DEPARTMENT OF THE ARMY
REGIONAL GENERAL PERMIT
FOR
CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD (TMDL) ACTIVITIES

PERMIT NO: NAB-2014-00602

EFFECTIVE DATE: July 01, 2015 **EXPIRATION DATE: June 30, 2020**

ISSUING OFFICE: U.S. Army Corps of Engineers, Baltimore District

The Baltimore District of the U.S. Army Corps of Engineers (Corps) is issuing this Chesapeake Bay Total Maximum Daily Load Regional General Permit (Bay TMDL RGP) for activities in waters of the U.S., including jurisdictional wetlands, that are part of an acceptable watershed strategy, such as a Chesapeake Bay TMDL Watershed Implementation Plan (WIP), whose purpose is to identify implementation activities needed to meet nutrient and sediment load reduction targets in accordance with the Chesapeake Bay TMDL. Activities authorized by this Bay TMDL RGP include, but are not limited to, the retrofit of existing stormwater management facilities, the retrofit of existing stormwater management outfalls, and the restoration and enhancement of non-tidal streams and non-tidal wetlands. Stream and wetland restoration and enhancement projects must meet nutrient and sediment load reduction targets under the Chesapeake Bay TMDL and restore functions that support and/or enhance aquatic biological resources at the project site.

This Bay TMDL RGP provides a streamlined form of Department of the Army authorization for activities that provide nutrient and sediment reductions mandated by the Chesapeake Bay TMDL. The development of permit streamlining measures under Section 404 of the Clean Water Act (CWA) for TMDL implementation activities, including stream restoration activities, supports Chesapeake Bay Executive Order (EO) 13508 strategy goals for restoring clean water and recovering habitat and EO 13563, Improving Regulation and Regulatory Review.

This Bay TMDL RGP contains the following sections:

I. AUTHORITIES: Section 10 of the Rivers and Harbors Act of 1899 for structures or work in or affecting navigable waters of the U.S. and Section 404 of the Clean Water Act (CWA) for the discharge of dredged or fill material into waters of the U.S.

II. APPLICABLE WATERS: Applicable waters include nontidal waters and nontidal wetlands in the Chesapeake Bay watershed within the State of Maryland, the District of Columbia, and military installations in northern Virginia within the regulatory geographic boundaries of the Corps (i.e., Fort Belvoir, Fort Myer, and the Pentagon).

III. EXCLUDED WATERS: This RGP does not authorize discharges or work into waters of the U.S. channelward of the high tide line. Additional excluded waters of Maryland include adjacent and contiguous jurisdictional wetlands to Back Creek (of the Chesapeake and Delaware Canal) east of a line extending from Welch Point to Courthouse Point to the Delaware line and to the Second Street Bridge to the south; Herring Creek east of the line extending from Welch Point to Courthouse Point to the dam that crosses Herring Creek; and Long Branch to the Boat Yard Road Bridge to the north. These areas are within the regulatory geographic boundary of the Philadelphia District.

IV. IMPACT AREA AND CONVERSION THRESHOLDS FOR BAY TMDL RGP:

A. The total temporary and permanent impacts to nontidal waters of the U.S. (wetlands, streams, etc.) for the overall project must not exceed 1.0 acre (43,560 square feet). Of this, no more than 2,000 linear feet of streams, rivers, open waters, or a combination thereof may be impacted.

B. This Bay TMDL RGP applies to the discharge of dredged or fill material and/or the placement of structures that are components of a single and complete project, including all attendant features both temporary or permanent, which individually and cumulatively result in direct or indirect impacts to waters regulated by Section 404 of the CWA and/or Section 10 of the Rivers and Harbors Act of 1899. Authorization under the Bay TMDL RGP requires compliance with all of the terms and conditions of the Bay TMDL RGP. The activities authorized must have only minimal individual and cumulative adverse effects on the environment. The cumulative total of all impact areas associated with a single and complete project is the basis for

determining whether the project is eligible for authorization under the Bay TMDL RGP.

C. All retrofit activity impacts to waters of the U.S. must be limited to the minimum necessary to reduce nutrient and sediment loads for the purpose of Bay TMDL. All stream and wetland restoration and enhancement activity impacts to waters of the U.S. must be limited to the minimum necessary to restore functions that support nutrient and sediment reduction for Bay TMDL purposes and to restore functions that support and/or enhance aquatic biological resources.

D. This Bay TMDL RGP may be used to authorize multiple conversion types for an overall project provided the total extent of all types of conversion does not exceed 10,000 square feet of all waters of the U.S. (i.e., waters and wetlands), including 500 linear feet of streams, rivers, and other open waters. Of the total conversion, the thresholds for specific conversion types indicated below (#1-4) must also not be exceeded. See Section XIV, "Definitions" of this Bay TMDL RGP for the definition of the term "conversion". Table 1 provides an overview of the Bay TMDL RGP conversion thresholds.
   1. **Conversion to Uplands:** The loss or conversion of waters of the U.S. (i.e., wetlands and/or streams, rivers, and other open waters) to uplands must not exceed 5,000 square feet or 200 linear feet of streams, rivers, and other open waters.
   2. **Conversion of Wetland Plant Community Types:** The conversion of one wetland type to another must not exceed 5,000 square feet.
   3. **Conversion of Streams or Rivers to Open Waters or Wetlands:** The conversion of streams or rivers (excluding wetlands) to open water or wetlands must not exceed 10,000 square feet or 500 linear feet of streams and/or rivers.
   4. **Conversion of Wetlands to Other Aquatic Habitat Type:** The conversion of wetlands to another aquatic habitat type (e.g., streams, rivers, open water, etc.) must not exceed 5,000 square feet.

