 Public Health and Safety

The project area is an approximately 30-mile long existing freight rail line between Portland and Brunswick that crosses numerous two- to four-lane municipal roads. These crossings have various forms of control, from actively protected grade crossing predictor technology with gates and flashing light signals to passively protected lights- and bells-only crossing signals.

The No-build Alternative would not impact public health and safety. The safety of vehicular, bicycle and pedestrian traffic would not be enhanced as the grade-crossing signals would not be upgraded or replaced.

The Preferred Alternative would not have an appreciable negative impact on public health and safety by adding six additional train trips on an existing, active rail line. The Preferred Alternative would improve public health and safety by upgrading out of date grade-crossing signal equipment. By diverting some commuter traffic from I-295 and local roads between Portland and Brunswick, the Preferred Alternative would likely reduce congestion and improve safety on the roads and highway.

3.3.5 Contaminated Sites and Hazardous Waste

According to the EPA *National Priority List* (2009b) and the MaineDEP *Remediation Sites (Institutional Controls) Database* (2009a), the project area does not contain known contaminated or hazardous waste sites. A Phase I Site Investigation was not prepared.

The No-build and Preferred Alternatives would not impact known contaminated sites or hazardous waste.

3.3.6 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, requires that federal actions be reviewed for their impact to potentially significant historic resources; the term “historic” includes architectural and archeological resources. A significant historic resource is one that is either listed or determined eligible for listing on the National Register of Historic Places (NRHP).

Consultation with The Maine Historic Preservation Commission (MHPC) has been performed. Previous study of historic architectural resources for the portion of the rail corridor north of Yarmouth Junction revealed three known resources eligible for the National Register of Historic Places (NRHP); two stone arch culverts (one in Yarmouth and one in Freeport) and one bridge (South Main Street crossing in Freeport). A cultural resources survey was performed for the 12-mile segment of Pan Am Railways between the Portland Wye in Portland and Yarmouth Junction, which had not previously been surveyed. The survey identified three bridges (one in Yarmouth, one in Cumberland, and one in Falmouth) within the project’s Area of Potential Effects (APE) that are eligible for listing in the NRHP (VHB 2009). None of the culverts within this segment were determined to be eligible for listing in the NRHP. The survey also identified another bridge on the route, the Park Avenue Bridge in Portland, which had previously been studied and determined eligible for listing in the NRHP (VHB 2009).

The No-build Alternative would not impact known cultural resources.

The preferred alternative involves steel rail and wood tie replacements with new rails and ties in order to upgrade the line for passenger service. This work will not affect the integrity of any existing bridge structures, as the ties and rail will be attached to existing or replacement bridge timbers with the rails laid on top of the new ties. Based on this description of the proposed work, there will be no adverse effect to any of the inventoried bridges that are recommended eligible or are already determined eligible for the National Register.

Three stone arch culverts are being rehabilitated as part of the project, and one of these has been determined as eligible for the NRHP. Since the work to be conducted on the arches is limited to repair and rehabilitation, there will be no adverse effect.

The MHPC concurred that the Preferred Alternative would not impact prehistoric archaeological resources (MHPC 2008) and would have no adverse effect upon historic properties (MHPC 2009). The MHPC concurrences are attached to this EA at Section 8, Appendix A.

3.3.7 Section 4(f) Resources

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 grants special protection to historic sites that are listed on or eligible for the NRHP, or are a publicly owned park, recreational area, or wildlife refuge. Section 4(f) states that publicly owned parks, recreation lands, wildlife and waterfowl refuge areas, or historic sites of national, state, or local significance may not be used for USDOT-funded projects unless there is no feasible and prudent alternative to the use of such land, and such projects include all possible planning to minimize harm to these lands.

Section 4(f) resources are located within the project area. Two stone arch culverts and five bridge structures along the corridor have been determined eligible for the NRHP.

The Preferred Alternative will not affect the integrity of any existing bridge structures, as the work necessary for upgrades to passenger service are limited to rail and tie replacement, which will be attached to existing or replacement bridge timbers, with the rails laid on top of the new ties. Based on this description of the proposed work, there will be no adverse effect to any of the inventoried bridges that are recommended eligible or are already determined eligible for the National Register.

The Preferred Alternative will not affect the integrity of the two stone arch culverts determined eligible for the NRHP, as the work is only to be performed on one of the stone arch culverts, and the proposed work is limited to repair and rehabilitation. Based on this description of the proposed work, there will be no adverse effect to the stone arches.

