Applicant: General Public in the Commonwealth of Massachusetts

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DEPARTMENT OF THE ARMY
GENERAL PERMIT
COMMONWEALTH OF MASSACHUSETTS

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues this General Permit (GP) for activities in waters of the United States (U.S.) that have minimal individual and cumulative adverse effects on the aquatic environment in waters of the U.S. within the boundaries of and off the coast of the Commonwealth of Massachusetts.

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I. GENERAL CRITERIA:

In order for activities to qualify for this GP, they must meet the GP's terms and eligibility criteria (Page 3), general conditions (GCs) (Pages 6 - 17), and Appendix A - Definition of Categories.

Under this GP, projects may qualify for the following:

- Category 1: Category 1 Notification Form required.
  Submittal of the Category 1 Notification Form at Appendix C to the Corps is required.
- Category 2: Application required.
  Submittal of an application to the Corps is required and written approval from the Corps must be received.

If you determine that your project is eligible for Category 1 no application to the Corps is required. However, you must submit the Category 1 Notification Form (Appendix C) to the Corps.

If your project is ineligible for Category 1, it may qualify for Category 2 or an Individual Permit and you must submit an application (see Page 4). The thresholds for Categories 1 and 2 are defined in Appendix A. This GP does not affect the Corps Individual Permit review process or activities exempt from Corps regulation.

Project proponents should first review Appendix A to determine if a project is eligible for either Category 1 or 2. If you determine that your project is eligible for Category 1, you must then ensure that

your project is in full compliance with this GP's Category 1 terms and GCs (Pages 6 - 17). If it qualifies for Category 1, you are required to submit the Category 1 Notification Form at Appendix C to the Corps.

If any of these Category 1 terms or GCs are not met, your project may be eligible for Category 2 or an Individual Permit and you must submit an application to the Corps (see Page 4). This GP does not affect the Corps Individual Permit review process or activities exempt from Corps regulation.

II. ACTIVITIES COVERED:

- Work and structures that are located in, under or over any navigable water of the U.S.[1]; that affect the course, location, condition, or capacity of such waters; or the excavating from or depositing of material in such waters. The Corps regulates this under Section 10 of the Rivers and Harbors Act of 1899.
- The discharge of dredged or fill material into waters of the U.S[2]. The Corps regulates this under Section 404 of the Clean Water Act (CWA).[3]
- The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates this under Section 103 of the Marine Protection, Research and Sanctuaries Act.

III. APPROVAL PROCESS

1. State and Local Approvals

Applicants are responsible for applying for and obtaining any of the required State or local approvals (see GC 1, Page 6). Federal and State jurisdictions may differ in some instances. State permits may be required for specific projects regardless of the general permit category.

In order for authorizations under this GP to be valid, when any of the following State approvals or statutorily-required reviews is also required, the approvals must be obtained prior to the commencement of work in Corps jurisdiction:

- **Final Order of Conditions** under the Massachusetts Wetlands Protection Act (WPA) (MGL c. 131 Section 40) must be obtained for activities subject to jurisdiction as defined in 310 CMR 10.02.
- **Waterways license** or permit under MGL c. 91, from the Massachusetts Department of Environmental Protection (MassDEP) must be obtained for activities subject to its jurisdiction, defined in 310 CMR 9.05.
- **Water Quality Certification (WQC)** is required for work in Corps jurisdiction involving a discharge of dredged or fill materials to waters of the U.S., including wetlands. Some projects require an Individual WQC issued by the MassDEP under Section 401 of the Clean Water Act and 314 CMR 9.00, before work can proceed. See Appendix D for 401 WQC requirements.
- **Coastal Zone Management (CZM):** Any project that qualifies for Category 1 of this GP has been determined to be consistent with the Massachusetts CZM plan and does not require any additional CZM review. For Category 2 work in or affecting the coastal zone, the Corps will coordinate review with the MA Office of CZM and then notify applicants if an Individual CZM concurrence is required.

[1] Defined at 33 CFR 329
[2] Defined at 33 CFR 328
[3] When there is a regulated discharge of dredged or fill material into waters of the U.S., the Corps will also consider secondary impacts, which are defined at Appendix B, Definition 2.

2. Corps Authorizations

The two GP review categories are listed below.

a. CATEGORY 1 (No application)

Eligibility Criteria

Activities in Massachusetts that:

- Are subject to Corps jurisdiction (see GC 2, Page 6),
- Meet the terms and GCs of this GP,
- Meet the definition of Category 1 in Appendix A - Definition of Categories,

may proceed without application to the Corps provided:

- The Category 1 Notification Form (Appendix C) is submitted to the Corps before starting the work authorized by this GP.

Consultation with the Corps and/or outside experts is required when necessary to ensure compliance with this GP's general conditions (starting on Page 6) and related federal laws such as the National Historic Preservation Act, the Endangered Species Act (ESA), and the Wild and Scenic Rivers Act. For example, experts on historic resources may include the agencies and tribes listed in GC 7, while experts on endangered species include the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS). Project proponents are encouraged to contact the Corps with Category 1 eligibility questions.

Work that is not subject to the Commonwealth's Wetland Protection Act (WPA) but is subject to Corps jurisdiction, is eligible for Corps Category 1 authorization under this GP. Although an Order of Conditions is not required if the work is not subject to the WPA, this GP's review thresholds and requirements concerning WQC and CZM consistency apply. Such projects could include activities that are exempt from the WPA or activities in federal wetlands that are not included in the WPA. The MA Office of CZM has concurred with the determination that projects authorized under Category 1 of this GP are consistent with the enforceable policies of the Massachusetts CZM Program.

b. CATEGORY 2 (Reporting – Requiring Review)

Eligibility Criteria

Activities in Massachusetts that:

- Are subject to Corps jurisdiction, (see GC 2, Page 6),
- Meet the terms and GCs of this GP,
- Meet the definition of Category 2 in Appendix A - Definition of Categories,

require written approval from the Corps. The Corps will coordinate review of all Category 2 activities with Federal and State agencies, as appropriate. To be eligible and subsequently authorized, an activity must result in no more than minimal impacts to the aquatic environment as determined by the Corps in coordination with the interagency review team and the criteria listed above. This may require project modifications involving avoidance, minimization, or compensatory mitigation for unavoidable impacts to ensure the net effects of a project are minimal.

3. Applying for a Permit

All applicants for Category 2 projects must:

a. Apply as appropriate to the:

i. MassDEP or conservation commission for authorization under Section 401 or Chapter 91 prior to or concurrent with the Corps application, and

ii. Corps using either ENG Form 4345[1] or the MassDEP WQC or Chapter 91 application form[1]. The Information Required Checklist (Appendix E) is necessary to ensure the required information for a complete application has been provided to us. Corps jurisdictional boundaries and special aquatic sites need to be clearly indicated on the plans. Proponents are encouraged to call the Corps promptly for emergency situations at (978) 318-8338.

b. Submit the SHPO/MHC's "Project Notification Form"[1] (follow "Guidance for Completing MHC's Project Notification Form"[1]), a USGS locus map with the project boundaries clearly located, and scaled existing and proposed project plans to the SHPO/MHC, BUAR, and the Native American tribes when applicable (see Appendix F, page 2 for contact information and geographic areas of interest) to be reviewed for the presence of historic, archaeological, or tribal resources in the permit area that the proposed work may affect, unless alternate procedures exist as specified in GC 7. All applications to the Corps or MassDEP shall confirm this has been done, when applicable, by submitting a copy of the applicant's dated cover letter to the SHPO/MHC, BUAR and the tribes, or a copy of their response letters.

4. Review Procedures

The Corps will coordinate review of all Category 2 activities with Federal and State agencies, as appropriate, to ensure that the work will result in no more than a minimal impact to the aquatic environment.

Massachusetts Office of Coastal Zone Management (CZM) Screening Procedures: The CZM has issued consistency for projects meeting Category 1 of the GP and no further coordination with CZM is required for those projects. The Corps will coordinate Category 2 projects that involve work in or affecting the coastal zone with CZM. The CZM will make a determination within 10 business days of coordination that (1) CZM consistency may be waived; (2) CZM consistency may be waived provided CZM and the Corps agree to special conditions in the Corps authorization to protect the land or water uses or natural resources of the coastal zone; or (3) an individual CZM consistency concurrence will be required for the project. If CZM waives/issues consistency [(1) or (2) above], the Corps will attempt to include that determination in the Corps authorization letter. If CZM requires an individual CZM consistency concurrence [(3) above], the Corps may issue a conditional letter, which will notify the applicant that the federal authorization is not valid until CZM consistency concurrence is issued or waived by CZM.

Emergency Procedures: 33 CFR 325.2(e)4 states that an "emergency" is a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures." The Corps will work with all applicable agencies to expedite authorization in emergency situations.

[1] See Appendix J, (1) to locate these forms.

Individual Permit Procedures: Proponents of work that does not qualify for Category 1 or 2 of this GP should submit an application and the appropriate application materials (including the Corps application form) to the Corps (see 33 CFR 325.1) at the earliest possible date in order to expedite the Individual Permit review process. General information and application forms can be obtained on our website [see Appendix J, (1)] or by calling us at (978) 318-8338. Individual WQC and CZM consistency concurrence are required when applicable from the Commonwealth of Massachusetts before Corps permit issuance. The Corps encourages applicants to concurrently apply for a Corps Individual Permit and State permits.

5. Approval

Applicants for Category 2 activities may not proceed with work in Corps jurisdiction until written authorization is received from the Corps. Applicants are responsible for applying for and obtaining all applicable approvals listed on Page 2 from the appropriate State and local agencies before commencing work in Corps jurisdiction.

IV. GENERAL PERMIT GENERAL CONDITIONS:

The following general conditions apply to all Category 1 and Category 2 activities authorized under this GP unless otherwise specified.

1. Other Permits. Authorization under this GP does not obviate the need to obtain other Federal, State, or local authorizations required by law.

2. Federal Jurisdictional Boundaries.

(a) Applicability of this GP shall be evaluated with reference to federal jurisdictional boundaries. Applicants are responsible for ensuring that the boundaries used satisfy the federal criteria defined at 33 CFR 328-329. These sections prescribe the policy, practice and procedures to be used in determining the extent of jurisdiction of the Corps concerning "waters of the U.S." and "navigable waters of the U.S." (Note: Waters of the U.S. include the subcategories "navigable waters of the U.S." and "wetlands.")

(b) Wetland boundaries shall be determined in accordance with the most recent versions of the a) Corps of Engineers Wetlands Delineation Manual and b) Regional Supplement to the Corps Delineation Manual (which for New England states is the Northcentral and Northeast Regional Supplement), both located at www.usace.army.mil/CECW/Pages/techbio.aspx. Delineation data shall be recorded on the Wetland Determination Data Form - Northcentral and Northeast Region. Use the most recently approved version of the National Wetland Plant List at http://wetland_plants.usace.army.mil. The Natural Resources Conservation Service (NRCS) publishes the current list of hydric soil indicators at http://soils.usda.gov (click "Hydric Soils"). The regional guide "Field Indicators for Identifying Hydric Soils in N.E." (www.neiwpcc.org/hydricsoils.asp) may be used as a supplement in problem soil situations.

3. Minimal Direct, Secondary and Cumulative Impacts[1].

(a) Projects authorized by this GP shall have no more than minimal direct, secondary and cumulative adverse environmental impacts. Applicants should provide information on secondary and cumulative impacts. Compensatory mitigation may be required to offset unavoidable impacts (see GC 15) and to ensure that they are no more than minimal. Compensatory mitigation will be determined on a case-by-case basis.

(b) Secondary impacts to waterway and/or wetland areas, (e.g., areas drained, flooded, cleared, excavated or fragmented) shall be added to the total fill area when determining whether the project qualifies for Category 1, 2 or an Individual Permit.

(c) Site clearing, grading and construction activities in the upland habitat surrounding vernal pools (Vernal Pool Envelope and Vernal Pool Critical Terrestrial Habitat) may be secondary impacts, but first there must be wetland/waterway fill on the project site.

4. Discretionary Authority. Notwithstanding compliance with the terms and conditions of this permit, the Corps retains discretionary authority to require an Individual Permit review based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. This authority is invoked on a case-by-case basis whenever the Corps determines that the potential consequences of the proposal warrant Individual Permit review based on the concerns stated above. This authority may be invoked for projects with cumulative environmental impacts that are more than minimal or if there is a special resource or concern associated with a particular project that is not already covered by the remaining conditions of the GP that warrants greater review. Whenever the Corps notifies an applicant that an Individual Permit is required, the project is not authorized under this GP and

[1] Direct, secondary and cumulative impacts are defined at Appendix B, Definition 2.

no work may be conducted until an Individual Permit is obtained or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under this GP.

5. Single and Complete Projects.
(a) This GP shall not be used to piecemeal work and shall be applied to single and complete projects[1]. All components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be treated together as constituting one single and complete project.
(b) Unless the Corps determines that an activity is a single and complete project[1], this GP shall not be used for any activity that is part of an overall project for which an Individual Permit is required.

6. Permit On-Site. For Category 2 projects, the permittee shall ensure that a copy of this GP and the accompanying authorization letter are at the work site (and the project office) authorized by this GP whenever work is being performed, and that all personnel with operation control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and sub-contracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this GP. This shall be achieved by including the entire permit authorization in the specifications for work. The term "entire permit authorization" means this GP and the authorization letter (including its drawings, plans, appendices and other attachments) and also includes permit modifications. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization shall be included in the contract or sub-contract. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire GP authorization, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

7. Historic Properties.
(a) No activity otherwise authorized by this GP shall result in effects [as that term is defined at 36 CFR 800.16(i)] on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties, unless and until the Corps or another federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act.
(b) Work is not eligible for Category 1 and an application to the Corps is required if the activity may have the potential to cause effects to any historic property listed, is determined to be eligible for listing, or is potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. Work is eligible for Category 1 provided another federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act.
(c) Information on the location and existence of historic resources can be obtained from the MHC/SHPO, BUAR, the National Register of Historic Places [see 33 CFR 330.4(g)], and the four Native American tribes listed in Appendix F, which contains contact information and geographic areas of interest for each tribe and the BUAR. Historic properties include those that are eligible for inclusion, but not necessarily listed on the National Register. Submittal of the MHC PNF is required for all Category 2 applications (see Page 4) and highly recommended for Category 1 authorizations to help determine if there is a potential effect.