Table 1: Conversion Thresholds under the Bay TMDL RGP[1]

The Bay TMDL RGP may be used to authorize multiple conversion types for an overall project provided ALL the following conversion thresholds are not exceeded.

	Total Conversion Limit for Overall Project	Conversion to Uplands Limit	Limit to Conversion Among Aquatic Habitat Types[2]
Wetlands (square feet)	5,000 sqft	5,000 sqft	5,000 sqft
Streams, rivers, and other open waters (square feet/linear feet)	10, 000 sqft/500 lf	5,000 sqft/200 lf	10,000 sqft/500 lf
All Waters of the U.S. (square feet)	10,000 sqft	5,000 sqft	10,000 sqft

[1] *Impacted aquatic resources that are replaced in-kind and onsite (i.e., relocated) do not count against conversion thresholds provided there is a net increase in aquatic resource functions and services at the project site.*

[2] *Re-establishment or rehabilitation of aquatic habitat types in areas where these habitat types can be determined to have previously existed at the project site do not count against conversion thresholds. Historical evidence and documentation that the proposed habitat type previously existed at the site is required. Historical evidence collected from aerial photographs, prior delineations, historical maps, forensic soil analysis, and local nearby reference sites may provide details of the former extent and conditions of the aquatic habitat that previously existed on the site.*

V. ACTIVITIES AUTHORIZED BY BAY TMDL RGP: This Bay TMDL RGP authorizes the following activities subject to the conditions and limitations contained herein.

A. To the extent that a Corps permit is required, activities authorized by this Bay TMDL RGP, include but are not limited to, the retrofit of existing stormwater management facilities, the retrofit of existing stormwater management outfalls and the restoration and enhancement of non-tidal streams and non-tidal wetlands.

B. The activity must be part of an acceptable watershed strategy, such as a Chesapeake Bay TMDL WIP, whose purpose is to identify implementation activities needed to meet nutrient and sediment load reduction targets in accordance with the Chesapeake Bay TMDL.

C. This Bay TMDL RGP authorizes stream and wetland restoration and enhancement projects provided they restore functions that support and/or enhance:
   1. Aquatic biological resources, **and**
   2. Sediment and/or nutrient reduction at the project site in accordance with the Chesapeake Bay TMDL goals and an acceptable watershed strategy.

D. This Bay TMDL RGP authorizes the relocation and/or conversion of nontidal waters, including nontidal wetlands and nontidal streams, on the project site provided these impacts are consistent with the impact and conversion thresholds established by this Bay TMDL RGP.

E. This Bay TMDL RGP also authorizes temporary construction structures, fills, and work necessary to construct the Bay TMDL activity. The use of construction mats is considered to be a discharge of fill material and must be included in the quantification of impact area authorized by the Bay TMDL RGP. Authorized temporary fills must be the minimum necessary to complete the project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of clean materials, and be placed in a manner that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction contours and elevations within 30 days following completion of the work. Temporarily disturbed wetlands and stream banks must be re-vegetated with native wetland plant species by the end of the first growing season following completion of the work. Authorized temporary fills may not be used for the purpose of on-going project access and maintenance activities. Access fills are considered to be permanent impacts when used in an on-going manner to monitor or conduct maintenance at the project.

VI. REQUIRED STREAM ASSESSMENT & DEGRADATION CRITERIA: Current conditions of stream reaches where restoration or enhancement projects are proposed must be assessed and meet the following stream degradation criteria for both the

existing biological function-based parameter AND the existing geomorphology/hydraulic function-based parameter. Each stream reach proposed for restoration or enhancement must be assessed and meet these stream degradation criteria. Compliance with these criteria must be documented on the Self-Verification Form or Pre-Construction Form as well as the function-based assessment for stream restoration and enhancement activities.

A. **Perennial Streams**:
   1. **Biological Function-Based Parameter**: A Benthic Index of Biotic Integrity (BIBI) score of fair or worse (i.e., BIBI score of 50% or less); **AND**
   2. **Geomorphology/Hydraulic Function-Based Parameter:** Documentation of existing stream conditions for at least one of the following:
      a) **Lateral Stability**: Geomorphic evidence of active, widespread lateral erosion [e.g., Bank Erosion Hazard Index (BEHI)/Near Bank Stress (NBS) score of Moderate/Moderate or higher or an annual bank erosion rate of greater than 0.1 foot/year]; or
      b) **Floodplain Connectivity (Vertical Stability)**: Evidence of floodplain disconnection throughout the majority of the reach [e.g., bank height ratio, entrenchment ratio, stage/Q relationship, Hydrologic Engineering Center River Analysis System (HEC-RAS) or other hydraulic model]; or
      c) **Other:** Other appropriate, approved metric that demonstrates water quality impairment and stream stability degradation of the project reach (with validation).

B. **Intermittent and Ephemeral Streams:**
   1. **Biological Function-Based Parameter:** A Modified Environmental Protection Agency Rapid Bioassessment Protocol (EPA RBP) Habitat Assessment score of marginal to poor (See Appendix 1); **AND**
   2. **Geomorphology/Hydraulic Function-Based Parameter:** Documentation of existing stream conditions for at least one of the following:
      a) **Lateral Stability:** Geomorphic evidence of active, widespread lateral erosion [e.g., BEHI/NBS score of Moderate/Moderate or higher or an annual bank erosion rate of greater than 0.1 feet/year]; or
      b) **Floodplain Connectivity (Vertical Stability):** Evidence of floodplain disconnection throughout the majority of the reach [e.g., bank height ratio, entrenchment ratio, stage/Q relationship, HEC-RAS or other hydraulic model]; or
      c) **Other:** Other appropriate, approved metric that demonstrates water quality impairment and stream stability degradation of the project reach (with validation).