The No-build Alternative would not affect Section 4(f) resources.

The Preferred Alternative would not have an adverse effect on Section 4(f) Resources.

3.4 Construction Impacts

Impacts from construction of an alternative are temporary and occur during and following construction. The time for the individual or specific construction impacts to dissipate varies with

the type of activity performed and resource impacted; most construction impacts cease immediately after the activity in an area is completed. Some specific construction impacts cannot be estimated at this time because they depend on several factors that are determined either during final design or by the contractor before or during construction: location for staging and stockpiling equipment and materials, the timing and sequencing of construction, specific construction methods and materials and equipment to use, and areas for the disposal of debris and excess earth material.

The No-build Alternative would not create temporary construction impacts.

Construction of the Preferred Alternative would not have permanent impacts on resources within the project area (MDIFW 2009 and MNAP 2009). The Preferred Alternative would create temporary construction impacts to traffic, air quality and noise during construction from the operation of equipment and the potential temporary short-term closure of Union Street in Brunswick to install a portion of the siding across the street. Proper implementation and maintenance of control measures (e.g., traffic control, dust/ erosion and sedimentation controls, properly fitted emission control devices and mufflers, etc.) would be used to minimize the temporary impacts. These minor temporary impacts would cease upon completion of construction.

Construction of the Preferred Alternative would temporarily impact floodplains, wetlands, streams, and surrounding streambanks. The arch rehabilitation at Todd's Brook, Cousins River, and Davis Brook and two of its unnamed waterways would impact regulated 100-year floodplains, while four wetlands would be temporarily impacted during the repair and replacement of the culverts and stone arches, and the excavation at Deep Cut. The wetlands that would be temporarily impacted are adjacent to the Presumpscot River, an unnamed waterway to the East Branch of the Piscataqua River, Todd's Brook, the Cousins River, and Mill Stream. The Deep Cut excavation would temporarily impact the headwaters of the unnamed waterway to Bunganuc Stream. Underdrains would convey water into the wetland east of Deep Cut, but as this is a minor redirection of water that is already present onsite, no adverse impact would be expected. The Preferred Alternative would also impact 17 waterways and their surrounding streambanks by potentially increasing soil erosion within the disturbed portions of the project area.

The temporary impacts would cease immediately after the activity is completed, and would be minimized by using best management practices and by following the standards for culvert replacement under the NRPA. Construction activities would follow federal, state, and local statutes, regulations and ordinances and the proper permits would be obtained and followed (Section 1.7 Applicable Regulations and Permits). Following construction, temporarily impacted floodplains, wetlands, streams, and surrounding streambanks would be restored to their natural condition.

3.5 Secondary and Cumulative Impacts

Secondary Impacts

Secondary impacts are defined as reasonably foreseeable future consequences to the environment that are caused by the proposed action, but that would occur either in the future (later in time) or in the vicinity of but not at the exact same location as direct impacts associated with implementation of a build alternative. Under the CEQ regulations, secondary impacts are defined as those that are "...caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects would include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems" (40 CFR 1508.8b).

Secondary impacts can be associated with the consequences of land-use development that would be indirectly supported by changes in local access or mobility. Secondary impacts differ from those directly associated with the construction and operation of a facility itself and are often caused by what is commonly referred to as "induced development." Induced development would include a variety of alterations such as changes in land use, economic vitality, property value, population density. The potential for secondary impacts to occur is determined in part by local land-use and development-planning objectives and the physical location of a proposed action.

The No-build Alternative would result in a slight secondary impact in that the lack of passenger rail service would reduce the economic competitiveness of the project area municipalities and would hinder economic development within Freeport and Brunswick.

The Preferred Alternative would result in secondary impacts by creating the potential for development of additional platforms, as well as further transit-oriented development near the proposed stops, similar to the Freeport Village Station and the Brunswick Maine Street Station currently under construction. This transit-oriented development would likely occur in already built-up areas. Local review boards would be responsible for investigating the impacts to water, sewer, and traffic from future transit oriented development.

Cumulative Impacts

The consideration of cumulative effects consists of an assessment of the total effect on a resource, ecosystem, or community from past, present, and future actions that have altered the quantity, quality, or context of those resources within a broad geographic scope. Under the CEQ regulations, cumulative effects are defined as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7). The cumulative effects analysis considers the aggregate effects of direct and indirect impacts—from federal, non-federal, public, or private actions—on the quality or quantity of a resource.