[1] Single and Complete Project and Independent Utility are defined at Appendix J, (2).

(d) If the permittee, either prior to construction or during construction of the work authorized herein, encounters a previously unidentified archaeological or other cultural resource within the area subject to Corps jurisdiction that might be eligible for listing in the National Register of Historic Places, he/she shall stop work and immediately notify the Corps, MHC/SHPO, BUAR and applicable tribes(s).

8. National Lands. Any of the following work is not eligible as a Category 1 project**:**
(a) Activities that impinge upon the value of any National Wildlife Refuge, National Forest, National Marine Sanctuary (e.g., Stellwagen Bank), National Park or any other area administered by the National Park Service (e.g., Cape Cod National Seashore), USFWS or U.S. Forest Service.
(b) Work on Corps properties and Corps-controlled easements. In addition to any authorization under this GP, proponents must contact the Corps Real Estate Division at (978) 318-8585 to obtain real estate documents.
(c) Any proposed temporary or permanent modification or use of a federal project (including but not limited to a levee, dike, floodwall, channel, sea wall, bulkhead, jetty, wharf, pier, or other work built but not necessarily owned by the United States), which would obstruct or impair the usefulness of the federal project in any manner, and/or would involve changes to the authorized federal project's scope, purpose, and/or functioning that go beyond minor modifications required for normal operation and maintenance requires review and approval by the Corps pursuant to 33 USC 408. Federal navigation projects in Massachusetts are shown at Appendix G.

9. Wild and Scenic Rivers. Any activity that occurs a) in the designated main stem of, within 0.25 miles up or downstream of the designated main stem of, or in tributaries within 0.25 miles of the designated main stem of a National Wild and Scenic River; b) in "bordering and contiguous wetlands" (see Appendix B, Definition 1) that are adjacent to the designated main stem of a National Wild and Scenic River; c) or that has the potential to alter flows within a river within the National Wild and Scenic River System, is not eligible for Category 1, regardless of the size of the impacts, unless the National Park Service (NPS) has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. This condition applies to both designated Wild and Scenic Rivers and rivers officially designated by Congress as study rivers for possible inclusion while such rivers are in official study status. See Appendix F for NPS contact information and Appendix H for a list of rivers and procedures.

10. Federal Endangered Species.
(a) No activity may be authorized under Category 1 of this GP which:
- **i.** "May affect" a threatened or endangered species, a species proposed for listing as threatened or endangered, or designated or proposed critical habitat (all herein referred to as "listed species or habitat") as identified under the federal Endangered Species Act (ESA) (unless specified in a programmatic agreement with NMFS or USFWS),
- **ii.** Result in a "take" of any federally-listed threatened or endangered species of fish or wildlife, or
- **iii.** Result in any other violation of Section 9 of the ESA protecting threatened or endangered species of plants.

(b) No activity may be authorized under Category 1 if a listed species or critical habitat is present in the action area[1]. Project proponents must check the USFWS and NMFS websites[2] to ensure that listed

[1] The "Endangered Species Consultation Handbook – Procedures for Conducting Consultation and Conference Activities Under Section 7 of the ESA," defines action area as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. [50 CFR 402.02]."
[2] www.fws.gov/newengland/EndangeredSpec-Consultation_Project_Review.htm and www.nero.noaa.gov/prot_res/esp/ListE&Tspec.pdf

species or critical habitat are not present in the action area or to provide information on federally-listed species or habitat as required in GC 10(c).
(c) Proponents must submit an application to the Corps if any of the activities in (a) or (b) above may occur and provide information on federally-listed species or habitat[1] to allow the Corps to conduct any required consultation under Section 7 of the ESA.
(d) Although some work is excluded from Category 1 as stated in (a) and (b) above, work may qualify for Category 1 if a "No Effect determination" or "May Affect" has been made for that work by a federal action agency. The permittee must comply with any conditions that were imposed to avoid adverse effects to listed species or critical habitat.

11. Essential Fish Habitat.
(a) Any unconfined work[2] in streams in the Connecticut River watershed that are stocked with Atlantic salmon (see Appendix I) is eligible for Category 1 of this GP provided the work is not conducted from October 1 to June 30, which is the high flow period, and is NOT conducted during the time of year (TOY) restrictions stated in the Massachusetts Division of Marine Fisheries (MA DMF) Technical Report[3].
(b) Any unconfined work[2] in streams in the Merrimack River watershed that are stocked with Atlantic salmon (Appendix I lists these as the i) Nissitissit River to Nashua River in Pepperill and ii) Nashua River from Nissitissit River to New Hampshire border in Pepperill) is eligible for Category 1 of this GP provided the work[3] is not conducted during the TOY restrictions stated in the MA DMF Technical Report[4].

Notes: The mainstems of the Connecticut River (and Merrimack River) are navigable waters of the U.S. (Appendix A, Navigable Waters, Page 4 states "No provisions for new or previously unauthorized fills in Category 1," while Appendix A, Page 5 provides dredging thresholds.) The above TOY restrictions are imposed to protect upstream adult migration, downstream smolt emigration and fall migration. Category 2 authorization letters from the Corps may require permittees to follow any NMFS conservation recommendations, including additional TOY restrictions that may be necessary to protect sensitive life stages of other species for projects located in coastal waters. Atlantic salmon is just one of the species that has designated EFH within Massachusetts.

12. Federal Navigation Project. Any structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (see Appendix G) than a distance of three times the project's authorized depth shall be subject to removal at the owner's expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. This is applicable to Category 1 and 2. Reference Appendix A, Page 5 (Moorings) and Page 6 (Structure and Floats).

13. Navigation.
(a) There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein.
(b) The permittee understands and agrees that, if future U.S. operations require the removal, relocation,

[1] www.fws.gov/newengland/EndangeredSpec-Consultation_Project_Review.htm and www.nero.noaa.gov/prot_res/esp/ListE&Tspec.pdf.
[2] Exploratory drilling and borings for bridges are not subject to time of year restrictions.
[3] Work shall not be conducted during the TOY restrictions for any waterbody with a species that has "*spawning run/habitat present*" listed in Appendix B of the MA DMF Technical Report "Marine Fisheries Time of Year Restrictions (TOYs) for Coastal Alteration Projects" located at www.nae.usace.army.mil/reg/index.htm>>State General Permits>>Massachusetts. The TOY restriction for any "Inland Water" stream not listed in Appendix B of the MA DMF document is October 1 to June 30.

or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

14. Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest; (c) damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit; (d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension, or revocation of this permit.

15. Avoidance, Minimization and Compensatory Mitigation.
(a) Discharges of dredged or fill material into waters of the U.S., including wetlands, shall be avoided and minimized to the maximum extent practicable through consideration of alternatives. The Corps may require compensatory mitigation of unavoidable direct and indirect impacts on a case-by-case basis [see Appendix J, (3)].
(b) For all Category 1 and 2 projects, project proponents must minimize upland impacts in the Vernal Pool (VP) Envelope and VP Critical Terrestrial Habitat for all VPs on, and known VPs surrounding, the project site, to the greatest extent practicable. Additional VP information is at GC 3, page 1 of Appendix A for thresholds, Appendix B, Definition 5 for definitions, and Appendix J, (3)(c) for impact minimization documents.

16. Heavy Equipment in Wetlands.
(a) Operating heavy equipment other than fixed equipment (drill rigs, fixed cranes, etc.) in wetlands shall be minimized, and such equipment shall not be stored, maintained or repaired in wetlands, to the maximum extent practicable. Where construction requires heavy equipment operation in wetlands, the equipment shall either have low ground pressure (typically <3 psi), or it shall be placed on swamp/ construction/timber mats (herein referred to as "construction mats" and defined at Appendix B, Definition 3) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation. Construction mats are to be placed in the wetland from the upland or from equipment positioned on swamp mats if working within a wetland. Dragging construction mats into position is prohibited. Other support structures that are capable of safely supporting equipment may be used with written Corps authorization (Category 2 authorization or Individual Permit). Similarly, the permittee may request written authorization from the Corps to waive use of mats during frozen, dry or other conditions. An adequate supply of spill containment equipment shall be maintained on site.
(b) In tidal wetlands, no dredge work shall have equipment traverse, be placed, or stored on the marsh vegetation unless specifically authorized in writing by the Corps.

17. Temporary Fill.
Temporary fill that qualifies for Category 1 (e.g., less than 5,000 square feet of combined temporary and permanent fill associated with the single and complete project), or is authorized in writing under Cat 2, shall adhere to the following:
(a) All temporary fill shall be stabilized to prevent its eroding into portions of waters of the U.S., including wetlands, where it is not authorized.
(b) Unconfined temporary fill authorized for discharge into waters of the U.S., including wetlands, shall consist of material that minimizes impacts to water quality (e.g. sandbags, clean gravel, stone, aggregate, etc.).

(c) Temporary fill authorized for discharge into wetlands should be placed on geotextile fabric or other material (e.g., straw) laid on the pre-construction wetland grade where practicable to minimize impacts.
(d) Temporary fill shall be removed as soon as it is no longer needed, disposed of at an upland site, and suitably contained to prevent its subsequent erosion into waters of the U.S., including wetlands. To qualify for Category 1, temporary fill placed during the:

i. Growing season must be removed before the beginning of the next growing season.

ii. Non-growing season may remain throughout the following growing season, but must be removed before the beginning of the next growing season.

(e) Waters of the U.S., including wetlands, where temporary fill was discharged shall be restored (see GC 18).
(f) Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including coffer-dams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must be placed in a manner that will not be eroded by expected high flows. See GC 19.
(g) Construction mats and corduroy roads (see GC 16) are considered as temporary fill when they are removed immediately upon work completion[1]. The areas must be restored (see GC 18). See Appendix A, Page 1, Category 1.

18. Work Site Restoration.
(a) Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation, which under no circumstances shall be higher than the pre-construction elevation. Original condition means careful protection and/or removal of existing soil and vegetation, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized.
(b) Upon completion of construction, all disturbed wetland areas (the disturbance of these areas must be authorized) shall be properly stabilized. Any seed mix shall contain only plant species native to New England and shall not contain any species listed in the Appendix titled "Invasive and Other Unacceptable Plant Species" in the "New England District Compensatory Mitigation Guidance." See Appendix J, (4) of this GP. This list may be updated periodically.
(c) In areas of authorized temporary disturbance, if trees are cut they shall be cut at ground level and not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.

19. Sedimentation and Erosion Control.
(a) Adequate sedimentation and erosion control management measures, practices and devices, such as phased construction, installation of sediment control barriers (i.e., silt fence, vegetated filter strips, geo-textile silt fences, filter tubes, erosion control mixes, hay bales or other devices) downhill of all exposed areas, retention of existing vegetated buffers, application of temporary mulching during construction, and permanent seeding and stabilization shall be installed and properly maintained to reduce erosion and retain sediment on-site during and after construction. They shall be capable of preventing erosion, of collecting sediment, suspended and floating materials, and of filtering fine sediment.
(b) Temporary sediment control barriers shall be removed upon completion of work but not until all disturbed areas are permanently stabilized. The sediment collected by these sediment barriers shall be removed and placed at an upland location and stabilized to prevent its later erosion into a waterway or wetland.
(c) All exposed soil and other fills shall be permanently stabilized at the earliest practicable date (GC 18).

[1] See Appendix D, (4) for information from the MassDEP's regulations on the use of construction mats for the purpose of utility maintenance.

20. Bank Stabilization.
(a) Projects involving construction or reconstruction/maintenance of bank stabilization structures within Corps jurisdiction shall be designed to minimize environmental effects, effects to neighboring properties, scour, etc. to the maximum extent practicable.
(b) Project proponents must design and construct bank stabilization projects using this sequential minimization process: avoidance of aquatic resource impacts, diversion of overland flow, vegetative stabilization, stone-sloped surfaces, and walls/bulkheads. Vertical walls/bulkheads shall only be used in situations where reflected wave energy can be tolerated. Refer to Appendix J, (5) for design guidance.
(c) Inland Water bank stabilization activities necessary for erosion prevention must meet all of the following criteria to qualify for Category 1: (i) No material is placed in excess of the minimum needed for erosion protection; (ii) The activity is no more than 100 feet in length along the bank; (iii) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark; (iv) No structures angled steeper than 3H:1V and only angular or subangular stone or fiber roll revetments allowed. (v) The activity does not involve discharges of dredged or fill material into special aquatic sites; (vi) No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any water of the United States; (vii) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and, (viii) The activity is not a stream channelization activity.

21. Stream Crossings and Work[1].
(a) All permanent crossings of rivers, streams, brooks, etc. (hereon referred to as "streams") shall be suitably culverted, bridged, or otherwise designed and constructed to **(i)** withstand and prevent the restriction of high flows, **(ii)** maintain low flow conditions, and iii) not obstruct the movement of or not substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, beyond the actual duration of construction unless the activity's primary purpose is to impound water to qualify for Category 1 or 2.
(NOTE: Areas of fill and/or cofferdams must be calculated as part of the total waterway/wetlands impacts to determine the review category in Appendix A.
(b) Any work that temporarily or permanently impacts upstream or downstream flood conditions, or permanently impacts wetlands in excess of Category 1 thresholds, must be reviewed at least under Category 2. The "Massachusetts Dam Removal and the Wetland Regulations" may be used as a reference [see Appendix J, (6)].
[Note: (c)-(h) below only apply to Inland Waters and Wetlands (see Appendix A, Page 1 for definition).]
(c) New Stream Crossings. To ensure compliance with GC 21(a) above, new stream crossings are eligible for Category 1 provided:

i. Spans[2] are installed to avoid or cause minimal disruption to the streambed. Footings and abutments shall be landward of 1.2 times bankfull width (see General Standard 3). To the greatest extent practicable, work in the stream shall be minimized, and design and construction shall allow the streambed's natural structure and integrity to remain intact. Any fill or excavation of the streambed below bankfull width other than footings, support pilings, and work specified in 21(f) and 21(h), requires Category 2 review and, unless demonstrated otherwise, stream simulation[3] as necessary to

[1] This condition does not apply to 1) non-tidal drainage systems and 2) irrigation ditches excavated on dry land.
[2] For purposes of this GP, spans are bridges, 3-sided box culverts, open-bottom culverts or arches that span the stream with footings landward of bankfull width.
[3] See Appendix J, (6)(b) for stream simulation design and construction manual information.

restore or establish substrate and banks in the span structure and work area to match the characteristics of the substrate and banks in the natural stream channel.

ii. The spans are at least 5-feet wide at ground level to ensure that General Standard 3 is met for small streams. This means that the footings and/or abutments located on either side of the stream shall have at least 5 feet in between them.

iii. The spans are designed and constructed to conform to the General Standards for new crossings contained in the version of the "Massachusetts River and Stream Crossing Standards" on our website[1].

iv. The spans are designed and constructed in accordance with the methodologies in the stream simulation design and construction manual on our website[1].