VII. ACTIVITIES NOT AUTHORIZED BY BAY TMDL RGP: This Bay TMDL RGP does **not** authorize the following:

A. Stream or wetland restoration and enhancement activities that are implemented for the sole purpose of nutrient or sediment reduction. The restoration or enhancement

activity must also restore functions that support and/or enhance aquatic biological resources at the project site.

B. Single and complete projects, including all attendant features both temporary and permanent, which will result in more than one acre (43,560 square feet) of impact, both direct and indirect, to waters of the U.S., including wetlands or 2,000 linear feet of streams, rivers, and other open waters.

C. Projects that exceed the conversion thresholds outlined in Section IV, “Impact Area and Conversion Thresholds for Bay TMDL RGP”.

D. Activities in stable streams as documented by the geomorphology/hydraulic assessment measurements required in Section VI, “Required Stream Assessment and Degradation Criteria” of this Bay TMDL RGP above (e.g., BEHI/NBS scores of Low or Very Low or an annual bank erosion rate less than or equal to 0.1 feet/yr or floodplain connectivity throughout the majority of the reach)

E. Activities in perennial waters that have a BIBI score greater than 50%.

F. Activities in intermittent and ephemeral waters that have a Modified EPA RBP Habitat Assessment score of suboptimal to optimal.

G. Stream channelization and piping activities.

H. Construction of any new stormwater management facilities in aquatic resources, including streams or wetlands.

I. Activities that convert a stream to a permanent impoundment and block aquatic life movements (e.g., riser structure and dam added to an existing on-line stormwater management facility that blocks aquatic passage).

J. Construction of earthen or stone cofferdams or causeways due to problems with excessive sedimentation of the waterway during installation and removal of the fill.

K. Activities that are primarily designed to protect public infrastructure using bank armoring or riprap. These activities must be reviewed under an alternative permit process (e.g., MDSPGP-4(f)(4) nontidal bank stabilization).

L. Activities that are solely designed to improve aquatic habitat functions and services must be reviewed under an alternative permit process (e.g., Nationwide Permit 27).

M. Activities for the purpose of restoring streams damaged by acid mine drainage.

N. Activities that are built to offset, compensate, or otherwise mitigate for an impact to a waters of the U.S.

O. Activities that do not comply with the conditions, terms, and limitations herein do not qualify for this Bay TMDL RGP and will require separate Department of the Army authorizations.

P. Existing or proposed activities associated with an ongoing Corps or EPA enforcement action until such time as the enforcement action is resolved or the Corps determines that the activity may proceed independently without compromising the enforcement action.

Q. Activities that have more than minimal individual and/or cumulative adverse environmental effects.

R. Activities that have more than minimal individual and/or cumulative adverse impact on navigation.

VIII. STATE AND LOCAL APPROVALS: This Bay TMDL RGP does not obviate the need to obtain all other Federal, state, or local permits required by law.

IX. HOW TO OBTAIN/APPLY FOR AUTHORIZATION: Under the Bay TMDL RGP, some activities may be eligible for self-verification, while other activities require submittal of a Pre-Construction Notification (PCN). Proposed activities that qualify for self-verification in accordance with the terms and conditions of this Bay TMDL RGP may proceed without review by the Corps, provided that all required State and local authorizations are obtained. For those activities requiring advance notification to the Corps with a PCN, the application and PCN will be reviewed by the Corps. When a PCN is required, construction of the activity may not begin until the applicant has been notified in writing by the Corps that the activity is eligible for authorization under the Bay TMDL RGP with any special conditions, if applicable, and all State and local authorizations have been obtained.

A. All applications for regulated activities under this Bay TMDL RGP shall be completed using the established Corps permit application procedures for Maryland, Virginia, and the District of Columbia. Activities may qualify for this Bay TMDL RGP whether or not they are regulated by the State. Please see the Baltimore District website at http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcess.aspx for more information on permit application procedures by state and locality.

B. Applicants must refer to the Section X, “Application Submittal Thresholds” to determine if the single and complete project is eligible for self-verification or whether preconstruction notification (PCN) is required.

C. **Self-Verification:** Please see Section X, “Application Submittal Thresholds” of this Bay TMDL RGP for when as-built and post-construction reporting is required for self-verified activities authorized by this Bay TMDL RGP. All terms and conditions of this Bay TMDL RGP still apply to self-verified activities that do not require Corps review. Self-verified activities authorized by this RGP (Category I and Category II) may commence without written verification from the Corps after the applicant has:

1. Confirmed that the activity will be conducted in compliance with the terms and conditions of this Bay TMDL RGP, which may include consultation with the Corps and/or outside relevant Federal and State agencies. Examples of pertinent laws that must be considered include the National Historic Preservation Act, Endangered Species Act, and State regulatory requirements. Applicants are encouraged to contact the Corps with self-verification eligibility questions. Activities not meeting the self-verification criteria require the submittal of an application using the established Corps permit application procedures (see http://www.nab.usace.army.mil/Missions/Regulatory.aspx).
2. Submitted a completed Self-Verification Notification Form (See Appendix 2) and permit application.
   a) In Maryland, a Self-Verification Notification Form must be submitted with the joint permit application and project plans to the Maryland Department of the Environment.
   b) In the District of Columbia, a Self-Verification Notification Form must be submitted with the permit application and project plans to the Corps and the District Department of the Environment.
   c) In Virginia, a Self-Verification Notification Form, the Virginia joint permit application, and project plans must be submitted to the Corps and Virginia Marine Resources Commission.
3. Obtained all required State and local authorizations.