The intent of the cumulative-effects analysis is to determine the magnitude and significance of cumulative effects, both beneficial and adverse, and to determine the contribution of the proposed action to those aggregate effects. Contributions to cumulative effects associated with

ENVIRONMENTAL ASSESSMENT FOR THE DOWNEASTER PORTLAND NORTH EXPANSION PROJECT

the build alternative on the resources analyzed would be limited to those derived from the direct and secondary impacts of the action.

The planned Freeport Village Station commercial development and the Brunswick Maine Street Station (both under construction) were identified as reasonably foreseeable future actions that could contribute to cumulative impacts. These projects would create additional travel demand, and generally increase the density of commercial and retail enterprises in the project area.

The No-Build Alternative would have a slight negative contribution to cumulative impacts. The No-build Alternative would not provide any benefits to regional air quality because it would continue the State's dependence on personal automobiles on highways for travel between Portland and Brunswick.

The Preferred Alternative would have slight beneficial contributions to cumulative impacts. The proposed extension of passenger rail service is expected to provide an overall benefit to air quality. The rail service is expected to provide service to motorists who would otherwise travel between Portland and Brunswick by motor vehicle. This shift in travel mode is expected to reduce overall vehicle emissions. The addition of passenger rail service would also encourage the transit-oriented development already occurring adjacent to the proposed stops.

4.0 Coordination and Consultation

Coordination and consultation with agencies, stakeholder groups and the public was initiated early in the study to incorporate agency and public comments and concerns into the development and analysis of the project purpose and need, alternatives and potential resultant environmental impacts. Representatives from the MaineDOT, Pan Am Railways, Amtrak, and the FRA coordinated closely on the project.

Coordination included stakeholder meetings, briefings, and conference presentations (exhibit 5). Small briefings were also held with the following stakeholder groups to discuss the development of alternatives:

- TrainRiders Northeast
- Maine Tourism Association
- Maine Bicycle Coalition,
- Portland Area Comprehensive Transportation System
- Greater Portland Council of Governments
- St. Lawrence & Atlantic Railroad
- Maine Eastern Railroad
- Lewiston, Auburn, Freeport, Brunswick, Yarmouth, Falmouth and Portland station community representatives

Exhibit 5 – Portland North Expansion Calendar of Presentations

<i>Date</i>	<i>Presentation Made To:</i>	<i>Type of Event</i>
April 2007	Maine Turnpike Authority Board of Directors	Public Meeting
April 2007	Economic Impacts of Passenger Rail	Conference
June 2007	Maine Chapter Assoc of Travel Agents	Monthly Meeting
June 2007	Cape Elizabeth Rotary	Monthly Meeting
June 2007	Regional Corridors Initiative	Conference (MA)
October 2007	GrowSmart Maine Summit Conference	Conference
December 2007	Maine Transportation Conference	Conference
December 2007	Auburn Council Members	Briefing
December 2007	Rail Caucus – State Legislature	Public Meeting
January 2008	Rail Caucus – State Legislature	Public Meeting
January 2008	Association of Government Accountants	Monthly Meeting
January 2008	Rail Caucus – State Legislature	Public Meeting

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January 2008	Rail Caucus – State Legislature	Public Meeting
February 2008	Portland Regional Chamber – VP Gov’t. Affairs	Briefing
February 2008	Maine & Company President	Briefing
February 2008	Rail Caucus – State Legislature	Public Meeting
March 2008	Portland City Council – Mayor	Briefing
March 2008	Rail Caucus – State Legislature	Public Meeting
March 2008	GrowSmart Maine President & Staff	Briefing
March 2008	Project Management Institute	Monthly Meeting
March 2008	Sierra Club Meeting re Passenger Rail	Public Meeting
March 2008	Rail Caucus – State Legislature	Public Meeting
March 2008	Maine Transportation Committee re LD2019	Public Meeting
April 2008	Earth Day Downtown Portland Event	Public Speech
April 2008	Brunswick Economic Development Staff	Briefing
April 2008	Maine/NH MPO meeting about Public Transportation	Public Meeting
May 2008	TrainRiders NE	Annual Meeting
May 2008	Brunswick Planning Board	Public Meeting
May 2008	Freeport Economic Development Corporation	Briefing
May 2008	Mid Coast Chamber of Commerce	Monthly Meeting
June 2008	Portland Council Transportation Committee	Public Meeting
July 2008	Bowdoin College President	Briefing