(d) Replacement Stream Crossings. See Appendix B, Definition 15 for information on the replacement of serviceable stream crossings. To ensure compliance with GC 21(a) above, for replacement of non-serviceable stream crossings:

i. The crossings should be designed and constructed to conform to the General Standards for new crossings contained in the latest version of the "Massachusetts River and Stream Crossing Standards" on our website[1].

ii. The crossings should be designed and constructed in accordance with the methodologies in the stream simulation design and construction manual on our website[1].

iii. Compliance with General Standards 2 and 4 is required to be eligible for Category 1.

iv. Replacement crossings on high-quality stream segments are eligible for Category 1 provided they are designed and constructed to conform to the General Standards for new crossings and in accordance with the methodologies in the stream simulation design and construction manual on our website[1]. This is to ensure compliance with GC 21(a) above. High-quality stream segments are: NHESP Living Water Cores, NHESP BioMap cores, ACECs, Anadromous Fish Runs, and Cold Water Fisheries. These are shown at: www.streamcontinuity.org/assessing_crossing_structures/prioritzing_streams.htm

(e) Culvert Extensions. Culvert extensions are eligible for Category 1 provided that after completion the entire culvert conforms to the General Standards for new crossings in the latest version of the "Massachusetts River and Stream Crossing Standards" on our website. The crossings should be designed and constructed in accordance with the methodologies in the stream simulation design and construction manual on our website[1] to achieve this objective.

(f) Temporary Stream Crossings.

i. The General Standards do not apply to temporary stream crossings.

ii. Temporary spans shall be removed within 180 days in order to be eligible for Category 1.

iii. Temporary stream crossings that are not spans (typically culverts) must be designed in accordance with 1-6 below to qualify for Category 1. Category 2 applications should include information demonstrating 2-6 below:

1. Installed outside of the time of year (TOY) restrictions specified in GC 21(j) below and must be removed before the beginning of the TOY restriction of that same season. Those that will remain into the TOY restriction will require Category 2 review.

2. Placed on geotextile fabric or other material where practicable to ensure restoration to the original grade. Soil may not be used to construct or stabilize these structures and rock must be large enough to allow for easy removal without disrupting the streambed.

3. Designed and maintained to withstand and pass high flows. Water height should be no higher than the top of the culvert's inlet. A minimum culvert diameter of two feet is required to pass debris. Culverts must be aligned to prevent bank erosion or streambed scour.

4. Equipped with energy dissipating devices installed downstream if necessary to prevent scour.

5. Designed and maintained to prevent soil from entering the waterbody.

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[1] See Appendix J, (6)(a) for General Standards information and Appendix J, (6)(b) for stream simulation design and construction manual information.

6. Removed upon the completion of work. Impacts to the streambed or banks requires restoration to their original condition using stream simulation methods.[1]

iv. Temporary stream crossings or cofferdams shall be used for equipment access across streams. See Appendix J, 6(d).

(g) Slip Lining. Projects using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), plastic pipes and High Density Polyethylene (HDPE) pipes do not qualify for Category 1, either as new work or maintenance activities.

(h) Work in Flowing Waters. To be eligible for Category 1, no unconfined fill [see GC 17(b)] or excavation in flowing waters is allowed. To accomplish this:

i. Bank stabilization work below ordinary high water (OHW) shall utilize erosion controls such as inflatable cofferdams, jersey barriers, silt screens, turbidity curtains, etc. where practicable to prevent sediment input to the stream and to minimize turbidity and sedimentation impacts for sensitive life stages. Bank stabilization above OHW must utilize erosion controls.

ii. Management techniques such as temporary flume pipes, culverts, cofferdams, etc. must be used to maintain normal flows within the stream boundary's confines, or water diversions may be used immediately up and downstream of the work footprint or work must be performed in the dry under no flow conditions, or under very low flow conditions following the practices in GC 21(a). See Appendix B, Definition 4.

(i) Minimization. In order to make the Category 2 review process more efficient and result in a faster decision, new and replacement stream crossings should be designed using the least intrusive and environmentally damaging method to construct new and replacement stream crossings following this sequential minimization process: **(i)** Spans with no stream impacts, **(ii)** Spans with stream impacts, and 3) Embedded culverts with stream simulation or low-slope design.

(j) Work Window. For projects that otherwise meet the terms of Category 1, in-water construction work shall not be conducted during the time of year (TOY) restrictions for any stream with a species that has a "*spawning run/habitat present"* listed in Appendix B of the MA DMF Technical Report at www.nae.usace.army.mil/reg/index.htm>>State General Permits>>Massachusetts. For streams not listed in Appendix B of the MA DMF document, work may not be conducted from September 1 to June 30 in order to qualify for Category 1. Projects proposed during these TOY restrictions are ineligible for Category 1, regardless of the waterway and wetland fill and/or impact area.

(k) Maintenance Requirements. The permittee shall maintain the work authorized herein in good condition and in conformance with the terms and general conditions of this permit to facilitate aquatic life passage as stated in GC 21(a). Culverts that develop "hanging" inlets or outlets, result in bed washout, or a stream that doesn't match the characteristics of the substrate in the natural stream channel such as mobility, slope, stability, confinement will require maintenance or repair to comply with this GC. This does not apply to GC 21(f) above.

22. Wetland Crossings.

(a) All temporary and permanent crossings of wetlands shall be suitably culverted, bridged, or otherwise designed to: **(i)** Withstand and prevent the restriction of high flows, **(ii)** Not obstruct the movement of or not substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the wetland, including those species that normally migrate through the area, beyond the actual duration of construction unless the activity's primary purpose is to impound water.

(b) To qualify for Category 1, new and replacement wetland crossings that are permanent shall be culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity, at its present level, between the wetlands on either side of the road. To meet this requirement, we recommend that culverts, spans or bridges be placed at least every 50 feet with an opening at least 2 feet high and 3

[1] See Appendix J, (6)(b) for stream simulation design and construction manual information.

feet wide at ground level. Closed bottom culverts shall be embedded at least 6 inches with a natural bottom. In addition, the MassDEP's crossing standards are at 310 CMR 10.53(3)(e).
(c) In the case of non-compliance, the permittee shall take necessary measures to correct wetland damage due to lack of hydraulic and ecological connectivity.
(d) Any work that permanently impacts flooding, results in impacts to wetlands on either side of the wetland crossing in excess of Category 1 thresholds, or impacts wetland drainage from the upgradient side of the wetland crossing does not qualify for Category 1.

23. Discharge of Pollutants.
(a) All activities involving any discharge of pollutants into waters of the U.S., including wetlands, authorized under this GP shall be consistent with MassDEP's Surface Water Quality Standards and Surface Water Discharge Permit Program Regulations (314 CMR 3.00 and 4.00) and the Wetlands Protection Act (310 CMR 10.00), including Stormwater Management Standards, applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 USC 1251), and other applicable State and local laws. If applicable water quality standards, limitations, etc. are revised or modified during the term of this GP, the authorized work shall be modified to conform with these standards within six months of the effective date of such revision or modification, or within a longer period of time deemed reasonable by the Corps in consultation with EPA. Issuance of the WQC confirms that State water quality standards are met.
(b) All projects authorized by this GP shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.
(c) All activities involving any discharge of pollutants into waters of the U.S., including wetlands, authorized under this GP must comply with Section 402 [33 U.S.C. 1342] of the CWA and the requirements of the National Pollutant Discharge Elimination System (40 CFR 122).

24. Spawning, Breeding and Migratory Areas.
(a) Activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities, in fish migratory areas, fish and shellfish spawning or nursery areas, or amphibian and migratory bird breeding areas, during spawning or breeding seasons shall be avoided and minimized to the maximum extent practicable.
(b) To qualify for Category 1, inland and navigable water (e.g., ocean waters, rivers, streams, brooks, embayments, lakes, ponds, etc.) work shall not be conducted during the time-of-year restrictions for any waterbody with a species that has "*spawning run/habitat present*" listed in Appendix B of the MA DMF Technical Report "Marine Fisheries Time of Year Restrictions (TOYs) for Coastal Alteration Projects" located at www.nae.usace.army.mil/reg/index.htm>>State General Permits>>Massachusetts. The TOY restriction for the "Inland Water"[1] portions of streams not listed in Appendix B of the Technical Report is September 1 to June 30. The TOY restriction for the "Navigable Water"[1] portions of streams not listed in Appendix B of the MA DMF document is January 15 to November 15. However, the TOY restrictions for the Connecticut River, a Navigable Water, is October 1 to June 30 (this is specified in GC 11).

25. Storage of Seasonal Structures. Coastal structures, such as pier sections and floats, that are removed from the waterway for a portion of the year (often referred to as seasonal structures) shall be stored in an upland location located landward of mean high water (MHW) and not in tidal wetlands or mudflats. These seasonal structures may be stored on the fixed, pile-supported portion of the structure

[1] Appendix A, Page 1 provides definitions for Inland Waters and Page 4 provides definitions for Navigable Waters.

that is seaward of MHW. This is intended to prevent structures from being stored on the marsh substrate, mudflats, or the substrate seaward of MHW.

26. Environmental Functions and Values. The permittee shall make every reasonable effort to carry out the construction or operation of the work authorized herein in a manner that maintains as much as practicable, and minimizes any adverse impacts on, existing fish, wildlife, and natural environmental functions and values.

27. Invasive Species.
(a) The introduction, spread, or the increased risk of invasion of invasive plant or animal species on the project site, into new or disturbed areas, or areas adjacent to the project site caused by the site work is prohibited. See Appendix J, (4) for a reference listing invasive species.
(b) Unless otherwise directed by the Corps, all applications for Category 2 inland projects proposing fill in Corps jurisdiction shall include an Invasive Species Control Plan (ISCP). See Appendix J, (4).

28. Inspections. The permittee shall allow the Corps to make periodic inspections at any time deemed necessary in order to ensure that the work is being or has been performed in accordance with the terms and conditions of this GP. The Corps may also require post-construction engineering drawings for completed work or post-dredging survey drawings for any dredging work. To facilitate these inspections, the permittee shall complete and return to the Corps:

- For Category 1 projects, the Category 1 Notification Form (Appendix C).
- For Category 2 projects, the 1) Work-Start Notification Form and 2) Compliance Certification Form. Both are provided with each Category 2 authorization letter.

29. Maintenance.
(a) The permittee shall maintain the work authorized herein in good condition and in conformance with the terms and general conditions of this permit.
(b) GC 29 (a) does not include maintenance of dredging projects. Each maintenance dredging event requires a new Corps authorization unless an unexpired, written Corps authorization specifies that the permittee may "dredge and maintain" an area for a particular time period. Category 1 or 2 maintenance dredging includes only those areas and depths previously authorized by the Corps.
(c) For inland mosquito ditching and maintenance information, see www.nae.usace.army.mil/reg/index.htm, and then "Other."

30. Property Rights. This GP does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of federal, State or local laws or regulations.

31. Modification, Suspension, and Revocation. This GP or any work authorized under Category 1 or 2 may be either modified, suspended, or revoked in whole or in part pursuant to the policies and procedures of 33 CFR 325.7. Any such action shall not be the basis for any claim for damages against the United States.

32. Restoration Directive. The permittee, upon receipt of a notice of revocation of authorization under this GP, shall restore the wetland or waterway to its former conditions, without expense to the United States and as directed by the Secretary of the Army or his authorized representative. If the permittee fails to comply with such a directive, the Secretary or his designee may restore the wetland or waterway to its former condition, by contract or otherwise, and recover the cost from the permittee.
33. Special Conditions. The Corps may independently, or at the request of the federal resource

33. Special Conditions. The Corps may independently, or at the request of the federal resource agencies, impose other special conditions on a project authorized pursuant to this GP that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all conditions of the authorization, including special conditions, constitutes a permit violation and may subject the permittee to criminal, civil or administrative penalties, and/or restoration.

34. False or Incomplete Information. If the Corps makes a determination regarding the eligibility of a project under this GP and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the permittee, the GP authorization shall not be valid and the U.S. Government may institute appropriate legal proceedings.

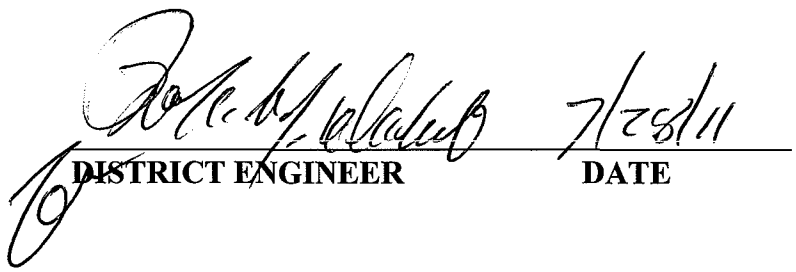
35. Abandonment. If the permittee decides to abandon the activity authorized under this GP, unless such abandonment is merely the transfer of property to a third party, he/she may be required to restore the area to the satisfaction of the Corps.

36. Enforcement Cases. This GP does not apply to any existing or proposed activity in Corps jurisdiction associated with an on-going Corps or EPA enforcement action, until such time as the enforcement action is resolved or the Corps and/or EPA as appropriate determines that the activity may proceed independently without compromising the enforcement action.