D. **Pre-Construction Notification (PCN):** For activities that do not qualify for self-verification or where otherwise required by the terms of this Bay TMDL RGP, the applicant must submit a completed Pre-Construction Notification Form and permit application and obtain written verification from the Corps before starting work in waters of the U.S., including wetlands. The Corps will review all applications for activities requiring PCN. In certain cases, the Corps will coordinate review of the application requiring PCN with Federal and state agencies and Federally-recognized tribes. (See Section XII "Agency Coordination" below). To be eligible and subsequently authorized, an activity must result in no more than minimal adverse effects on the aquatic environment as determined by the Corps, and in certain cases, in consultation with the appropriate resource agencies.

E. **Alternative Permit Type:** Projects that are not authorized by this Bay TMDL RGP require authorization under an alternative permit type (e.g., State Programmatic General Permit, Nationwide Permit, or Individual Permit). Applicants must submit an application in accordance with the established Corps permit application procedures for that locality. This Bay TMDL RGP does not affect the Corps Individual Permit review process or activities exempt from Corps regulation. For general information and application forms, see the Baltimore District website at: http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcess.aspx

X. APPLICATION SUBMITTAL THRESHOLDS: Table 2 below identifies when specific activities and associated impact limits proposed under this Bay TMDL RGP are eligible for self-verification only (Category I), self-verification with 90-day as-built and

post construction reporting (Category II), or Pre-Construction Notification and 5-year project-monitoring (Category III).

Table 2: Application Submittal Thresholds

Activity	Self-Verification Only	Self-Verification with 90-day As-Built Report & Function-Based Assessment Required[1]	Pre-Construction Notification (PCN) & Permit Application Required	5-Year Project Monitoring & Function-Based Assessment Required[2]
CATEGORY I:				
All retrofit activities on existing stormwater management facilities	X			
All retrofit activities performed on existing concrete-lined stormwater management outfalls	X			
All activities to restore or enhance existing piped or concrete-lined stream channels	X			
All other projects with total temporary and permanent impacts not to exceed 200 linear feet or 5,000 square feet of nontidal waters of the U.S., which do not occur in wetlands	X			
CATEGORY II:				
Projects with total temporary and permanent impacts greater than 5,000 square feet but not exceeding 10,000 square feet of waters of the U.S.		X		
Projects with total temporary and permanent impacts greater than 200 linear feet but not exceeding 500 linear feet of streams, rivers, and other open waters		X		
Projects with total temporary and permanent impacts not more than 5,000 square feet of nontidal wetlands		X		
CATEGORY III:				
Projects with total temporary and permanent impacts greater than 10,000 square feet but not exceeding 43,560 square feet (1.0 acre) of waters of the U.S.			X	X
Projects with total temporary and permanent impacts greater than 500 linear feet but not exceeding 2,000 linear feet of stream, rivers, and other open waters			X	X
Projects with total temporary and permanent impacts greater than 5,000 square feet but not exceeding 43,560 square feet (1.0 acre) of nontidal wetlands			X	X
Projects that will occur in or adjacent to a proposed or existing Federally authorized civil works project			X	Dependent Upon Project Thresholds
Projects that will occur along or within 150 feet of the horizontal limits of a Federal navigation project			X	Dependent Upon Project Thresholds
Projects that have the potential to cause effects to any historic properties listed, determined to be eligible for listing, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties			X	Dependent Upon Project Thresholds
Projects that may have effects on any Federally listed threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the designated critical habitat of such species.			X	Dependent Upon Project Thresholds

[1] As-Built Report and Function-Based Assessment must be provided to the Baltimore District Regulatory Branch within 90-days of project completion. The As-

Built Report and Function-Based Assessment shall include: (1) Name and 8-digit U.S. Geological Survey Hydrologic Code of the stream; (2) Location of the completed work (latitude and longitude); (3) Dates during which the work occurred; (4) The function-based assessment information outlined in Section XI.A.2 below (restoration and enhancement activities); (5) As-built plans; (6) A set of geo-referenced photographs that show the pre-construction and post-construction conditions for the project; (7) Documentation demonstrating compliance with the National Historic Preservation Act and Endangered Species Act; and (8) Application tracking number and State permit number.