5.0 List of Preparers

Federal Railroad Administration

David Valenstein, R.A., M.P.A., Environmental Program Manager, Office of Railroad Development

Alexander Roth, RRIF Financial Analyst, Office of Railroad Development

Wendy Messenger, Environmental Protection Specialist, Office of Railroad Development

Linda Martin, Attorney, Office of Chief Counsel

Northern New England Passenger Rail Authority

Patricia Quinn, Executive Director

Marina Douglass, Manager, Budget and Administration

Gannett Fleming, Inc.

William M. Plumpton, CEP, Project Manager and Senior Environmental Scientist

Scott W. Duncanson, AICP, Senior Environmental Planner

Christopher S. Schultz, Environmental Scientist

Ahmed A. El-Aassar, Ph.D., INCE, Noise and Air Quality Manager

Katherine E. Sharpe, Environmental Planner

Aaron K. Holt, Graphic Designer

Moffat & Nichol

Jason L. Field, P.E., Corridor Safety Engineer, Noise Mitigation

**ENVIRONMENTAL ASSESSMENT FOR THE
DOWNEASTER PORTLAND NORTH EXPANSION PROJECT**

6.0 Distribution List

This EA was distributed to federal, state, and local agencies with jurisdiction by law or special expertise, and agencies, tribes, and local entities, which may be interested in the study.

U.S. Federal Government

U.S. Department of Interior
Attn: Willie R. Taylor
Office of Policy & Compliance
MS2340 M1B
1849 C Street, NW
Washington, DC 20240

U.S. Environmental Protection Agency
Office of Federal Activities
EIS Filing Section
Ariel Rios Building (South Oval Lobby)
1200 Pennsylvania Avenue, NW
Washington, DC 20004

Federal Emergency Regulation Commission
Environmental Evaluation Branch
825 North Capital Street Room 7102
Washington, DC 20426

Federal Highway Administration
Attn: Marlys Osterhues, HEPE
1200 New Jersey Ave., SE.
Room E72-214
Washington, DC 20590

Federal Emergency Management Agency
Region 1 Office
Attn: J.W. McCormack
POCH/Room 442
Boston, MA 02109

USEPA New England Region 1
Attn: Tim Timmerman
1 Congress Street
Boston, MA 02114-2023

Federal Aviation Administration
Director, New England Region
12 New England Executive Park
Burlington, MA 01803

Federal Railroad Administration
Region 1 Office
55 Broadway, Room 1077
Cambridge, MA 02142

Federal Transit Administration
Region 1 Office
Transportation Systems Center
Kendall Square
55 Broadway, Suite 920
Cambridge, MA 02142-1093

U.S. Army Corps of Engineers
Environmental Analysis Branch
New England Division
696 Virginia Road
Concord, MA 01742-2751

Jeff Murphy
NOAA Fisheries
Maine Field Station
17 Godfrey Drive
Suite 1
Orono, ME 04473

National Marine Fisheries Service
Northeast Regional Office
Attn: Mary Colligan
One Blackburn Drive
Gloucester, MA 01930

U.S. Geological Survey
Attn: Robert Dudley
Maine District
196 Whitten Road
Augusta, ME 04330

**ENVIRONMENTAL ASSESSMENT FOR THE
DOWNEASTER PORTLAND NORTH EXPANSION PROJECT**

U.S. Army Corps of Engineers
Maine Project Office
Attn: Jay Clement
675 Western Avenue
28 State House Station
Manchester, ME 04351

U.S. Department of Housing and Urban
Development
Margaret Chase Smith Federal Building
202 Harlow Street, Suite 101
Bangor, ME 04401-4919

U.S. Fish and Wildlife Service
Maine Field Office –Ecological Services
Attn: Wende Mahaney
1168 Main Street
Old Town, ME 04468

US Department of Agriculture.
Natural Resources Conservation Service
Cumberland County Office
Attn: Wayne P. Munroe
306 U.S. Route 1, Suite A1
Scarborough, ME 04074-9774

U.S. Coast Guard, 1st Coast Guard District
Attn: Gary Kassof
1 South Street, Battery Park Building
New York, NY 10004-5073

