

3 Environmental Permitting

As documented in the previous section, the study area parallels and traverses several environmentally sensitive areas. Accordingly, the project will require environmental permit applications to be filed in accordance with local, state and federal statutes and regulations depending upon the funding source.

Environmental permits are anticipated under the following:

- National Environmental Policy Act (NEPA)
- Massachusetts Environmental Policy Act (MEPA)
- Massachusetts Wetlands Protection Act (MGL. c. 131 s 40), its implementing *Regulations* (310 CMR 10.00), and Orleans Wetlands By-laws
- Massachusetts Endangered Species Act (MGL. c. 131A, MESA) and its implementing *Regulations* (321 CMR 10.00)
- NPDES General Permit for Discharges from Construction Activities

The proposed project will require permits and/or review with regulators to determine if a permit is required for all of these statutes and regulations.

3.1 National Environmental Policy Act (NEPA)

If this project advances using Federal funds, compliance with NEPA will be required. However, since trail construction infrequently results in significant impacts, these projects are classified as Categorical Exclusions (CEs). CEs are actions which meet the definition contained in 23 CFR 771.1177(a), that is, they are actions which individually or cumulatively do not involve significant social, economic or environmental impacts, and are therefore, categorically excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS). The CE and supporting information will be submitted to the Federal Highway Administration (FHWA) Division Office for approval during the design phase.

3.2 Massachusetts Environmental Policy Act (MEPA)

The MEPA office is part of the Executive Office of Energy and Environmental Affairs (EOEEA). The purpose of MEPA is to provide an opportunity early in project design for state regulatory agencies and the public to comment on a proposed project prior to the filing of permits.

An Environmental Notification Form (ENF) or Environmental Impact Report (EIR) is required to be submitted to MEPA if:

- The project is subject to MEPA review (e.g. the project is undertaken by an Agency of the Commonwealth);
- Involves State Agency Financial Assistance or requires an Agency Action/Permit; and
- Environmental impacts or review thresholds as referenced in the MEPA regulations are exceeded.

Although there are many review thresholds for all types of projects, the two most common thresholds to trigger an ENF for trail construction are as follows:

- Creation of 5 or more acres of impervious area. This translates to 4.2 miles for a 10-foot wide paved trail or 5.2 miles for an 8-foot paved trail.
- Alteration of 5,000 or more square feet of bordering or isolated wetlands.

In addition, as described in 301 CMR 11.03 (11)(b), one of the MEPA review thresholds that automatically triggers the need for an ENF is “Any project within a designated ACEC, unless the project consists solely of one single family dwelling.” Some of the alternatives under consideration traverse the Pleasant Bay Area of Critical Environmental Concern (ACEC).

Trail construction is not expected to create 5 or more acres of impervious area or impact greater than 5,000 square feet of vegetated wetlands. Accordingly, the need to file an ENF will primarily depend upon:

- The presence/absence of financial assistance from an agency of the Commonwealth
- Potential width and length of the proposed trail, and
- Whether the trail traverses the Pleasant Bay ACEC

Although a determination cannot be made until a preliminary design has been established, we do not anticipate the filing of a Draft and Final Environmental Impact Report (DEIR/FEIR) under the Massachusetts Environmental Policy Act (MEPA).

3.3 Massachusetts Wetlands Protection Act & Orleans Wetlands By-law

Based on a preliminary review of the project area site and available GIS datalayers, many of the alternative alignments under consideration are located within the 100 foot Buffer Zone to vegetative wetlands, ponds, vernal pools, and ACEC areas. This work will require the filing of a Notice of Intent (NOI) Application with the Orleans Conservation Commission.

It is not anticipated that wetlands will be impacted as part of this project. However, should conditions change, and wetlands impact be unavoidable, then an alternatives analysis must be conducted to avoid, minimize, and mitigate (310 CMR 10.55) and it is likely that the Conservation Commission and/or Massachusetts Department of Environmental Protection (MA DEP) will require completion of a wildlife habitat evaluation in accordance with the Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands (March 2006). If the amount of wetlands alteration exceeds 5,000 square feet, the proposed project would be required to meet the criteria to be deemed a limited project under 310 CMR 10-53 (3).

Based on a preliminary review of the project area and USGS map, work may also occur within the 200 foot Riverfront Area depending upon the selected alternatives. When work is proposed in Riverfront Area, the Applicant must demonstrate that other wetland resource areas are protected, rare species are protected, that there are no practicable and substantially equivalent economic alternatives, and that the project will not result in significant adverse impacts to the Riverfront Area. Habitat for eleven state-listed rare species is associated with the project area; therefore, protection of rare species will be an important component of work within Riverfront Area. The alternatives analysis must consider cost, existing technology, proposed use, and logistics. While it may be clear that

there are no practicable and substantially equivalent economic alternatives, the project will need to demonstrate that it will not result in significant adverse impacts to the Riverfront Area. This includes limiting the amount of Riverfront Area alteration and protection of wildlife habitat. The standards for compliance with the Riverfront Area regulations can be complicated and quite specific. Compliance with these standards should be taken into consideration early in the design process.