[2]Project monitoring for a minimum of five years (five full growing seasons) after construction is required to ensure the integrity of the work and successful growth of planted vegetation. In addition, the applicant must demonstrate functional lift is occurring compared with baseline values for restoration and enhancement activities. The monitoring reports shall be submitted to the Baltimore District Regulatory Branch by December 31 of each monitoring year. A monitoring year must include monitoring documentation for a minimum of one full growing season. The monitoring protocols shall include, at a minimum, (1) Baseline conditions; (2) As-built plans; (3) Routine inspections; (4) Quantifiable measurements of appropriate, project-specific parameters based on project goals and design objectives to assess the aquatic resource functional lift as compared to the baseline values (restoration and enhancement activities); (5) Stream and project stability monitoring; (6) Invasive plant species cover; and (7) Photo documentation. Monitoring of stream restoration or enhancement projects must include a comparison of pre- and post-restoration and enhancement conditions to assess the project's success in meeting the goals and objectives to restore functions that support and/or enhance aquatic biological resources and sediment and nutrient reduction at the project site in accordance with the Chesapeake Bay TMDL goals. Function-based parameters, such as BIBI, modified EPA RBP habitat assessment, lateral stability, floodplain connectivity, and riparian vegetation, that were used to quantify and describe the pre-restoration condition of the stream and used to identify the restoration potential shall be measured and assessed to quantify the aquatic resource functional lift. In the event there are unforeseen changes in site conditions or other factors that affect the integrity of the project and/or project performance, the permittee shall develop necessary contingency/adaptive management plans and coordinate these with the Corps and any other appropriate regulatory agencies (e.g., Maryland Department of the Environment, District Department of the Environment, etc.) for written approval prior to implementation. Approved maintenance and remedial measures necessary for any project authorized under this RGP must be conducted in accordance with the terms and conditions of the authorization. Maintenance that requires deviations from the original design may require a separate authorization. The permittee shall provide revised as-built drawings to the Corps within 60-days of completion of the modifications. Additional monitoring and maintenance requirements may be required based on a project-specific evaluation.

XI. PERMIT APPLICATION:

A. A complete permit application submitted with a PCN must contain the information specified on the application form and the following written information. In general, the level of detail needed to perform a function-based assessment will be based on the size and complexity of the proposed project:

1. **Watershed Strategy:** A statement that describes the acceptable watershed strategy and how it supports selection of the project site. The statement shall include information regarding how the acceptable watershed strategy has incorporated upland best management practices, upland stormwater management retrofits, and Low Impact Development (LID) practices to the maximum extent practicable. An acceptable watershed strategy for identifying Chesapeake Bay TMDL implementation activities is required to focus retrofit and restoration efforts at locations that will provide the most benefit in terms of sediment and nutrient reduction, as well as improvement to stream function at the project site.
2. **Function-Based Assessment:** Proper design of restoration and enhancement projects requires an assessment of current site conditions and stressors, watershed conditions, and a careful selection of available restoration techniques. Restoration and enhancement project design must be developed through a functional assessment process, such as the stream functions pyramid (Harman et al., 2011) or functional assessment equivalent. Therefore, an application for restoration and enhancement projects must demonstrate that the necessary assessments have been conducted and include the following function-based assessment information:
   a) Programmatic and design goals
   b) Watershed assessment
   c) Site selection

d) Site-level function-based assessment, including photographs clearly labeled with the direction from which the photo was taken. The photo location points should also be identified on the appropriate maps.
e) Restoration potential and constraint analysis
f) Design objectives (quantifiable and documentable) based on site restoration potential
g) On-site restoration design approach and on-site design alternative analysis. An explanation of logical project termini should also be provided.
h) Project design development
i) Post-construction monitoring plan with quantifiable and documentable performance standards based on project goals and design objectives that are attainable based on the restoration potential and that will demonstrate aquatic resource functional lift is occurring compared with baseline values. At a minimum, monitoring of stream restoration or enhancement projects must include a comparison of pre- and post-restoration and enhancement conditions to assess the project's success in meeting the goals and objectives to restore functions that support and/or enhance aquatic biological resources and sediment and nutrient reduction at the project site in accordance with the Chesapeake Bay TMDL goals. Function-based parameters, such as BIBI, modified EPA RBP habitat assessment, lateral stability, floodplain connectivity, and riparian vegetation, that were used to quantify and describe the pre-restoration condition of the stream and used to identify the restoration potential shall be measured and assessed to quantify the aquatic resource functional lift.

3. **Temporary Impact Restoration Plan:** A restoration plan and narrative identifying how all temporary fills and structures will be removed and the area restored to pre-construction conditions.
4. **Historic and Cultural Resources Correspondence:** Evidence (i.e., correspondence) that the applicant has already contacted and received a response from the State Historic Preservation Office (SHPO) concerning historic properties that may be affected by the proposed activity. Useful information regarding cultural resources may be obtained by using the following websites. (Refer to General Condition 18-Historic Properties for further information).
   a) In Maryland: http://www.mht.maryland.gov
   b) In Virginia: http://www.dhr.virginia.gov and https://solutions.virginia.gov/ePIX
   c) In District of Columbia: http://planning.dc.gov/historicpreservation
5. **Endangered Species Correspondence:** Evidence (i.e., correspondence) that the applicant has already contacted and received a response from the U.S. Fish and Wildlife Service (FWS) concerning any Federally listed or proposed threatened and endangered species and designated or proposed critical habitat that may be affected by the proposed activity. Information on Federally listed or proposed threatened and endangered species and designated or proposed critical habitat can be obtained using the following websites. (Refer to General Condition 22-Endangered Species for further information):
   a) In Maryland and the District of Columbia: http://www.fws.gov/chesapeakebay/EndSppWeb/ProjectReview/Index.html

b) In Virginia:
http://www.fws.gov/northeast/virginiafield/endangered/projectreviews.html

B. Prospective permittees are not relieved of the obligation to comply with other Federal laws such as the National Historic Preservation Act and the Endangered Species Act. A PCN and a permit application submittal is required (even if an application submittal is not otherwise required in accordance with the thresholds) if the activity may affect Federally listed or proposed threatened or endangered species or designated or proposed critical habitat, or if the activity has the potential to cause effects to any historic properties listed, determined to be eligible for listing in, or potentially eligible for listing in the National Register of Historic Places, including previously unidentified properties. If a cultural resource or endangered species survey has been completed for the project site, reports documenting the results of the survey shall be submitted with the application to facilitate the Corps review. In cases where the prospective permittee has notified the Corps that Federally listed species or critical habitat and/or historic properties might be affected by the project or is in the vicinity of the project, the prospective permittee may not begin the activity until notified by the Corps in writing that the requirements of the Endangered Species Act and/or the National Historic Preservation Act have been satisfied and that the activity is authorized.