Maine State Government

Maine Historic Preservation Commission
Attn: Earle Shettleworth
65 State House Station
Augusta, ME 04333-0065

Maine Department of Conservation
Attn: Peter McGowen, Commissioner
East Side Campus, 18 Elkins Lane
Augusta, ME 04330

Maine Bureau of Parks and Lands
Attn: Will Harris, Director
22 State House Station
Augusta, ME 04333-0022

Maine Forest Service
Attn: R. Alec Giffen, Director
22 State House Station
Augusta, ME 04333-0022

Maine Geological Survey
Attn: Robert Marvinney, Director
22 State House Station
Augusta, ME 04333-0022

Maine Department of Agriculture
Attn: Seth Bradstreet III, Commissioner
28 State House Station/Deering Building. -
AMHI Campus
Augusta, ME 04333-0028

Maine State Planning Office
Attn: Martha Freeman, Director
38 State House Station
Augusta, ME 04333-0038

Maine Department of Inland Fisheries and
Wildlife
Attn: Steve Timpano
41 State House Station
Augusta, ME 04333-0041

Maine Department of Economic and
Community Development
Attn: John Richardson, Director
59 State House Station
Augusta, ME 04333-0059

Maine Natural Areas Program
Attn: Molly Docherty, Director
93 State House Station
Augusta, ME 04333-0093

Maine Atlantic Salmon Commission
Attn: Norman R. Dube, Fisheries Scientist
Bureau of Sea Run Fisheries and Habitat
Maine Department of Marine Resources
650 State Street
Bangor, ME 04401

**ENVIRONMENTAL ASSESSMENT FOR THE
DOWNEASTER PORTLAND NORTH EXPANSION PROJECT**

Maine Department of Environmental
Protection
Bureau of Land and Water Quality
Attn: Andy Fiske
17 State House Station
Presque Isle, ME 04333-0017

Maine Department of Inland Fisheries and
Wildlife
Attn: James Connolly, Region Wildlife
Biologist
Sidney Regional Headquarters
270 Lyons Road
Sidney, ME 04330-9711

Local Government

Portland City Council
389 Congress St
Portland Maine 04101

Yarmouth Town Council
Town Hall
200 Main Street
Yarmouth, ME 04096
Cumberland Town Council
Town Hall
290 Tuttle Road
Cumberland, ME 04021

Freeport Town Council
Town Hall
30 Main Street
Freeport, ME 04032

Brunswick Town Council
Town Council
28 Federal Street
Brunswick, Maine 04011

Falmouth Town Council
271 Falmouth Road
Falmouth, ME 04105

Libraries

Maine State Library
Attn: Sarah Stanton
230 State Street
Augusta, ME 04330

Falmouth Memorial Library
5 Lunt Road
Falmouth Maine 04105

Curtis Memorial Library
23 Pleasant Street
Brunswick, Maine 04011

Freeport Community Library
10 Library Drive
Freeport, ME 04032

Prince Memorial Library
266 Main Street
Cumberland, ME 04021-9754

Merrill Memorial Library
215 Main Street
Yarmouth, Maine 04096

Portland Public Library
5 Monument Square
Portland Maine 04101

Other Local Entities

Hannaford Supermarket
35 Elm Street
Brunswick, Maine 04011

Androscoggin Bank
208½ Maine Street
Brunswick, ME 04011

JHR Development of Maine
8 Noble Street
Brunswick, ME 04011

7.0 References

- Council on Environmental Quality. "A Citizen's Guide to the NEPA: Having Your Voice Heard." December 2007. Online. http://ceq.hss.doe.gov/nepa/Citizens_Guide_Dec07.pdf Accessed January 2009.
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VHB/Vanasse Hangen Brustlin, Inc. "Section 106 Cultural Resources Field Survey: Portland North Passenger Rail Extension, Portland Wye to Yarmouth Junction, Maine." February 2009.

8.0 Appendix – State Historic Preservation Office (SHPO) Correspondence



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

JOHN ELIAS BALDACCI
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

March 4, 2009

Rita Walsh
VHB
PO Box 9151
Watertown, MA 02471-9151

Project: MHPC #1688-08 - Proposed Downeaster Portland North Expansion Project;
Cultural Resources Survey; Portland North Passenger Rail Extension; Portland
Wye to Yarmouth Junction
Town: Portland to Brunswick, ME

Dear Ms. Walsh:

In response to your recent request, I have reviewed the information received March 3, 2009 to continue consultation on the above referenced project pursuant to Section 106 of the National Historic Preservation Act, as amended.