37. Transfer of GP Verifications. If the permittee sells the property associated with a GP verification, the permittee may transfer the GP verification to the new owner by submitting a letter to the Corps (see Appendix F for address) to validate the transfer. A copy of the GP verification must be attached to the letter and the letter must contain the following statement and signature: "When the structures or work authorized by this GP are still in existence at the time the property is transferred, the terms and conditions of this GP, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this GP and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

38. Duration of Authorization. This GP expires on January 20, 2015. Activities authorized under this GP that have commenced (i.e., are under construction) or are under contract to commence before this GP expires will have until January 20, 2016 to complete the activity under the terms and conditions of the current GP.

39. Previously Authorized Activities.
(a) Projects that have received authorization (Category 1 or 2) from the Corps and that were completed under the previous PGPs, nationwide permits, regional general permits or letters of permission, shall remain authorized as specified.
(b) Activities authorized pursuant to 33 CFR 330.3 ("Activities occurring before certain dates") are not affected by this GP.



DISTRICT ENGINEER **DATE**

APPENDIX A: DEFINITION OF CATEGORIES

I. INLAND WATERS AND WETLANDS	**Inland Waters and Wetlands:** Waters that are regulated under Section 404 of the Clean Water Act, including rivers, streams, lakes, ponds and wetlands, excluding Section 10 Navigable Waters of the U.S. The jurisdictional limits are the ordinary high water (OHW) mark in the absence of adjacent wetlands, beyond the OHW mark to the limit of adjacent wetlands when adjacent wetlands are present, and the wetland limit when only wetlands are present. For the purposes of this GP, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous[1] wetlands to tidal waters are reviewed in the Navigable Waters section (see Appendix A, Page 4).	
	Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project. All Category 1 and 2 projects must comply with all of this GP's applicable terms (Pages 1 – 5) and general conditions (Pages 6 – 17).	
	CATEGORY 1	**CATEGORY 2**
(a) NEW FILL/ EXCAVATION DISCHARGES (You must reference (b) – (e) below for other thresholds that may be relevant to your project.)	**1.** <5,000 SF inland waterway and/or wetland fill and associated secondary impacts[2] (e.g., areas drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Construction mats and corduroy roads[3] are considered as fill. [See General Condition (GC) 17.] Provided: • Permanent fill placed since August 1993 + proposed impact area <5000 SF. See GC 5, Single and Complete Projects. • No work in SAS[6] other than wetlands. **2.** Construction mats[3] of any area necessary to conduct activities that were previously authorized, authorized under Category 1, or not subject to regulation (see App. B, Definition 15). Other temporary or permanent fill and associated secondary impacts[2] are <5000 SF. Provided: • GC 17(g) is particularly relevant. • Authorized construction mats must be in place for <3 months, removed immediately upon work completion, and the wetlands must be restored (see GC 18). [See Appendix D, (4) for information from the MassDEP on the use of construction mats for the purpose of utility maintenance.] **3.** The following are excluded from Category 1 for all vernal pools (VPs) on, or known VPs adjacent to, the project site: a. Any work within a VP Depression[5]. b. Any work, including roads and driveways, in the VP Envelope[5]. c. Any work that individually or cumulatively impacts >25% of the VP Critical Terrestrial Habitat[5]. A minimum of 75% of the VP Critical Terrestrial Habitat must be contiguous (i.e., unfragmented) forest with undisturbed ground cover. Existing impact areas on or off the project site must be added to currently proposed impact areas for this calculation. (See notes on following page.)	**1.** 5,000 SF to 1 acre inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Construction mats and corduroy roads[3] are considered as fill. (See GC 17.) Secondary impacts for VPs are calculated as specified in 5 below. Provided: • Permanent fill placed since August 1993 + proposed impact area <1 acre. See GC 5, Single and Complete Projects. **2.** Specific activities with impacts ≥5,000 SF required to affect the containment, stabilization, or removal of hazardous or toxic waste materials performed, ordered, or sponsored by a government agency or Licensed Site Professional with established legal or regulatory authority. Wetlands must typically be restored in place at the same elevation to qualify. **3.** The discharge of accumulated bottom sediment from or through a dam into downstream waters. **4.** Temporary structures, work, and discharges ≥5000 SF necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps or not subject to Corps regulation. GCs 16-19 are particularly relevant. **5.** For all VPs on, or known VPs adjacent to, the project site, any fill and associated secondary impacts within a VP Envelope or Critical Terrestrial Habitat that exceeds Category 1. (See notes on following page.)

	CATEGORY 1	CATEGORY 2
(a) NEW FILL/ EXCAVATION DISCHARGES (continued)	VP Notes for Categories 1 and 2 above: * See GC 2 for boundary determinations. * See GCs 3 and 15 for VP general conditions. * See Appendix J, 3(c) for VP mitigation documents. * The Corps must have jurisdiction [i.e., there must be fill in waters of the U.S. (includes wetlands) on the property] before we address secondary impacts in the VP Depression, VP Envelope and VP Critical Terrestrial Habitat[5]. * Category 1, Paragraphs 3b & 3c, and Category 2, Paragraph 5 (previous page) don't apply to temporary impacts associated with construction mats in previously disturbed areas of existing utility project right-of-ways (e.g., transmission lines, gas pipelines) or linear transportation projects (e.g., roads, highways, railways, trails, airport runways and taxiways) provided there is a Vegetation Management Plan that avoids, minimizes and mitigates impacts to aquatic resources. This work may be eligible for Category 1 if all other terms, eligibility criteria, general conditions, and Appendix A thresholds are met.	
(b) BANK STABILIZATION PROJECTS (Rivers, streams, brooks & inland waterbodies such as lakes, ponds, etc.)	**1.** Inland bank stabilization <100 FT long and <1 CY of fill per linear foot below OHW. Provided: • Work complies with the GCs (GCs 20 & 21(h) in particular), including: o No structures angled steeper than 3H:1V and only rough-faced stone or fiber roll revetments allowed. o No unconfined fill or excavation in flowing waters. Proper management techniques and water diversions are required. See GC 17(b) and 21(h). • Work does not occur during the time of year (TOY) restrictions for any waterbody with a species that has a "*spawning run/habitat present*" listed in Appendix B of the MA DMF Technical Report referenced in GC 24(b). The TOY restriction for any stream not listed in Appendix B is September 1 to June 30. • No work in vernal pools[5] or SAS[6].	Work not qualifying for Category 1.
(c) RIVER/ STREAM/BROOK WORK & CROSSINGS *and* WETLAND CROSSINGS	**1.** River, stream and brook work and crossings: • Must comply with the GCs (GC 21 in particular), including: o No slip lining. See GC 21(g). o No open trench excavation in flowing waters. Proper management techniques and water diversions are required. See GC 21(h). • Work does not occur during the TOY restrictions for any waterbody with a species that has a "*spawning run/habitat present*" listed in Appendix B of the MA DMF Technical Report referenced in GC 24. The TOY restriction for any stream not listed in Appendix B of the MA DMF document is September 1 to June 30. • No work in riffles and pools[6]. • No stream relocations. • No dams or dikes. **2.** Wetland crossings must comply with the particularly relevant GC 22.	**1.** Work not qualifying for Category 1. **2.** Work in riffles and pools[6]. **3.** Stream relocations. **4.** Dams and dikes.

	CATEGORY 1	CATEGORY 2
(d) REPAIR, REPLACEMENT & MAINTENANCE OF AUTHORIZED FILLS.	**1.** Repair/maintenance of currently-serviceable, authorized fills with no expansion or change in use. • Conditions of the original authorization apply. • Minor deviations in fill design allowed[15]. • The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage.	**1.** Repair/maintenance of currently serviceable authorized fills, or replacement of non-serviceable authorized fills, <1 acre, including expansion or a change in use. **2.** Replacement of non-serviceable authorized fills, including expansion or a change in use, totaling <1 acre.
(e) MISC.	**1.** Oil spill clean-up fill done in accordance with the Massachusetts Contingency Plan 310 CMR 40.0000 or under state emergency certification 310 CMR 10.06. SAS[6] must typically be restored in place at the same elevation. **2.** Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, water recording devices, water quality testing and improvement devices, and similar structures. Structures may not restrict movement of aquatic organisms. **3.** Survey activities, such as core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, exploratory trenching, soil surveys, sampling, and historic resources surveys (but not recovery). Exploratory trenches must be restored in accordance with GC 19. The construction of temporary pads is authorized provided the discharge doesn't exceed 25 CY. This doesn't authorize permanent structures or the drilling and the discharge of excavated material from test wells for oil and gas exploration (the plugging of such wells is authorized). **4.** Any work not commenced nor completed that was authorized in a written letter from the Corps under the PGP in effect between December 18, 2006 and January 20, 2010. The terms and general conditions of this GP apply along with any special conditions in the written authorization.	**1.** Aquatic habitat restoration, establishment, and enhancement of wetlands and riparian areas and the restoration and enhancement of streams and other open waters with impacts of any area ≥5,000 SF, provided those activities result in net increase in overall aquatic resource functions and services.[8] **2.** Projects where an EIS is required by the Corps are not eligible for Category 2.

See Appendix B Definitions for the above footnote references.

II. NAVIGABLE WATERS	**Navigable Waters:** Waters that are subject to the ebb and flow of the tide and federally designated navigable rivers (the Merrimack River, Connecticut River, and Charles River to the Watertown Dam in Massachusetts) (Section 10 Rivers and Harbors Act of 1899). The jurisdictional limits are the mean high water (MHW) line in tidal waters and the ordinary high water (OHW) mark in non-tidal portions of the federally designated navigable rivers. For the purposes of this GP, fill placed in the area between MHW and the high tide line (HTL), and in the bordering and contiguous wetlands[1] to tidal waters are also reviewed in this Navigable Waters section.	
	Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project. All Category 1 and 2 projects must comply with all of this GP's applicable terms (Pages 1 – 5) and general conditions (Pages 6 – 17).	
	CATEGORY 1	**CATEGORY 2**
(a) FILL	**1.** No provisions for new or previously unauthorized fills in Category 1, other than: • Fills authorized under the MA Chapter 91 Amnesty program. (e.g., seawalls or bulkheads). • Discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the U.S., including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided the U.S. Coast Guard issues a bridge permit or appropriate approval. Causeways and approach fills are not included in this category and require Category 2 or Individual Permit authorization. See Appendix J, (8) for information clarifying areas of jurisdiction and responsibilities of the Corps and Coast Guard.	**1.** <1 acre waterway fill and secondary waterway impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills. Temporary fill and/or excavation <1 acre in SAS[6]. No permanent fill or excavation in SAS[6].
(b) REPAIR, REPLACEMENT, & MAINTENANCE WORK	Repair, replacement in kind or maintenance[15] of: • Existing, currently serviceable, authorized fills and structures • Amnesty-approved fills and structures <u>Provided</u>: • No expansion or change in use. • Must be rebuilt in same footprint, however minor deviations in structure design allowed[15].	Repair/maintenance of currently serviceable authorized fills, or replacement of non-serviceable authorized fills, <1 acre, including expansion or a change in use.[15] Repair/maintenance[15] of currently serviceable authorized structures with expansion where the structure (existing + expansion) qualifies for Cat 2 [see (e) below]. Replacement of non-serviceable authorized structures where the structure (existing + expansion, if any) qualifies for Cat 2 [see (e) below].

	CATEGORY 1	CATEGORY 2
(c) DREDGING/ EXCAVATION AND ASSOCIATED DISPOSAL	**1.** Maintenance dredging[16] for navigational purposes <1,000 CY with upland disposal. Includes return water from upland contained disposal area. Provided: • Proper siltation controls are used. • No impacts to SAS[6]. • No dredging in intertidal areas. • Work does not occur during the following time of year (TOY) restrictions for these ocean water regions specified in Appendix B and shown in Figure 2 of the MA DMF Technical Report referenced in GC 24: o Feb 15 - Nov 15 and Dec 1 – Jan 31 in the "North Coast" region; o Feb 01 - Nov 15 and Dec 1 – Jan 31 in the "Cape Cod Bay" region; o Jan 15 - Nov 15 in the "Southern Massachusetts" region. • Work does not occur during the TOY restrictions for any "Navigable Water" stream with a species that has a "*spawning run/habitat present*" listed in Appendix B of the MA DMF Technical Report referenced in GC 24. The TOY restriction for any "Navigable Water" stream not listed in Appendix B is January 15th to November 15th. • See GC 11 for TOY restrictions for work in streams in the Connecticut River watersheds that are stocked with Atlantic salmon.	**1.** Maintenance dredging[16] ≥1,000 CY, new dredging <25,000 CY, or projects not meeting Category 1. Provided: • No impacts to SAS[6]. • Disposal includes: o Upland; o Beach nourishment of any area provided dredging's primary purpose is navigation or sand is from an upland source and Corps, in consultation w/Federal and State agencies, determines the net adverse effects are not more than minimal; or o Open water & confined aquatic disposal, if Corps, in consultation with Federal and State agencies, finds the material suitable. • Includes return water from upland contained disposal areas.
(d) MOORINGS	**1.** New, private, non-commercial, non-rental, single-boat moorings authorized under MGL Chapter 91 Section 10A. Provided: • Authorized by the local harbormaster. • Not associated with any boating facility[10], including those in a Federal Anchorage[10]. • Not located within the buffer zone of the horizontal limits of a Federal Channel[10]. • No interference with navigation. • Not located in SAS[6]. Prior to installation of moorings, a site-specific eelgrass[12] survey should be conducted to document that eelgrass is not present.	**1.** Moorings that don't meet the terms of Category 1 and don't require an Individual Permit. **2.** Moorings associated with a boating facility[10] **3.** Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits of a Federal Channel[10]. (See Appendix G.) The buffer zone is equal to 3 times the authorized depth of that channel. **4.** Moorings and/or their moored vessels within the horizontal limits of a Federal Channel[10] (see Appendix G) are not eligible for Category 2 and require an Individual Permit. **5.** Any work in the area of the Cape Cod Canal[14] located west of the vertical lift railroad bridge as noted in Definition 14 and Appendix K is not eligible for Category 2 and requires an Individual Permit.