C. The Bay TMDL RGP verification may include site-specific special conditions imposed by the Corps to avoid and minimize adverse impacts to waters of the U.S. When an application submittal to the Corps is required under the terms of this RGP, the applicant shall not begin the activity until notified by the Corps that the project may proceed under this Bay TMDL RGP with any special conditions imposed by the Corps.

D. Work that does not qualify for this Bay TMDL RGP will require submission of an application for an alternative permitting procedure to the Corps (see 33 CFR Part 325.1).

E. Notwithstanding compliance with the terms and conditions of the Bay TMDL RGP, the Corps retains discretionary authority to require a Corps Individual Permit review for any project based on concerns for the aquatic environment or for any other public interest factor. This authority is invoked, on a case-by-case basis, whenever the Corps determines that the potential consequences of the proposal warrant individual review, based on 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, which is not addressed with stipulations of the Bay TMDL RGP and warrants greater review.

F. The applicant must ensure that all necessary Federal, state, or local authorizations have been obtained prior to beginning the work.

XII. **AGENCY COORDINATION:** A project-specific Corps written verification and 15-day agency coordination is required for single and complete projects with total temporary and permanent impacts that are:

A. Greater than ½ acre to waters of the U.S., including nontidal wetlands; or

B. Greater than 1,000 linear feet of streams; or

C. Greater than 10,000 square feet of nontidal wetlands; or

D. Activities that have the potential to cause effects to any historic properties listed, determined to be eligible for listing, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties (SHPO and tribal coordination only); or

E. Activities that may have effects on any Federally listed threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which will destroy or adversely modify the designated critical habitat of such species (FWS coordination only).

XIII. **GENERAL CONDITIONS:** Activities do not qualify for this Bay TMDL RGP unless they satisfy **ALL** of the general conditions listed below:

1. **Project Purpose:** Stream restoration and enhancement activities must be for the purpose of restoring or enhancing aquatic stream and wetland functions (i.e., provide functional lift) and services of the degraded stream at the project site. Stream and wetland restoration and enhancement activities proposed for the sole purpose of nutrient and sediment reduction are not eligible for authorization under this Bay TMDL RGP.
2. **Vegetation Protection and Restoration:** Riparian and wetland vegetation in the authorized project area shall be protected from unnecessary clearing and disturbance to the maximum extent practicable through:
   a) Minimization of project and impact footprint;
   b) Designation of staging areas and access points in open, upland areas;
   c) Fencing or other barriers demarking construction areas; or
   d) Use of alternative equipment (e.g., crane, portable bridges).
3. **Tidal Waters:** No activity, fill, or discharge shall occur channelward of the high tide line.
4. **Self-sustaining Design:** The project must be planned and designed to be self-sustaining.
5. **As-Built & Post-Construction Reporting:** For those self-verified activities requiring post-construction reporting (i.e., Category II activities), the permittee must provide a written post-construction report to the Corps within 90 days of project completion. The post-construction report shall include: a) Name and 8-digit U.S. Geological Survey Hydrologic Unit Code of the stream; b) Location of the completed work (latitude and longitude); c) Dates during which the work occurred; d) The function-based assessment information outlined in Section XI,

"Permit Application" of this Bay TMDL RGP (restoration and enhancement activities); e) As-built plans; f) A set of geo-referenced photographs that show the pre-construction and post-construction conditions for the project; g) Documentation demonstrating compliance with the National Historic Preservation Act and Endangered Species Act; and h) The application tracking number & State permit number.

6. **5-Year Project Monitoring:** For those projects requiring a PCN and application submittal to the Corps in accordance with this Bay TMDL RGP (i.e., Category III activities), the permittee must monitor the project for a minimum of five years (five full growing seasons) after construction to ensure the integrity of the work and successful growth of planted vegetation. In addition, the permittee must demonstrate functional lift is occurring compared to baseline values for restoration and enhancement projects. The monitoring reports shall be submitted to the Baltimore District Regulatory Branch by December 31 of each monitoring year. A monitoring report must include monitoring documentation for a minimum of one full growing season. At a minimum, the monitoring protocols shall include:
   a) Baseline conditions
   b) As-built plans
   c) Routine inspections
   d) Quantifiable measurements of appropriate project-specific parameters based on project goals and design objectives to assess the aquatic resource functional lift as compared to the baseline values (restoration and enhancement activities)
   e) Stream and project stability monitoring
   f) Invasive plant species cover
   g) Photo documentation