The Commission concurs with VHB's conclusion that the following bridges are eligible for listing in the National Register of Historic Places:

- Royal River Bridge (Pan Am Railways #14.72)
- Cumberland Bridge (Pan Am Railways #11.19)
- Piscataqua River Bridge (Pan Am Railways Bridge #7.68)

The above findings are new determinations of eligibility. In addition, and as noted in the survey report, the Park Avenue Bridge (Pan Am Railways Bridge #1.83, MEDOT #0326) was previously determined eligible for listing in the Register. Furthermore, as Kirk Mohny of my staff stated in your telephone conversation this morning, the Fore River Bridge (Pan Am Railways #s 1.83, 1.80, and 1.12) which carries Route 1 over the Fore River between Portland and South Portland, has also been previously determined eligible. A copy of the MDOT bridge survey form is enclosed for your information. As discussed, please revise the survey report to incorporate this information. In addition, please clarify the description of the Presumpscot River Bridge as discussed with Mr. Mohny, and add the acreage surveyed to the report.



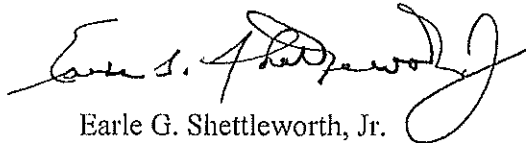
PRINTED ON RECYCLED PAPER

The Commission also concurs with VHB's findings of ineligibility for the other surveyed bridges, as well as the box culverts, of which only a representative sample were field inspected due to the snow cover and location of many of them at the bottom of steep and deep berms. The presence of stone arch culverts along this railroad line has not been ascertained due to the snow conditions. However, in view of the scope of the proposed undertaking, and given the inaccessibility of most of the culverts, the Commission accepts the survey methodology and partial culvert inventory.

Based on the materials submitted and the description of the proposed undertaking on pages 1-2 of the Section 106 Cultural Resources Field Survey, I have concluded that the proposed undertaking will have no adverse effect upon historic properties. With the completion of the survey and this finding of effect, the four conditions stipulated in my letter dated September 17, 2008 to Patricia Quinn have been satisfied.

Please contact Robin Stancampiano of my staff if we can be of further assistance in this matter.

Sincerely,

A handwritten signature in dark ink, appearing to read "Earle G. Shettleworth, Jr.", written in a cursive style.

Earle G. Shettleworth, Jr.
State Historic Preservation Officer

Enc.

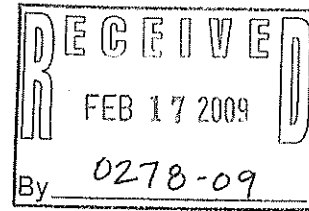
Cc: ✓ Patricia Quinn, Northern New England Passenger Rail Authority
David Cole, Commissioner, MDOT

75 West Commercial Street, Suite 104
Portland, Maine 04101-4631
207-780-1000 Tel
207-780-1001 Fax
www.AmtrakDowneaster.com

Martin I. Eisenstein
Chairman



**NORTHERN NEW ENGLAND
PASSENGER RAIL AUTHORITY**



February 13, 2009

Mr. Earle G. Shettleworth, Jr., State Historic Preservation Officer
Maine Historic Preservation Commission
55 Capitol Street
State House Station 65
Augusta, ME 04333-0065

Re: Section 106 and 36 CFR Part 800 – Requirements for Compliance
Proposed Portland Area Infrastructure Improvement Project
Portland, Cumberland County

Dear Mr. Shettleworth:

The Northern New England Passenger Rail Authority (NNEPRA) is planning to upgrade rail infrastructure in Portland to improve the reliability, reduce the travel time, and reduce maintenance costs associated with the Amtrak Downeaster.

In response to a Notice of Funding Availability (NOFA) for the Capital Assistance to States – Intercity Passenger Rail Service Program in the Federal Register, the Northern New England Passenger Rail Authority (NNEPRA), in cooperation with the Maine Department of Transportation (MaineDOT) submitted an application for the rehabilitation and improvement of rail infrastructure in the Portland area owned by the Pan Am Railways (PAR), over which the Boston-Portland *Downeaster Service* operates ("the Project"). The FRA selected the NNEPRA for an award of \$500,000 for this Project, to which an additional \$850,000 in state and private funds will be contributed.