	CATEGORY 1	CATEGORY 2
(d) MOORINGS (continued)	**2.** Minor relocation of previously authorized moorings and moored floats. Provided: • Authorized by the local harbormaster. • Cannot be relocated into a Federal Navigation Project[10] other than a Federal Anchorage[10] • No interference with navigation. • Existing moorings not in SAS[6] may not be relocated to SAS[6]. • When existing moorings in SAS[6] are replaced or upgraded, low impact mooring technology that eliminates contact with the bottom substrate at all tides, such as helical anchors and elastic or other floating mooring tackle (i.e., no dragging chains), shall be employed.	
(e) PILE-SUPPORTED STRUCTURES AND FLOATS	**1.** Private, bottom-anchored floats ≤400 SF. **2.** Private, pile-supported structures that aren't boating facilities[9] for navigational access to the waterway ≤400 SF with attached floats totaling ≤200 SF. Provided (for 1 and 2 above): • Floats supported at least 2.5' above the substrate during all tides. • Pile-supported structures & floats are not positioned over vegetated shallows[11] and moored vessels are not positioned over SAS[6]. • No structure located within 25' of any vegetated shallows[11]. • Pile-supported structures: o ≤4' wide and at least a 1:1 height:width ratio[13], o Cross or transverse bracing higher than MHW, o Planks spaced ≥ ¾ inch to permit light penetration (alternate spacing acceptable if in accordance with "Plank Spacing" on Page 17 of MassDEP's "A Guide to Permitting Small, Pile-Supported Docks and Piers," www.mass.gov/dep/water/resources/smaldock.pdf). • Ch. 91 license issued. • Not associated with a boating facility[9]. • Not located within the buffer zone of the horizontal limits of an FNP[11]. • No structure extends across >25% of the waterway width at MLW. • Not located within 25' of the property lines **3.** Piers /structures licensed by Massachusetts Ch. 91 through the Amnesty program.	**1.** Private structures or floats that aren't associated with a new or previously unauthorized boating facility[9] and that don't meet the terms in Cat. 1. **2.** Modifications or expansions to existing, authorized boating facilities[9]. **3.** Pile-supported structures or floats and/or vessels docked or moored at them within the buffer zone of the horizontal limits of a Corps FNP[10]. **4.** Pile-supported structures or floats located such that they and/or vessels docked or moored at them are within the horizontal limits of a Corps FNP[10] are not eligible for Category 2 and require an Individual Permit. **5.** Any work in the area of the Cape Cod Canal[14] located west of the vertical lift railroad bridge as noted in App. K and App. B, Definition 14 is not eligible for Category 2 and requires an Individual Permit. **6.** Establishment of a marina reconfiguration zone is not eligible for Category 2 and requires an Individual Permit.

	CATEGORY 1	CATEGORY 2
(f) MISC.	**1.** Temporary buoys, markers, floats, and similar structures for recreational use during specific events, provided they are removed with 30 days after use is discontinued. **2.** The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard. (See 33 CFR 66, Chapter I, C.) **3.** Oil spill clean-up structures and fill done in accordance with the Massachusetts Contingency Plan 310 CMR 40.0000 or under State emergency certification 310 CMR 10.06. SAS[6] must typically be restored in place at the same elevation. **4.** Fish and wildlife harvesting, enhancement, and attraction devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, and clam and oyster digging, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). This does not authorize artificial reefs or impoundments and semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster, or the use of covered oyster trays or clam racks. No activity in SAS and no hazard to navigation. Note: A Category 1 Notification Form is not required for these devices and activities. **5.** Test plots <100 SF for the planting of wetland species native to the area. No grading, no plant growing devices and no interference with navigation. Temporary structures must be removed within 60 days **6.** Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, tide gages, water recording devices, water quality testing and improvement devices, and similar structures. Structures may not restrict movement of aquatic organisms. No activity results in a hazard to navigation. **7.** Survey activities, such as core sampling, seismic exploratory operations, plugging of seismic shot holes, and other exploratory-type bore holes, exploratory trenching, soil surveys, sampling, and historic resources surveys (but not recovery). This does not authorize fill or work in SAS, permanent structures or the drilling and the discharge of excavated material from test wells for oil and gas exploration (the plugging of such wells is authorized). No activity results in a hazard to navigation.	**1.** Structures or work in or affecting tidal or navigable waters that are not defined under any of the previous headings listed above. Includes, but is not limited to, utility lines, aerial transmission lines, pipelines, outfalls, boat ramps, bridges, tunnels and horizontal directional drilling activities seaward of the MHW line. **2.** New or expansion of existing shellfish aquaculture facilities totaling ≥2 acres in compliance with the Aquaculture Guidelines (see Appendix L) and approved by the MA DMF. **3.** Aquatic habitat restoration, establishment, and enhancement provided those activities are proactive and result in net increases in aquatic resource functions and services.[8] **4.** Specific activities with impacts of any area required to affect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency or Licensed Site Professional with established legal or regulatory authority. Wetlands must typically be restored in place at the same elevation to qualify. **5.** Projects where an EIS is required by the Corps are not eligible for Category 2. **6.** Any work in the area of the Cape Cod Canal[14] located west of the vertical lift railroad bridge as noted in App. B, Definition 14 and Appendix K is not eligible for Category 2 and requires an Individual Permit.

	CATEGORY 1	CATEGORY 2
(f) MISC. (continued)	**8.** Any work not commenced nor completed that was authorized in a written letter from the Corps under the PGP in effect between December 18, 2006 and January 20, 2010. The terms and general conditions of this GP apply along with any special conditions in the written authorization. This does not allow continued disposal of dredged material at the Massachusetts Bay Disposal Site. **9.** New or expansion of existing shellfish aquaculture facilities totaling <2 acres in compliance with the Aquaculture Guidelines (see Appendix L) and approved by the MA DMF. No activity results in a hazard to navigation.	

See Appendix B, Definitions for the above footnote references.

Appendix B: Definitions & Acronyms

Definitions

[1] **Bordering and Contiguous Wetlands:** A bordering wetland is immediately next to its adjacent waterbody and may lie at, or below, the OHW mark (MHW in navigable waters) of that waterbody and is directly influenced by its hydrologic regime. Contiguous wetlands extend landward from their adjacent waterbody to a point where a natural or manmade discontinuity exists. Contiguous wetlands include bordering wetlands as well as wetlands that are situated immediately above the OHW mark and above the normal hydrologic influence of their adjacent waterbody. Note, with respect to the federally designated navigable rivers, the wetlands bordering and contiguous to the tidally influenced portions of those rivers are reviewed under "II. Navigable Waters".

[2] **Direct, Secondary, and Cumulative Impacts/Effects:**

Direct Impacts: The immediate loss of aquatic ecosystem within the footprint of the fill.

Secondary Effects: See 40 CFR 230.11(h). These are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities. Some examples of secondary effects on an aquatic ecosystem are a) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, b) septic tank leaching and surface runoff from residential or commercial developments on fill, c) leachate and runoff from a sanitary landfill located in waters of the U.S., d) work such as pipelines that drains a water of the U.S. by providing a conduit for water on or below the surface, e) groundwater withdrawals from wells that drain surface water from adjacent wetlands or waterbodies. Put another way, secondary effects are those impacts outside the footprint of the fill that arise from and are associated with the discharge of dredged or fill material, including the operation of an activity or facility associated with the discharge. Examples may include habitat fragmentation; interruption of travel corridors for wildlife (e.g., for amphibians that migrate to and from seasonal or vernal pools used as breeding habitat); hydrologic regime changes; and impacts from operation and maintenance activities for facilities constructed on fill placed in waters of the U.S. Using the directions contained in the guidelines, we consider the circumstances of a proposed discharge and the project of which it is a part to evaluate the scope, extent, severity, and permanence of direct, secondary, and cumulative adverse effects upon the aquatic ecosystem.

Cumulative Impacts: The extent of past, present, and foreseeable developments in the area may be an important consideration in evaluating the significance of a particular project's impacts. Although the impacts associated with a particular discharge may be minor, the cumulative effect of numerous similar discharges can result in a large impact. Cumulative impacts should be estimated only to the extent that they are reasonable and practical.

[3] **Construction Mats:** Constructions, swamp and timber mats (herein referred to as "construction mats") are generic terms used to describe structures that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. They are comprised of sheets or mats made from a variety of materials in various sizes. A timber mat consists of large timbers bolted or cabled together. Corduroy roads, which are not considered to be construction mats, are cut trees and/or saplings with the crowns and branches removed, and the trunks lined up next to one another. Corduroy roads are typically installed as permanent structures. Like construction mats, they are considered as fill whether they're installed temporarily or permanently.

[4] **Water Diversions:** Water diversions are activities such as bypass pumping (e.g, "dam and pump") or water withdrawals. Temporary flume pipes, culverts or cofferdams where normal flows are maintained within the stream boundary's confines aren't water diversions. "Normal flows" are defined as no change in flow from pre-project conditions.

[5] **Vernal Pools (VP):** For the purposes of this GP, these are 1) Certified VPs and Potential VPs as defined by the Massachusetts Natural Heritage and Endangered Species Program (NHESP), and 2) depressions that meet the Certification Criteria in NHESP's "Guidelines for the Certification of Vernal Pool Habitat" at www.mass.gov/dfwele/dfw/nhesp/nhesp.htm under "Vernal Pools." The Corps may determine during a Category 2 review that a waterbody should not be regulated as a VP based on available evidence. The Corps VP Management Areas are the: Vernal Pool Depression, Vernal Pool Envelope (area within 100 FT of the VP Depression's edge) and Vernal Pool Critical Terrestrial Habitat (area within 100-750 FT of the VP Depression's edge). When there is no distinct and clear topographic break at the edge of a VP Depression, the maximum observed or recorded extent of flooding represents the ecological boundary of the VP Depression.

[6] **Special Aquatic Sites (SAS):** Includes wetlands and saltmarsh, mudflats, riffles and pools, vegetated shallows, coral reefs, and sanctuaries and refuges which consist of areas designated under State and Federal laws or local ordinances to be managed principally for the preservation and use of fish and wildlife resources. Note: All SAS[6] within the project

area shall be delineated on the plans for Category 2 and IP applications. SAS are identified at 40 CFR 230.40 – 230.45 and defined at 40 CFR 230.4 (q-1) as "significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region."

[7] **In-Lieu Fee or Mitigation Bank Documents:** See www.nae.usace.army.mil/reg/index.htm and then "Mitigation."

[8] **Aquatic Habitat Restoration, Establishment and Enhancement:** The Corps will decide if a project qualifies and must determine in consultation with Federal and State agencies that the net effects are beneficial. The Corps may refer to Nationwide Permit 27 published in the 3/12/07 Federal Register. Activities authorized here may include, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to restore or establish stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands in inland waters**;** the construction of open water areas; the construction of native shellfish species habitat over unvegetated bottom for the purpose of habitat protection or restoration in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

[9] **Boating Facilities:** Facilities that provide for a fee, rent, or sell mooring space, such as marinas, yacht clubs, boat clubs, boat yards, town facilities, dockominiums, etc.

[10] **Federal Navigation Projects (FNPs):** FNPs are comprised of Federal Channels and Federal Anchorages. See Appendix G for their location and contact the Corps for more information. "Horizontal Limits" is the outer edge of an FNP. "Buffer Zone" is equal to three times the authorized depth of that channel.

[11] **Vegetated Shallows:** Subtidal areas that support rooted aquatic vegetation such as eelgrass and widgeon grass (Rupiamaritima). (Doesn't include salt marsh.) These are a type of SAS defined at 40 CFR 230.43.

[12] **Eelgrass (*Zostera marina*):** A type of rooted aquatic vegetation that exists in intertidal and shallow subtidal areas known as vegetated shallows. Contact the Corps for eelgrass survey guidance.

[13] **Height:Width Ratio:** The height of structures shall at all points be equal to or exceed the width of the deck. For the purpose of this definition, height shall be measured from the marsh substrate to the bottom of the longitudinal support beam.

[14] **Cape Cod Canal:** The Individual Permit area begins approximately 1,000 feet west of the Cape Cod Canal vertical lift railroad bridge and continues westerly approximately 3,000 feet along the center line of the channel to the end of the area (NOAA Reference Chart 13236). See Appendix K.

[15] **Maintenance:** In accordance with 33 CFR 323.4(a)(2), any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under Section 404 of the CWA: "Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design." (This could include replacement work if it meets this definition, and stream crossings typically must be an exact replica crossing in the same footprint to qualify.) Otherwise, the following work is regulated and subject to the Category 1 or 2 thresholds above in Appendix A, Pages 3 and 4: The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 – "Activities occurring before certain dates," provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction. Only structures or fills that were previously authorized and are in compliance with the terms and condition of the original authorization can be maintained as a non-regulated activity under 33 CFR 323.4(a)(2), or in accordance with the Category 1 or 2 thresholds in Appendix A. Note: The State's maintenance provisions may differ from the Corps and may require reporting and written authorization from the State.
Maintenance and replacements of stream crossings: An existing stream crossing must be authorized, serviceable, and in compliance with all conditions of its authorization(s) to qualify for maintenance that is not prohibited by or otherwise subject to regulation under Section 404 of the CWA. See 33 CFR 323.4(a)(2). Proponents are encouraged to contact the Corps for guidance.

[16] **Maintenance Dredging:** This includes only those areas and depths previously authorized by the Corps and dredged.

Acronyms

BUAR	Bureau of Underwater Archaeological Resources
Corps	U.S. Army Corps of Engineers
CWA	Clean Water Act
CZM	Coastal Zone Management
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FNP	Federal Navigation Project
GC	General Condition
GP	General Permit
HTL	High Tide Line
ISCP	Invasive Species Control Plan
MA DMF	Massachusetts Division of Marine Fisheries
MA NHESP	Natural Heritage and Endangered Species Program
MassDEP	Massachusetts Department of Environmental Protection
MHC	Massachusetts Historical Commission
MHHW	Mean Higher High Water
MHW	Mean High Water
MLLW	Mean Lower Low Water
MLW	Mean Low Water
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
OHW	Ordinary High Water
SAS	Special Aquatic Sites
SHPO	State Historic Preservation Officer
TOY	Time of Year
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Service
VP	Vernal Pool
WPA	Wetlands Protection Act
WQC	Water Quality Certification

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Appendix C: Category 1 Notification Form

(for all Inland and Navigable Water Projects in Massachusetts)

Submit this **before** work commences to the following address. Call (978) 318-8338 with any questions.