   Monitoring of stream restoration or enhancement projects must include a comparison of pre- and post-restoration and enhancement conditions to assess the project's success in meeting the goals and objectives to restore functions that support and/or enhance aquatic biological resources and sediment and nutrient reduction at the project site in accordance with the Chesapeake Bay TMDL goals. Function-based parameters, such as BIBI, modified EPA RBP habitat assessment, lateral stability, floodplain connectivity, and riparian vegetation, that were used to quantify and describe the pre-restoration condition of the stream and used to identify the restoration potential must be measured and assessed to quantify the aquatic resource functional lift. In the event there are unforeseen changes in site conditions or other factors that affect the integrity of the project and/or project performance, the permittee shall develop necessary contingency/adaptive management plans and coordinate these with the Corps and any other appropriate regulatory agencies (e.g., Maryland Department of the Environment, District Department of the Environment, etc.) for written approval prior to implementation. Approved maintenance and remedial measures necessary for any project authorized under this Bay TMDL RGP must be conducted in accordance with the terms and conditions of the authorization. Maintenance that requires deviations from the original design may require a separate authorization. The prospective permittee shall provide revised as-built

drawings to the Corps within 60 days of completion of the approved modifications. Additional monitoring and maintenance requirements may be required based on a project-specific evaluation.

7. **Geographic Applicability:** This regional general permit will authorize work undertaken within the geographical limits of the State of Maryland, the District of Columbia, and military installations of northern Virginia under the regulatory jurisdiction of the Corps.
8. **Compliance Certification:** Each permittee who receives a Bay TMDL RGP verification letter from the Corps must provide a completed and signed Certificate of Compliance (See Appendix 4) documenting completion of the authorized activity. The Corps will provide the permittee the certification document with the Bay TMDL RGP verification letter. Each permittee should retain a copy for their records. The original Certificate of Compliance shall be mailed to: U.S. Army Corps of Engineers, Regulatory Branch, P.O. Box 1715, Baltimore, Maryland 21203-1715 within 30 calendar days of project installation.
9. **Applicability:** Applicability of the Bay TMDL RGP shall be reviewed with reference to the Corps definition of waters of the U.S., including wetlands, and navigable waters of the U.S. Applicants are responsible for delineating boundaries of all waters of the U.S., including wetland boundaries. The identification and delineation of jurisdictional waters of the U.S., including wetlands, must be performed using a multi-parameter approach defined in Technical Report Y-87-1, Corps of Engineers Wetlands Delineation Manual, dated January 1987, and applicable supplemental guidance.
10. **Other Permits:** Authorization under the Bay TMDL RGP does not obviate the need to obtain other Federal, state, or local authorizations required by law or to comply with all Federal, state, or local laws.
11. **Water Quality:** Permittees must satisfy any conditions imposed by the States and EPA, where applicable, in their Water Quality Certifications (WQC) for this Bay TMDL RGP pursuant to Section 401 of the Clean Water Act. On August 14, 2014, WQC was issued by Virginia Department of Environmental Quality for activities authorized by this Bay TMDL RGP in waters of the U.S. and wetlands on applicable military installations in northern Virginia (i.e., the Pentagon, Fort Belvoir, and Fort Myer). On August 21, 2014, the District of Columbia Department of the Environment issued a conditional WQC. On February 27, 2015, the Maryland Department of the Environment issued WQC for the Bay TMDL RGP subject to the condition that the applicant obtains all necessary State permits and approvals. Where a State has not previously certified compliance of this Bay TMDL RGP with Clean Water Act 401, individual WQC must be obtained or waived. The Corps or State may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality. Copies of the WQC for this Bay TMDL RGP are attached at Appendix 5.
12. **Coastal Zone Management Consistency (CZM):** The Corps determined that all activities authorized by the TMDL RGP will be carried out in a manner consistent with the Maryland Coastal Zone Management Program and the Virginia Coastal Zone Management Program pursuant to Section 307 of the Federal Coastal Zone Management Act of 1972, as amended. On July 28, 2014,

Virginia Department of Environmental Quality concurred with the Corps' determination provided certain conditions are satisfied. On February 27, 2015, the Maryland Department of the Environment concurred with the Corps' determination provided that the applicant obtains all necessary State permits and approvals. Projects located within the Commonwealth of Virginia and the State of Maryland must comply with the applicable conditions of the concurrence letters for this Bay TMDL RGP. Copies of the CZM consistency concurrences for this Bay TMDL RGP are attached at Appendix 5. Permittees must satisfy any additional conditions imposed by the States in their CZM consistency concurrences for this Bay TMDL RGP.

13. **Minimal Effects:** Projects authorized shall have no more than minimal individual or cumulative adverse environmental effects, as determined by the Baltimore District.
14. **Discretionary Authority:** The Corps retains discretionary authority to require processing of an individual permit for any project based on concerns for the aquatic environment or for any other factor of the public interest (33 CFR 320.4(a)). This authority is exercised on a case-by-case basis.
15. **Single and Complete Project:** This Bay TMDL RGP shall only be applied to single and complete projects. For purposes of this Bay TMDL RGP, a single and complete project means the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers and which has independent utility. All components of a project, including all attendant features both temporary and permanent, shall be reviewed together as constituting one single and complete project. This Bay TMDL RGP cannot be used more than once for the same single and complete project.
16. **Multiple General Permit Authorizations:** An activity can be authorized by more than one general permit, if the activity is a single and complete project (33 CFR 330.2(i)), that will result in no more than minimal adverse environmental effects, and that will satisfy the terms and conditions of the applicable general permits. However, the project must meet the specific requirements of each general permit and the total extent of project impacts must not exceed the acreage limit of the general permit with the highest specified acreage limit.
17. **Contractor Compliance:** The prospective permittee shall ensure that a copy of the Bay TMDL RGP and any accompanying authorization letter are available and visible for reference at the project site and that all personnel with operational control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be expected to comply with all conditions of any general permit authorization. No contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.
18. **Historic Properties.**