Proposed Project:

The project includes the rehabilitation and improvement of rail infrastructure in the Portland, Maine area, including the replacement of crossties and rail, the surfacing of track, replacement of bridge ties, replacement of ballast, and renewal of turnouts. This work is intended to eliminate slow orders, resulting in improved ride quality and an increase in the speed of passenger rail operation on the Mountain Branch.

The Project will also allow the Portland wye to once again be used to turn passenger cars and locomotives. This will allow for the ability to switch

locomotives among trainsets in the event of mechanical difficulties, thus minimizing operational disruptions and eliminating the need to assign a protect locomotive to Portland.

Description of Work:

- Rehabilitation of the "Yard 8 Wye" Installation of all new switch ties and turnout steel on four turnouts, installation of 400 new wood crossties on the wye tracks, rehabilitation of the tail track leading to Yard 8, and the installation of 900 tons of ballast on the wye and tail tracks..
- Rehabilitation of Number 2 Track from CPF 196 to CPF 199 Including the Fore River Bridge Installation of 1,300 new wood crossties, at a ratio of 1,000 ties per mile, the replacement of all 1,030 bridge ties on the Fore River Bridge (PAR Bridge Number 0.98) with new wood bridge ties, and two surfacing passes over the rehabilitated track.
- Rehabilitation of the Mountain Branch from CPF196 to Portland Station Replacement of both rails with new 115-pound continuous welded rail from CPF 196 to Eng. Sta. 25+0, installation of 500 new wood crossties and two surfacing passes over the rehabilitated track.

The period of performance for the above work will extend to December 31, 2009.

Due to the prior disturbance and current use for railroad purposes, it is suggested that there would be no effect on historic or archaeological resources and that no investigations are necessary.

In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and 36 CFR Part 800, the MHPC's review of this project is required. These requirements include consideration of the project's potential effect upon both historic and archaeological resources.

We would welcome the opportunity to meet in your offices to discuss this project at your first available time. We appreciate your consideration of this very important public works project for the State of Maine. Please contact me if you have questions.

Sincerely,


Patricia Quinn
Executive Director

Attachments

cc: Commissioner David Cole

MHPC # 0278-09

Based on the information submitted, I have concluded that there will be no historic properties affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act. Consequently, pursuant to 36 CFR 800.4(d)(1), no further Section 106 consultation is required unless additional resources are discovered during project implementation pursuant to 36 CFR 800.13.


Kirk F. Mohnhey,
Deputy State Historic Preservation Officer
Maine Historic Preservation Commission

3/4/09
Date



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

JOHN ELIAS BALDACCI
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

September 17, 2008

Ms. Patricia Quinn
Executive Director
Northern New England Passenger Rail Authority
75 West Commercial Street, Suite 204
Portland, ME 04101-4631

Project: MHPC #1688-08 - Proposed Downeaster Portland North Expansion Project
Town: Portland to Brunswick, ME

Dear Ms. Quinn:

In response to your recent request, I have reviewed the information received August 28, 2008 to initiate consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Concerning the general scope of work for this project, I can make a no adverse effect determination from our office for this undertaking, pursuant to Section 106 regulations, provided the following four conditions are met:

- 1) Regarding prehistoric archaeological resources, we request that USGS topo maps be submitted for our review that identify the exact locations of the 14 culverts to be rehabilitated as well as the location of the Cousins River stone arch culvert. Some of these smaller river/stream crossings are archaeologically sensitive. Depending on our review of these locations, archaeological survey may be required prior to any ground disturbance. For your information, I have enclosed a list of qualified prehistoric archaeologists along with material explaining the Phase I/II/III approach to archaeological survey. This information can also be found on our website: www.maine.gov/mhpc/project_review This office must approve any proposal for archaeological fieldwork.
- 2) Regarding architectural resources, a cultural resources field survey was conducted by the Maine Department of Transportation (DOT) for a portion of the current project area. The January 2003 report "Portland North Passenger Rail Service Extension, Saint Lawrence & Atlantic Railroad, and Guilford Rail System," prepared by VHB, mentions two stone arch culverts [structures 1 in Yarmouth (milepost 537+46) and 5 in Freeport (milepost 772+56)] that were determined to be eligible for listing in the National Register of Historic Places. Structure 4 mentioned in the report [South Main Street crossing (milepost



September 17, 2008
MHPC #1688-08

720+00) in Freeport] was also determined to be eligible for listing during the Maine DOT's bridge survey. It is unknown at this time if additional survey was conducted by the Maine DOT for the portion of the current proposed line from Portland to Yarmouth Junction.