As documented in the Orleans Wetland By-law and Wetlands Protection Act Regulations (310 CMR 10.24(5)), the standard of performance that must be met by proposed development activities in and adjacent to an ACEC is “no adverse effect.” It is the responsibility of the applicant to show that the proposed activity will have no adverse effect, either immediate or cumulative, on the ACEC resources.

In addition, the NOI application will also need to include a Stormwater Report to demonstrate the project’s consistency with stormwater management standards. MA DEP issued a Stormwater Management Policy that established stormwater management standards in November 1996. In 1997, MA DEP published the Massachusetts Stormwater Handbook as guidance on the Stormwater Policy. Revisions to the 1997 Handbook and associated stormwater management standards, however, were promulgated by MA DEP and became effective on January 2, 2008.

According to 310 CMR 10.05(6)(m), the proposed project will need to comply with the Stormwater Management Standards to the maximum extent practicable as it involves the construction of “footpaths, bikepaths and other paths for pedestrian and/or nonmotorized vehicle.” With respect to stormwater runoff, the trail will be limited to non-motorized uses (other than occasional maintenance or emergency vehicle). As such, stormwater runoff will not be a source of pollutant loading (e.g. heavy metals, oils). Regardless, no direct discharges from trail construction should be channeled (tributary) to wetlands or waterways. Instead, non-point discharges in the form of stormwater runoff should be directed to the grassy shoulders or swales along the trail edge. Given the Cape’s sandy soil, it is expected that much of this water will infiltrate into the ground naturally. Where sidewalks are proposed, stormwater runoff will be directed to the roadway gutter. An erosion and sediment control plan will also need to be implemented during construction to effectively prevent sediment and silt runoff to adjacent environmental resource areas.

3.4 Massachusetts Endangered Species Act (MESA)

At a minimum, project review with the Massachusetts Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (DFW-NHESP) would be required in order for the NHESP to make a determination if the project will result in a “take” of any of the state-listed species associated with the project site. A “take”, in reference to an animal, means to harass, harm, pursue, hunt, shoot, hound, kill, trap, capture, collect, process, or to disrupt nesting, breeding, feeding or migratory activity or attempt to engage in any such conduct, or to assist such conduct. In reference to plants, a “take” means to collect, pick, kill, transplant, cut or process or attempt to engage or to assist in any such conduct.

Based on the mapping of listed-species for this site, the NHESP would likely select one of two avenues for authorization of the project under the Massachusetts Endangered Species Act. The NHESP could issue a Conditional No-Take Letter that would include certain conditions that would have to be complied with in order for the No-Take Letter to be considered valid. If the NHESP were to determine that the project will result in a “take” then

a Conservation and Management Permit would be required in order to ensure that impacts to the local population of the species were avoided, minimized, and mitigated and that the project would result in a net benefit to the species in Massachusetts.

As listed in the letter received from DFW-NHESP dated December 17, 2008 and as listed in Table 1, the project area includes habitat for at least eleven state-listed species - 2 reptiles, 1 moth, 2 damselflies, 1 dragonfly, and 5 plants - each with individual and specific habitat requirements. A copy of the DFW-NHESP letter is included within Appendix C. Further dialogue and coordination with NHESP should continue, early on in the design process. This will ensure the project is designed in a manner that protects habitat and the seven species listed above. This also will enable NHESP to comment while the design is still in the development stage and provide recommendations and feedback so the project may result in a long-term net benefit to these species.

3.5 NPDES General Permit for Discharges from Construction Activities

Pursuant to the Federal Clean Water Act, effective March 10, 2003, construction activities which disturb one acre or more are required to apply to the U.S. Environmental Protection Agency (EPA) for coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges From Construction Activities. On July 1, 2003 (68 FR 39087), EPA published the final NPDES construction general permit for construction activity. On August 4, 2003 (68 FR 45817), EPA reissued the General Permit for the Commonwealth of Massachusetts and included state specific requirements.

The NPDES General Permit requires the submission of a Notice of Intent (NOI) to the U.S. EPA prior to the start of construction (defined as any activity which disturbs land, including clearing and grubbing). In addition, if the project discharges to an Outstanding Resource Water (ORW), vernal pool, or is within a coastal ACEC as identified by the Massachusetts Department of Environmental Protection (MA DEP), a separate filing to MA DEP is required. Separate NOI's must be submitted by the owner, (Town or MassHighway), and the operator, the Contractor. In cases where the Town or other party has control over the plans and specifications or day-to-day site operations, said party must also submit a NOI.

The General Permit also requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the afore-mentioned statutes and regulations. The SWPPP details construction activities, erosion control measures, and inspection schedules to be implemented during construction to ensure that the construction activities do not have an adverse impact on wetlands and waterways.