Chief, Permits & Enforcement Branch (MA)
New England District
U.S. Army Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

Permittee: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Contractor: _____
Address, City, State & Zip: _____
Phone(s) and Email: _____

Project Location/Description: _____
Address, City, State & Zip: _____
Latitude/Longitude Coordinates: _____
Waterway Name: _____
Provide any prior Corps permit numbers: _____

Area of wetland impact: _____ SF
Area of waterway impact: _____ SF

Work will be done under the following Appendix A categories (circle all that apply):

I. Inland Waters and wetlands: a b c d e
II. Navigable Waters: a b c d e f

Will American Recovery and Reinvestment Act (ARRA) funds be used for any of this project? _____

Proposed Work Dates: Start: _____ Finish: _____

Your name/signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions of Category 1 of this Massachusetts General Permit.

Permittee Signature: _____ Date: _____

Permittee Printed Name: _____

Appendix D: 401 Water Quality Certification

For work in Corps jurisdiction involving a discharge to waters of the U.S., including wetlands, an Individual 401 WQC must be obtained from or waived by the Massachusetts DEP before work can proceed as authorized by this GP for the following circumstances (pursuant to MGL c. 21 Sections 26 - 53 and regulations at 314 CMR 9.00). The following are from the MassDEP regulations at 314 CMR 9.04: Activities Requiring an Application, and require an Individual 401 WQC application:

(1) *More than 5000 SF.* Any activity in an area subject to 310 CMR 10.00 which is also subject to 33 USC 1251, et seq. and will result in the loss of more than 5000 SF cumulatively of bordering and isolated vegetated wetlands and land under water.

(2) *Outstanding Resource Waters. Dredging in, or a*ny activity resulting in any discharge of dredged or fill material to any Outstanding Resource Water.

(3) *Real Estate Subdivision* - Any discharge of dredged or fill material associated with the creation of a real estate subdivision, unless there is a valid, unexpired Final Order of Conditions, followed by a Certificate of Compliance, and a recorded deed restriction providing notice to subsequent purchasers limiting the amount of fill for the single and complete project to less than 5000 square feet cumulatively of bordering and/or isolated vegetated wetlands and land under water and the discharge is not to an Outstanding Resource Water. Real estate subdivisions include divisions where approval is required and where approval is not required under the Subdivision Control Law, MGL. c. 41, §81K through 81GG. Discharges of dredged or fill material to create the real estate subdivision include but are not limited to discharges resulting from the construction of roads, drainage, sidewalks, sewer systems, buildings, septic systems, wells, and accessory structures.

(4) *Activities Exempt under MGL. c. 131, §40.* Any activity not subject to MGL. c. 131, §40 and which is subject to 33 USC 1251, et seq. and will result in any discharge of dredged or fill material to bordering vegetated wetlands or land under water except for the use of construction mats as temporary fill for utility maintenance when done in accordance with the construction mat thresholds specified in Appendix A, Page 1, Category 1 of the Corps Massachusetts GP provided that temporary fill placed within an area of State listed rare species has an Operation and Maintenance Plan approved by the Massachusetts Natural Heritage Program, and temporary fill placed within an Outstanding Resource Water shall require the filing of an Individual WQC and a Variance Request when required pursuant to 314 CMR 9.06(3).

(5) *Routine Maintenance.* Routine maintenance of existing channels, such as mosquito control projects or road drainage maintenance, that will result in the annual loss of more than 5000 square feet cumulatively of bordering and isolated vegetated wetland and land under water will be evaluated under the criteria of 314 CMR 9.06. A single application may be submitted and a single certification may be issued for repeated routine maintenance activities on an annual or multi-year basis not to exceed five years.

(6) *More than 5000 sq. ft. of Isolated Vegetated Wetlands.* Any activity in an area not subject to jurisdiction of MGL. c. 131, §40 but which is subject to 33 U.S.C.1251, et seq. (i.e., isolated vegetated wetlands) which will result in the loss of more than 5000 square feet cumulatively of bordering and isolated vegetated wetlands and land under water.

(7) *Rare and Endangered Species Habitat in Isolated Vegetated Wetlands.* Any activity resulting in the discharge of dredged or fill material to an isolated vegetated wetland that has been identified as habitat for rare and endangered species.

(8) *Salt Marsh.* Any activity resulting in the discharge of dredged or fill material in any salt marsh.

(9) *Individual 404 Permit.* Any activity that is subject to an Individual Permit under Section 404 of the Clean Water Act by the Corps of Engineers.

(10) *Agricultural Limited Project.* Agricultural work, not exempt under MGL. c. 131, §40, referenced in and performed in accordance with 310 CMR 10.53(5). Provided the activity does not result in any discharge of dredged or fill material to an Outstanding Resource Water, such work will be presumed to meet the criteria of 314 CMR 9.06 where a comparable alternatives analysis is performed or approved by the Natural Resources Conservation Service and included in the Notice of Intent.

(11) *Discretionary Authority.* Any activity where the Department invokes discretionary authority to require an application based on cumulative effects of multiphased activities, cumulative effects of dredging, or from the discharge of dredged or fill material to bordering or isolated vegetated wetlands or land under water, or other impacts that may jeopardize water quality. The Department will issue a written notice of and statement of reasons for its determination to invoke this discretionary authority not later than ten business days after its receipt of an Order of Conditions.

(12) *Dredging Greater than 100 c.y.* Any dredging or dredged material disposal of more than 100 cubic yards not meeting the requirements of 314 CMR 9.03(3).

(13) Any activity not listed in 314 CMR 9.03 or 314 CMR 9.04 is an activity requiring an application subject to the requirements of 314 CMR 9.05 and 9.06 through 9.13 as applicable.

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Appendix E: Information Required Checklist

(Category 2 & Individual Projects)

All applicants for Category 2 and Individual Projects must submit this checklist with their application to the MassDEP or Corps (see Page 4 of this GP) and include at least the following information. Project applications will be considered complete upon 1) the Corps receipt of the necessary information in this checklist and 2) the MassDEP site inspection. For a more comprehensive checklist, see www.nae.usace.army.mil/reg/index.htm, "Forms" and then "Application and Plan Guideline Checklist." Check with our office for project-specific requirements.

Applicant: _____ Date: _____
Address: _____
City, State & Zip Code: _____

All Projects:

- ☐ MassDEP 401 WQC or Chapter 91 application forms (see Page 3, III.3) or Corps application form as appropriate.
- ☐ The MHC PNF must be submitted to the appropriate groups as required in the Applying for a Permit section on Page 4. A copy of the dated cover letters to the appropriate groups or copies of their response letters shall be submitted to the Corps.
- ☐ Purpose of the project.
- ☐ Legible, reproducible, black and white (no color) plans no larger than 11"x17" with bar scale. Provide locus map with horizontal state plane coordinates (see below) and plan views of the entire property.
- ☐ Typical cross-section views of all wetland and waterway fill areas and wetland replication areas.
- ☐ On each plan, show the following for the project when applicable:
- ☐ Vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. Don't use local datum;
- ☐ Horizontal state plane coordinates in U.S. survey feet based on the Massachusetts Mainland Zone 2001 or Massachusetts Island Zone 2002 NAD 83.
- ☐ Show project limits with existing and proposed conditions.
- ☐ Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below the ordinary high water in inland waters and below the high tide line in coastal waters.
- ☐ Photographs of wetland/waterway to be impacted.
- ☐ Provide information on secondary and cumulative effects associated with the project. See GC 3.
- ☐ Provide information on any Federal or State authorized work, wetland/waterway fill, or conservation restrictions or easements associated with the project. See GC 5.
- ☐ The name(s) of federal endangered and threatened "listed species or habitat" present in the action area (see GC 10).
- ☐ The Corps will review alternatives analysis submitted to the DEP for WQC review. Include any additional information compiled on alternatives. See GC 15.
- ☐ A statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

Inland Waters

- ☐ Delineation of all waters of the United States on the project site, including special aquatic sites and vernal pools. Use federal delineation methods and include Corps wetland delineation data sheets (see GC 2, and Appendix B, Definitions 1, 5, 6, 11 and 12).
- ☐ Invasive Species Control Plan (see GC 27).

Stream Crossings [see the design and construction manual referenced in Appendix J, (6)].

(1) Plans showing the following information:

- ☐ Structure location including inlet and outlet inverts located with x, y, z coordinates or equivalent and taken from the long profile.
- ☐ Extension of channel excavation and filling.
- ☐ Road locations, edges, centerline, geometric description of curvature, widths, and curve widening, p-line or x, y, z coordinates.
- ☐ Channel work identified including bank erosion control features, grade control, and channel linings.
- ☐ Estimated drainage area at the crossing location.

(2) Streambed details, with figures, which show the following:

- ☐ The distance from the top of the right bank to the top of the left bank.
- ☐ Average stream approach channel slope and percent gradient within the crossing, measured using a clinometer, hand level or other survey equipment.
- ☐ A shaped streambed in the structure, usually sloping downward toward the center to form a low-water channel.
- ☐ Approximate elevations, spacing, diameters, and locations of rocks for steps, bankline, and other channel rocks for roughness.
- ☐ Details for sediment retention structures, if any, within embedded structures.
- ☐ A visual estimate of dominant channel materials upstream, downstream, and if applicable, within the existing crossing.
- ☐ The streambed simulation materials and its extent, depth and length within the crossing.
- ☐ Pebble count upstream, downstream, and if applicable, within the existing crossing.
- ☐ Channel information for the design reference reach including bank full width, bankfull depth, entrenchment ratio, sinuosity, flood prone width, a long profile that is 7-10 bankfull widths long with grade controls, pools and gradients shown, an appropriate reference reach cross section with channel details, reference reach pebble count, including a narrative explaining why the cross section is considered representative.

(3) Existing crossing metrics on the plan, including:

- ☐ Existing riparian zone, including the extent and type of existing vegetation surrounding or in the stream bank.
- ☐ Existing crossing type and dimensions, including material, length, and dimensions.
- ☐ Existing tailwater control, including its location and materials, and pool configuration.

(4) The dewatering system as follows:

- ☐ Estimates of the maximum flow anticipated during construction, including any summer storm estimates;
- ☐ Location, height, and width of the diversion dam.
- ☐ Sump locations, including estimate of necessary flow and sump capacity.
- ☐ Backwater prevention method.
- ☐ Sediment treatment plan with methods, release point, and extent.

(5) Structural details of the crossing, including the following:

- Structural section, gauge or thickness, and material, minimum and maximum cover limits;
- Structures, drawn to scale, on elevation view showing bed material location relative to structure, and special backfill zones;
- Structural excavation quantity and total excavation estimate.
- Footing depth and width for spans (bottomless arches, open-bottom culverts, bridges, etc.

(6) Impact Analysis:

- Crossing impact assessment to wildlife and fisheries and aquatic organisms (pre- and post design) including direct and secondary impacts.
- Replacements: an analysis of current crossing compatibility, stability of upstream and downstream channel and bank, recent scour events, systems analysis on hydrology, ecological stability and sediment loading.

Waters subject to the ebb and flow of the tide

- On each plan show the vertical datum and the NAVD 1988 equivalent with the vertical units as U.S. feet. Don't use local datum. In coastal waters this may be mean higher high water (MHHW), mean high water (MHW), mean low water (MLW), mean lower low water (MLLW) or other tidal datum with the vertical units as U.S. feet. MLLW and MHHW are preferred. Provide the correction factor detailing how the vertical datum (e.g., MLLW) was derived using the latest National Tidal Datum Epoch for that area, typically 1983-2001.
- Show the high tide line (HTL) elevations when fill is involved
- Limits of any Federal Navigation Project in the vicinity of the project area and horizontal State Plane Coordinates in U.S. survey feet for the limits of the proposed work closest to the Federal Navigation Project;
- Delineation of all waters of the United States on the project site, including special aquatic sites and vegetated shallows (e.g., eelgrass beds). Use federal delineation methods and include Corps wetland delineation data sheets (See GC 2, and Appendix B - Definitions 5 and 6).
- Identify and describe potential impacts to Essential Fish Habitat (see GC 11).

Information typically required for dredging projects:

- Sediment testing, including physical (e.g., grain-size analysis), chemical and biological testing. For projects proposing open water disposal, applicants are encouraged to contact the Corps as early as possible regarding sampling and testing protocols. Sampling and testing of sediments without such contact should not occur and if done, would be at the applicant's risk.
- The area in square feet and volume of material to be dredged below mean high water.
- Existing and proposed water depths.
- Resource areas (e.g., submerged aquatic vegetation and special aquatic sites) within the project area shall be delineated and shown on the project plans. See Appendix B, Definitions 6, 11 and 12.
- Show the dredge and beach nourishment area limits and impact area limits on the plans. Provide the horizontal state plane coordinates in U.S. survey feet based on the Massachusetts Mainland Zone 2001 or Massachusetts Island Zone 2002 NAD 83 for each corner of each dredging and beach nourishment area. This will assist with protecting resource areas by preventing the slumping of sediment or peat, avoiding the dredging eelgrass, etc,
- Type of dredging equipment to be used.
- Nature of material (e.g., silty sand).
- Any existing sediment grain size and bulk sediment chemistry data for the proposed or any nearby projects.
- Information on the location and nature of municipal or industrial discharges and occurrence of any contaminant spills in or near the project area.
- Location of the disposal site (include locus sheet).
- Identify and describe potential impacts to Essential Fish Habitat (see GC 11).