If this additional survey has not been conducted, we require that a Section 106-specific architectural survey be completed in accordance with our survey guidelines and associated forms, which are both downloadable from our website:

www.maine.gov/mhpc/project_review (see tabs in the white box on the left side of the webpage under Project Review) Please also find attached our revised photographic policy to be referenced in lieu of the policy in our on-line survey manual. Any computer generated template other than that provided by MHPC must be approved by MHPC prior to submission. No changes to the survey forms are to be made without consulting MHPC.

We recommend that a historic preservation consultant be consulted who meets the National Park Service's professional qualifications 36 CFR 61. Please find attached a list of historic preservation consultants who meet these qualifications.

- 3) If the culvert rehabilitation repair work will affect structures which were previously determined eligible or newly determined eligible for listing in the National Register of Historic Places, we will need to consult further to assess effects and pursue mitigation if necessary, pursuant to the Section 106 regulations.
- 4) Based on the USGS map #9 enclosed with your letter, it is our understanding that the signal upgrades and proposed platform to be constructed adjacent to the south side of the tracks between Union and Maine Streets in Brunswick will terminate before reaching Maine Street. If this scope of work changes, please advise our office as the National Register listed Federal Street Historic District is in the project's vicinity.

In order to conclude the Section 106 consultation process, we will forward a response regarding the results of our evaluation once we receive the information requested above. Please contact Robin Stancampiano of my staff if we can be of further assistance in this matter.

Sincerely,



Earle G. Shettleworth, Jr.
State Historic Preservation Officer

cc. David A. Cole, MDOT

Marina Douglass

From: Steele, Matt [Matt.Steele@maine.gov]
Sent: Wednesday, September 24, 2008 2:08 PM
To: Marina Douglass
Subject: FW: MHPC #1688-08, Proposed Downeaster Portland North Expansion Project

Marina-

As I promised. Sorry for the delay in sending this I was out of the office yesterday. This email chain and the response letter from SHPO, should be the documentation you need for the EA. Let me know if I can be of further assistance.

Matt Steele

Coordination & Permits Manager

Environmental Office

Maine Department of Transportation

16 State House Station

Augusta, ME 04333-0016

Cell-207-557-1051

Fax-207-624-3101

TTY-888-516-9364

matt.steele@maine.gov

From: Stancampiano, Robin
Sent: Monday, September 22, 2008 12:34 PM
To: Jergensen, Kurt E
Cc: Steele, Matt; Mohny, Kirk; Shettleworth, Earle
Subject: RE: MHPC #1688-08, Proposed Downeaster Portland North Expansion Project

Kurt-

We concur that this amendment is acceptable.

Please let us know if you need anything further.

Robin Stancampiano

Architectural Historian

--Review & Compliance/CLG Coordinator

Maine Historic Preservation Commission

9/25/2008

55 Capitol Street

65 State House Station

Augusta, ME 04333

phone: 207-287-2132 ext. 1

fax: 207-287-2335

<http://www.maine.gov/mhpc>

From: Jergensen, Kurt E

Sent: Monday, September 22, 2008 12:26 PM

To: Stancampiano, Robin

Cc: Steele, Matt

Subject: MHPC #1688-08, Proposed Downeaster Portland North Expansion Project

Robin,

The Coordination and Permits Division recently received a request from the Northern New England Passenger Rail Authority for clarification on the memo sent to them on September 17, 2008. I believe that they will be able to move forward with the completion of their EA if the statement, "Concerning the general scope of work for this project, I can make a no adverse effect determination from our office for this undertaking, pursuant to Section 106 regulations, provided the following four conditions are met", can be clarified in the following manner:

... I can make a no adverse effect determination from our office for the upcoming Environmental Assessment document for this undertaking, provided the following four conditions are met prior to commencement of any construction activities: etc.

Please respond with your concurrence if you find this amendment acceptable. Thank you very much for your assistance.

Kurt Jergensen

Historic Planner

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9/25/2008