Appendix F: Contacts and Tribal Areas of Interest

1. FEDERAL

U.S. Army Corps of Engineers
Regulatory Division
696 Virginia Road
Concord, Massachusetts 01742-2751
(978) 318-8338, (800) 362-4367 (MA)
(800) 343-4789 (ME, VT, NH, RI, CT)

Wild and Scenic Rivers:
National Park Service
15 State Street
Boston, Massachusetts 02109
(617) 223-5191

Bridge Permits
Commander (obr)
First Coast Guard District
One South Street – Battery Bldg
New York, NY 10004
(212) 668-7021

Federal Endangered Species and Essential Fish Habitat:
National Marine Fisheries Service
55 Great Republic Drive
Gloucester, Massachusetts 01930
(978) 281-9300

Federal Endangered Species:
U.S. Fish and Wildlife Service
70 Commercial Street, Suite 300
Concord, New Hampshire 03301
(603) 223-2541

2. STATE OF MASSACHUSETTS

Department of Environmental Protection (DEP):

DEP Division of Wetlands and Waterways
One Winter Street
Boston, Massachusetts 02108
(617) 292-5695

DEP Regional Offices:

DEP-Western Regions
Wetlands Protection Program
436 Dwight Street
Springfield, Massachusetts 01103
(413) 784-1100

DEP-Southeast Region
Wetlands Protection Program
20 Riverside Drive, Route 105
Lakeville, Massachusetts 02347
(508) 946-2800

DEP-Central Region
Wetlands Protection Program
627 Main Street
Worcester, Massachusetts 01608
(508) 792-7650

DEP-Northeast Region
Wetlands Protection Program
205B Lowell Street
Wilmington, Massachusetts 01887
(978) 694-3200

Massachusetts Office of Coastal Zone Management (CZM)
Coastal Zone Management
251 Causeway Street, Suite 800
Boston, Massachusetts 02114
(617) 626-1200

Massachusetts Board of Underwater Archaeological Resources (BUAR)
251 Causeway Street, Suite 800
Boston, Massachusetts 02114
(617) 626-1141, (617) 626-1240 (fax)
victor.mastone@state.ma.us
Area of concern: All Massachusetts lakes, ponds, rivers and navigable waters.

3. HISTORIC PROPERTIES:

- State Historic Preservation Officer (SHPO)
  Massachusetts Historical Commission (MHC)
  The Massachusetts Archives Bldg.
  220 Morrissey Boulevard
  Boston, Massachusetts 02125
  (617) 727-8470; (617) 727-5128 (fax)
  Area of concern: All of Massachusetts

- Wampanoag Tribal Historic Preservation Officer
  Wampanoag Tribe of Gay Head (Aquinnah)
  20 Black Brook Road
  Aquinnah, MA 02535
  (508) 645-9265; (508) 645-3233 (fax)
  Area of concern: All of Massachusetts

- Mashpee Wampanoag Tribe
  Tribal Historic Preservation Authority
  P.O. Box 1048
  Mashpee, Massachusetts 02649
  (508) 419-6017, x601,
  Area of concern: Plymouth, Barnstable & Bristol Counties

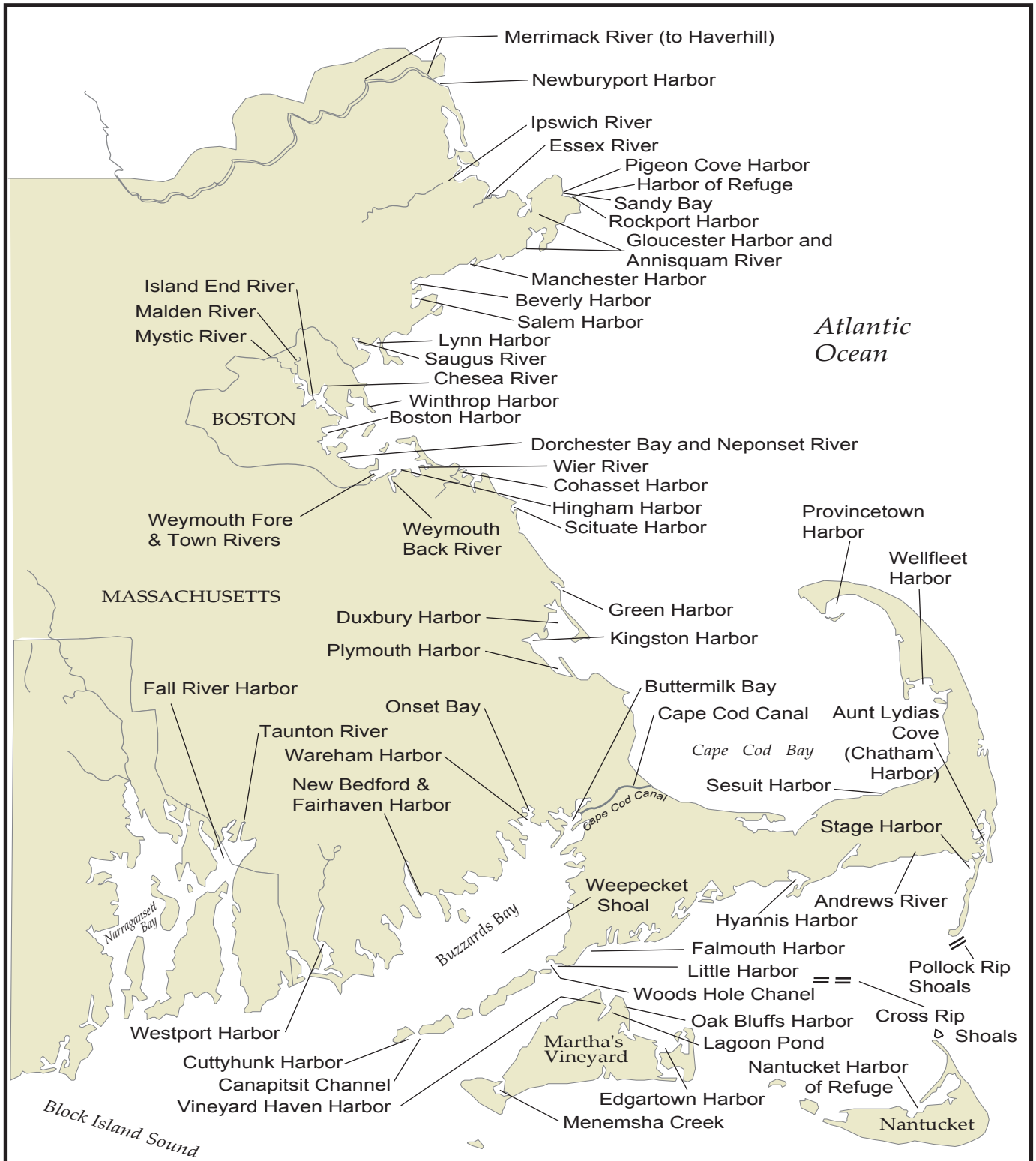
- Tribal Historic Preservation Officer
  c/o Stockbridge-Munsee Community
  P.O. Box 70
  Bowler, Wisconsin 54416
  (715) 793-3970
  Area of concern: West of Connecticut River

- Narragansett Tribal Historic Preservation Officer
  P.O. Box 350
  Wyoming, Rhode Island 02898
  (401) 539-7626 (phone), (401) 862-5106 (cell), (401) 539-4217 (fax),
  Area of Concern: Boston and its surrounding neighborhoods; Lynn; Newton; these cities and towns in Plymouth County (Carver, Duxbury, Hingham, Kingston, Marshfield, Middleborough, Plymouth, Plympton, Scituate); these cities and towns in Norfolk County (Milton, Quincy, Braintree, Randolph, Canton, Sharon and Foxborough); the Blackstone River valley and the cities and towns west of Worcester (which are those including and west of Ashburnham, Westminster, Princeton, Holden, Paxton, Leicester, Oxford and Webster).

- Massachusetts Board of Underwater Archaeological Resources (BUAR) (see previous page)

4. ORGANIZATIONAL WEBSITES:

Army Corps of Engineers	www.nae.usace.army.mil/reg/index.htm
Environmental Protection Agency	www.epa.gov/owow/wetlands/
National Marine Fisheries Service	www.nmfs.noaa.gov
U.S. Fish and Wildlife Service	www.fws.gov
National Park Service	www.nps.gov/rivers/index.html
Federal Emergency Management Agency	www.fema.gov
MA Executive Office of Environmental Affairs	www.state.ma.us/envir
MA Department of Environmental Protection	www.state.ma.us/dep (access the four regional offices)
MassDEP, Division of Wetlands	www.state.ma.us/dep/brp/ww/rpwwhome.htm
MassDEP, Division of Waterways	www.state.ma.us/dep/brp/waterway/waterway.htm
MA Division of Marine Fisheries	www.state.ma.us/dfwele/dmf/
MA Div. of Fisheries & Wildlife	www.state.ma.us/dfwele/dfw/dfw_toc.htm
MA Endangered Species Program	www.state.ma.us/dfwele/dfw/nhesp/heritage.htm
MA Coastal Zone Management	www.state.ma.us/czm
MassGIS	www.state.ma.us/mgis/massgis.htm
MA Historical Commission	www.state.ma.us/sec/mhc
MA Board of Underwater Archaeological Resources	www.mass.gov/czm/buar/index.htm
Mashpee Wampanoag Tribe	http://mashpeewampanoagtribe.com
Narragansett Tribe	www.narragansetttribe.com
Stockbridge-Munsee Tribe	www.mohican.com
Wampanoag Tribe of Gayhead (Aquinnah)	www.wampanoagtribe.net



Federal Navigation Projects
Commonwealth of Massachusetts

Department of the Army
U.S. Army Corps of Engineers, New England District
Concord, Massachusetts

Appendix H: Wild and Scenic Rivers

The Corps will consult with the National Park Service (NPS) on projects qualifying for Category 2 with regard to potential impacts of the proposed work on the resource values of the wild and scenic river. The culmination of this coordination will be a determination by the NPS and the Corps that the work: (1) may proceed as proposed; (2) may proceed with recommended conditions; or (3) could pose a direct and adverse effect on the resource values of the river and an Individual Permit is required. If preapplication consultation between the applicant and the NPS has occurred whereby NPS has made a determination that the proposed project is appropriate for authorization under this GP (with respect to Wild and Scenic River issues), this determination should be furnished to the Corps with submission of the application.

National Wild and Scenic Rivers System segments for Massachusetts as of April 2009 include:

Sudbury/Assabet/Concord Rivers: the Sudbury from the Danforth Street bridge in Framingham downstream to the confluence with the Assabet, the Assabet from 1,000 feet below the Damon Mill Dam downstream to the confluence with the Sudbury, and the Concord from the confluence of the Sudbury and Assabet downstream to the Route 3 bridge in Billerica.

Westfield River: Shaker Mill Brook from Brooker Hill Road in Becket to its headwaters. The Upper East Branch from the Windsor/Cummington town line to its confluence; Upper East Branch Tributaries including Drowned Land Brook, Center Brook and Windsor Jambs Brook. Headwater tributaries of the West Branch, including Shaker Mill Brook from Brooker Hill Road in Becket to its confluence with the West Branch; Depot Brook; Savery Brook; Watson Brook; and Center Pond Brook from Center Pond to its confluence with the West Branch. The Lower Middle Branch, East Branch, and Main Stem in the Town of Huntington (3.2 miles) and the Upper East Branch from its confluence with Sykes Brook to its confluence with the West Branch.

Taunton River: From the confluence of the Town River and Matfield River in Bridgewater downstream to Mt. Hope Bay at the Rte 195 bridge in Fall River.

Appendix I: Essential Fish Habitat (EFH)

As part of the application review process, the Corps will coordinate with NMFS in accordance with the 1996 amendments to the Magnuson-Stevens Fishery and Conservation Management Act to protect and conserve the habitat of marine, estuarine and anadromous finfish, mollusks, and crustaceans. This habitat is termed "Essential Fish Habitat" (EFH) and is broadly defined to include "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." Project proponents may contact NMFS (see Appendix F) or go to www.nero.noaa.gov/hcd for additional EFH information. This website contains EFH Regulations 50 CFR 600, the "Guide to EFH Consultations," and EFH locations at "Guide to EFH Designations."

The following streams are stocked with Atlantic salmon (*Salmo salar).* Note that the mainstems of the Connecticut and Merrimack Rivers are navigable waters of the U.S. Appendix A, Navigable Waters, (a) Fill, Page 4 states, "No provisions for new fills in Category 1." Page 5 provides dredging thresholds. Any questions on locations should be directed to the Corps.

Merrimack River Watershed

Pepperell:	Nissitissit River to Nashua River, Nashua River from Nissitissit River to New Hampshire border

Connecticut River Watershed

Agawam:	Westfield River
Ashfield:	Bear River, South River to Baptist Corner Road
Athol:	Millers River
Becket:	Depot Brook, Shaker Mill Brook, Walker Brook to Spark Brook, West Branch Westfield River, Yokum Brook to Rudd Pond Brook
Bernardston:	Fall River
Blandford:	Wigwam Brook
Buckland:	Deerfield River
Charlemont:	Chickley River, Cold River, Deerfield to Pelham Brook, North River, Pelham Brook
Chester:	Middle Branch Westfield River, Walker Brook, West Branch Westfield River
Chesterfield:	Child's Brook West Branch, Dead Branch, Tower Brook, Westfield River
Colrain:	North River, East Branch North River, West Branch North River, Green River
Conway:	Bear River, Deerfield River, Poland Brook, South River
Cummington:	Bartlett Brook, Child's Brook West Branch, Meadow Brook, North Branch Swift River to Stage Road, Swift River, Westfield Brook, Westfield River
Deerfield:	Deerfield River
Easthampton:	Manhan River to North Branch Manhan River, North Branch Manhan River
Erving:	Millers River
Florida:	Cold River
Gill:	Fall River
Goshen:	Swift River
Greenfield:	Allen Brook, Deerfield River, Fall River, Green River
Hatfield:	Mill River to West Brook
Hawley:	Chickley River to King Brook, Mill Brook to Gorge Hill Road
Huntington:	Dead Branch to Westfield River, Little River, Middle Branch Westfield River Pond Brook to Searle Road, Roaring Brook to Mica Mill Road, West Branch Westfield River, Westfield River
Leverett:	Sawmill River

Leyden:	Green River
Middlefield:	Factory Brook, Middle Branch Westfield River to Tuttle Brook, West Branch Westfield River
Montague:	Millers River, Sawmill River
Montgomery:	Westfield River, Roaring Brook
Northampton:	North Branch Manhan River
Orange:	Millers River
Plainfield:	Bartlett Brook to Prospect Street, Meadow Brook to Gloyd Street
Rome:	Pelham Brook to Rice Brook
Royalston:	Millers River to Birch Hill Dam
Russell:	Bradley Brook, Potash Brook, Stage Brook, Westfield River
Savoy:	Cold River to Black Brook, Westfield River to Griffin Hill Road
Shelburne:	Allen Brook, Deerfield River, North River
Shutesbury:	Sawmill River
Southampton:	North Branch Manhan River
Southwick:	Munn Brook
Washington:	Depot Brook to Frost Road
Wendell:	Millers River
Westfield:	Little River to Munn Brook, Moose Meadow Brook to Mass Turnpike, Munn Brook, Westfield River
Westhampton:	Dead Branch, North Branch Manhan River to Northwest Road
W.Springfield:	Westfield River
Whately:	West Brook to Haydenville Road
Windsor:	Westfield Brook to East Windsor Road, Westfield River
Worthington:	Bronson Brook, Child's Brook West Branch, Little River to Goss Hill Road, Middle Branch Westfield River to Tuttle Brook

Appendix J: Additional References

1. Applying for a Permit, Page 4.

(a) These forms are available at our website[1].

- For the Corps application form, go to "Forms" and then "Application for Department of the Army Permit."
- For the SHPO/MHC PNF form and guidance, go to "Programmatic General Permits" and then "Massachusetts."

(b) For the MassDEP's application forms, go directly to www.mass.gov/dep/water/approvals/wwforms.htm.

2. GC 5:

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Single and complete linear project: For linear projects, the term ''single and complete project'' is defined as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers and includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term ''single and complete project'' is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of ''independent utility'').

3. GC 15: Avoidance, Minimization and Compensatory Mitigation.

(a) See Corps website[1] under "Mitigation" to view the April 10, 2008 "Final Compensatory Mitigation Rule" (33 CFR 332) and related documents. The Q&A document states: "In order to reduce risk and uncertainty and help ensure that the required compensation is provided, the rule establishes a preference hierarchy for mitigation options. The most preferred option is mitigation bank credits, which are usually in place before the activity is permitted. In-lieu fee program credits are second in the preference hierarchy, because they may involve larger, more ecologically valuable compensatory mitigation projects as compared to permittee-responsible mitigation. Permittee-responsible mitigation is the third option, with three possible circumstances: (1) conducted under a watershed approach, (2) on-site and in kind, and (3) off-site/out-of-kind.

(b) In-lieu fee may be used as compensatory mitigation to protect, benefit and improve marine fish habitat in Massachusetts. See the MA In-Lieu Fee Mitigation Program Fact Sheet on our website[1] under "Mitigation."

(c) Information on minimizing impacts within the vernal pool terrestrial habitat can be found in:

i. Best Development Practices: Conserving pool-breeding amphibians in residential and commercial development in the northeastern U.S., Calhoun and Klemens, 2002. Chapter III, Management Goals and Recommendations, pages 15 - 26, is particularly relevant. (Available for purchase at www.maineaudubon.org/resource/index.shtml and our website[1] under "Vernal Pools.")

ii. Science and Conservation of Vernal Pools in Northeastern North America, Calhoun and deMaynadier, 2008. Chapter 12, Conservation Recommendations section, page 241, is particularly

[1] www.nae.usace.army.mil/reg/index.htm

relevant. (Available for purchase via the internet. Chapter 12 is available on our website[1] under "Vernal Pools."

4. GCs 18 and 27: Invasive Species.
(a) Information on preparing an ISCP and what are considered "invasive species," is provided in the "New England District Compensatory Mitigation Guidance" on our website[1] under "Mitigation."
(b) Additional ISCP Guidance and sample ISCPs are provided on our website[1] under "Invasive Species."
(c) The June 2009 "Corps of Engineers Invasive Species Policy" is on our website[1] under "Invasive Species" and provides policy, goals and objectives.

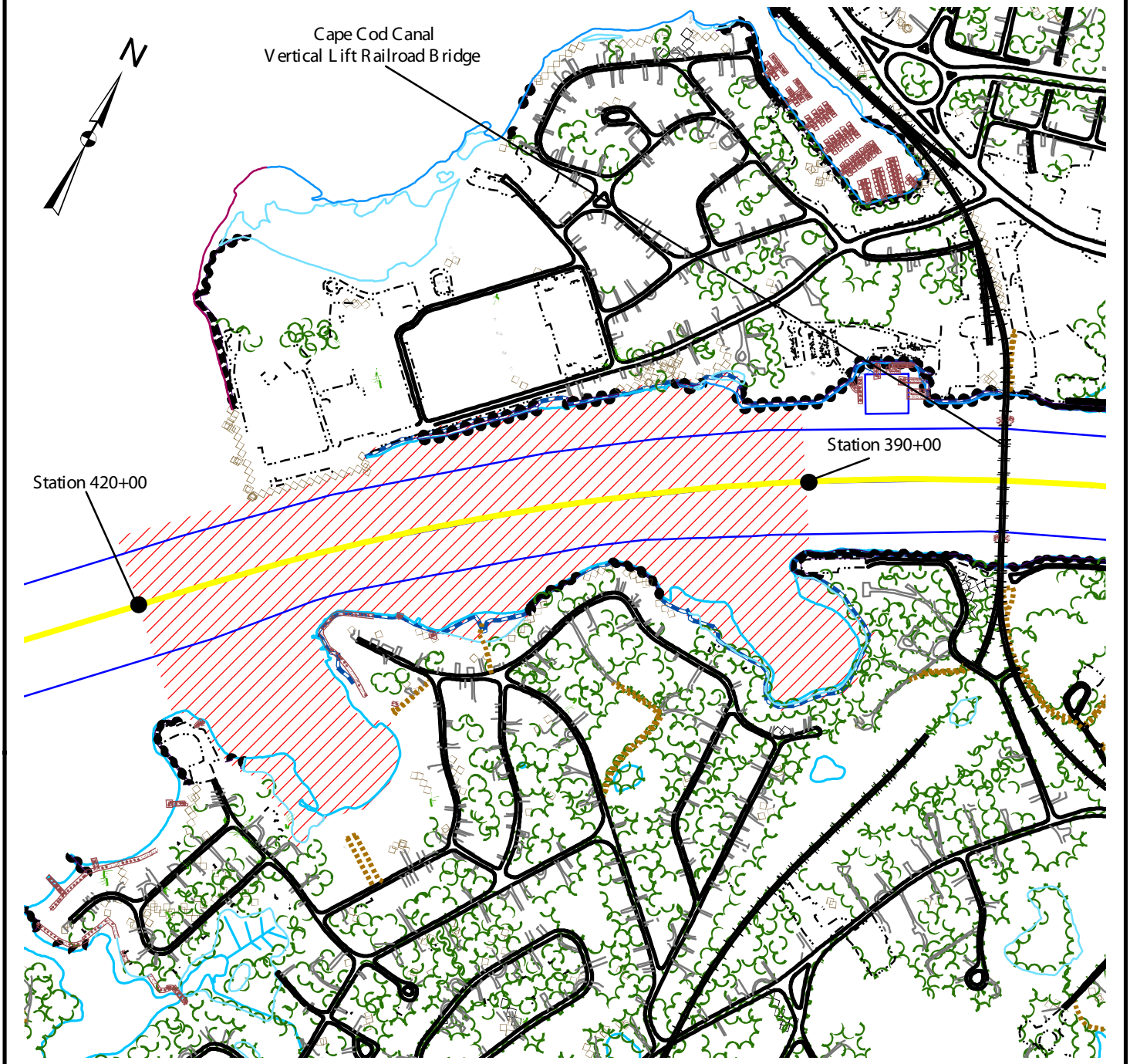
5. GC 20: Bank Stabilization. This generally eliminates bodies of water where the reflected wave energy may interfere with or impact on harbors, marinas, or other developed shore areas. A revetment is sloped and is typically employed to absorb the direct impact of waves more effectively than a vertical seawall. It typically has a less adverse effect on the beach in front of it, abutting properties and wildlife. See the Corps Coastal Engineering Manual EM 1110-2-1100 at our website[1] under "Useful Links and Documents" for design and construction guidance.

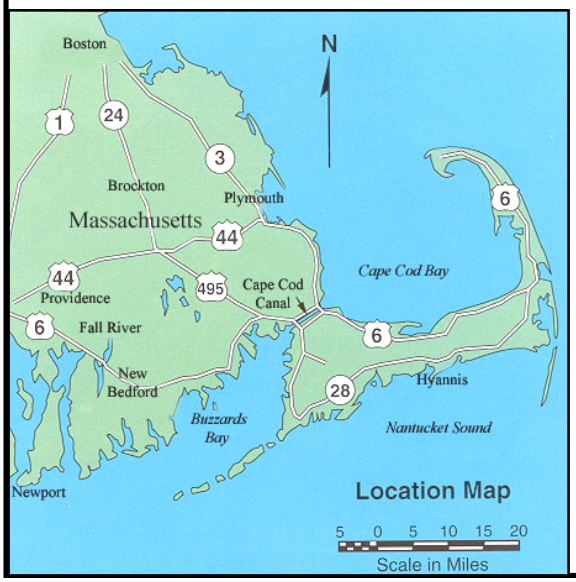
6. GC 21: Stream Crossings and Work.
(a) The version of the "Massachusetts River and Stream Crossing Standards" that must be used to comply with this GP is provided on our website[1] under "Stream and River Continuity."
(b) Projects should be designed and constructed to ensure long-term success using the most recent manual located on our website[1] under "Stream and River Continuity," currently "Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings, by the U.S. Forest Service." Section 5.3.3 is of particular importance. Sections 7.5.2.3 Construction Methods and 8.2.11 Stream-Simulation Bed Material Placement both show important steps in the project construction.
(c) The Massachusetts Dam Removal and the Wetland Regulations guidance may be used to evaluate the positive and negative impacts of culvert replacement, including the loss of upstream wetlands which may be offset by the overall benefits of the river restoration. Section VII, Wetland Impacts, is particularly relevant. See our website[1] and then "Stream and River Continuity."
(d) GC 21(f)(iv): The Skidder Bridge Fact Sheet on our website[1] under "Stream and River Continuity" may be a useful temporary span construction method.

7. GC 29: Maintenance. River restoration projects that are designed to accommodate the natural dynamic tendencies of the fluvial system are maintained in accordance with the project's design objectives (Cat. 1) or the Corps authorization letter (Category 2). These projects are generally designed to support and implement channel assessment and management practices that recognize a stream's natural dynamic tendencies.

8. Appendix A. The U.S. Coast Guard and Corps 1973 Memorandum of Agreement (MOA) and Guidance is provided on our website[1] under the heading "Useful Links and Documents."

[1] www.nae.usace.army.mil/reg/index.htm





[11] Cape Cod Canal: The Individual Permit area begins approximately 1,000 feet West of the Cape Cod Canal Vertical Lift Railroad Bridge and continues westerly approximately 3,000 feet along the center line of the channel to the end of the area (NOAA Reference Chart 13236).

US Army Corps of Engineers ®
New England District

Map printed on January 30, 2003

Cape Cod Canal Individual Permit Area

LEGEND

- Channel Limits
- Center Line
- Area (approximate) requiring Individual Permits for pile supported structures and floats from Stations 390+00 to 420+00.

Appendix L: Aquaculture Guidelines

NOTE: The following guidelines are excerpted from the Corps Aquaculture Letter of Permission dated September 1, 1991, with some modern clarifications.

Shellfish Aquacultural Facilities are used for bottom and/or suspended culturing and harvesting of bivalve mollusks in the inter-tidal and immediate sub-tidal area of navigable waters. Activities covered include: deployment and maintenance of buoys, rafts, trays, lines, and other equipment associated with the activity; discharge of minor quantities of fill material (i.e. as mineral growth medium) and work, including seed placement, transplanting, temporary wet storage, and harvesting. Activity must be found to have minimal impacts on navigation and the environment and must meet the following specific criteria:

1. The area authorized for this activity shall not exceed 10 acres, except where the permittee is a duly authorized municipality, for which the maximum size shall be 25 acres.

2. The area and any elevated structures within it are marked in conformance with 33 CFR 64, and the permittee has contacted the U.S. Coast Guard, *First District,* Aids to Navigation Branch (617) 223-8347, to coordinate the proper buoy markings for the activity. Buoys shall be deployed and maintained as appropriate.

3. Rafts and other floating equipment may be allowed to the extent that they cover no more than 10% of the project area, or 20,000 square feet, whichever is greater. An area shall be considered to be covered with floating equipment if normal navigation through the area is precluded. Projects which are in-place and authorized by the municipality (and MA Division of Marine Fisheries if applicable*) by 1 September 1991* which have areas containing floating equipment exceeding the aforementioned limits may be authorized if they meet the remaining criteria. All rafts shall be securely anchored to the bottom, and all "lines" shall be attached to fixed mooring points at both ends.

4. Any fill material imported to the project from off site *(this is limited to mineral growth medium used in culture trays)* shall be clean and of comparable grain size to the native substrate.

5. No activity shall occur within a distance of 25 feet from beds of eelgrass, widgeongrass, or saltmarsh, nor shall such vegetation be damaged or removed.

6. An activity shall be deemed not applicable under this GP if it can be shown that the activity, including any vehicular access, will have more than minimal negative impacts on avian resources such as, but not limited to: shore birds, wading birds, or members of the waterfowl group. This is meant to include migratory bird nesting, feeding or resting activities (see 50 CFR 10.13).

7. An activity shall be deemed not applicable under this GP if it can be shown that the activity, including any vehicular access, will have more than minimal negative impacts on existing or naturally occurring beds or population of shellfish, marine worms or other invertebrates that could be used by humans, other mammals, birds, reptiles, or predatory fish.

8. No activity nor vehicular access to an activity shall occur in such a way as to negatively impact coastal or freshwater wetlands, or any endangered or threatened species on either the federal or Massachusetts species list.

9. Aquaculture applicants do not need to notify the SHPO/MHC as stated in the application procedures on Page 4 of this GP since these projects are unlikely to affect historic or archaeological resources. However the BUAR and four tribes do require notification.