    a) Any activity authorized by the Bay TMDL RGP shall comply with Section 106 of the National Historic Preservation Act. Assistance regarding information on the location of or potential for presence of historic resources shall be sought from the SHPO, as appropriate, and the National Register of Historic Places. Prior to

initiating the work, prospective permittees shall coordinate with and receive written notification/comments (i.e., letter, email, etc.) from the appropriate SHPO:

i. Virginia State Historic Preservation Office, Review and Compliance Division, Department of Historic Resources, 2801 Kensington Avenue, Richmond, VA 23221, Phone: 804-482-6103, Website: http://www.dhr.virginia.gov/ (utilization of the ePIX – Electronic Project Information Exchange is also recommended: https://solutions.virginia.gov/ePIX);
ii. Maryland Historical Trust, 100 Community Place, Crownsville, MD 21032, Phone: 410-514-7600, Website: http://www.mht.maryland.gov; or
iii. DC State Historic Preservation Office, Office of Planning, 1100 4th Street, SW, Suite E650, Washington, DC 20024, Phone: 202-442-7600, Website: http://planning.dc.gov/historicpreservation.

b) Prospective permittees must submit a PCN form and an application to the Corps, regardless of the Application Thresholds listed in Section X, "Application Submittal Thresholds" of this Bay TMDL RGP, if the authorized activity may have the potential to cause effects to any historic properties listed in, determined to be eligible for listing in, or potentially eligible for listing in the National Register of Historic Places, including previously unidentified properties. For such activities, the application must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. When reviewing applications, the Corps will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The Corps shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey of archaeological and historical resources in the project area. The Corps shall determine whether National Historic Preservation Act Section 106 consultation is required.

c) In cases where the Corps determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act have been satisfied.

d) If the permittee discovers any previously unknown archaeological or other cultural resource while accomplishing the work authorized by the Bay TMDL RGP, the permittee shall immediately notify the Corps of what has been found and stop work in the permit area until the required coordination has been completed. The permittee shall not begin or continue work until notified by the Corps that the requirements of the National Historic Preservation Act have been satisfied and that the activity may proceed.

19. **Tribal Rights:** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
20. **Discovery of Previously Unknown Artifacts:** Upon discovery of any previously unknown historic, cultural, or archeological resources or remains while accomplishing the activity authorized by this permit, the permittee must immediately notify this office of what has been found, and avoid construction

activities that may affect the resources or remains until the required coordination has been completed. The Corps will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

21. **National Lands:** Authorized activities shall not impinge upon the value of any National Wildlife Refuge, National Forest, National Park, or any other area administered by the FWS, U.S. Forest Service, or National Park Service.
22. **Endangered Species:**

a) No activity is authorized under this Bay TMDL RGP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the proposed or designated critical habitat of such species. No activity is authorized under this Bay TMDL RGP that "may affect" a proposed or listed species or proposed or designated critical habitat, unless project-specific Section 7 consultation addressing the effects of the proposed activity has been completed.

b) Prospective permittees must submit an application and PCN form if any listed species or designated critical habitat may be affected or is in the vicinity of the project, or if the project is located in designated critical habitat. The application and PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilizes the designated critical habitat that might be affected by the proposed work. The Corps shall determine if consultation with FWS is required under Section 7 of the ESA. If consultation is required, the prospective permittee shall not begin or continue work until notified by the Corps that the requirements of the ESA have been satisfied and that the activity is eligible for authorization.

c) Authorization of an activity by this Bay TMDL RGP does not authorize the "take" of a threatened or endangered species as defined under the ESA. The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct in the absence of an authorization (e.g., an ESA Section 10 permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS. FWS regulations extend the definition of "harm" to include significant habitat modification or degradation (50 CFR 17.3).

d) Information on Federally listed or proposed threatened and endangered species and designated or proposed critical habitat can be obtained from the FWS. Prior to initiating the work, prospective permittees in Maryland and the District of Columbia must review ESA resources at the Endangered Species Project Review website: http://www.fws.gov/chesapeakebay/EndSppWeb/ProjectReview/Index.html . Prospective permittees in Virginia must review ESA resources at this website: http://www.fws.gov/northeast/virginiafield/endangered/projectreviews.html

23. **Migratory Birds and Bald and Golden Eagles:** The permittee is responsible for obtaining any "take" permits required under the FWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle

Protection Act. The permittee should contact the appropriate local office of the FWS to determine if such "take" permits are required for a particular activity.

24. **Essential Fish Habitat (EFH) and Fish and Wildlife Coordination Act:** Essential Fish Habitat (EFH) consultation with NMFS was conducted in accordance with required legal procedures under Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-297; 11 October 1996). The EFH regulations, 50 CFR Section 600.920, outline that consultation procedure. The EFH Designations within the Northeast Region (Maine to Virginia), dated March 1, 1999, has identified EFH for a number of species and their life stages within Maryland waters. Essential Fish Habitat has been defined by Congress as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The EFH final rule published in the Federal Register on January 17, 2002 defines an adverse effect as; "any impact which reduces the quality and/or quantity of EFH". The rule further states that: An adverse effect may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat and other ecosystem components, if such modifications reduce the quality and/or quantity of EFH. Adverse effects to EFH may result from action occurring within EFH or outside EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. The Corps completed EFH coordination and received a no effect determination; however, proposed projects may impact prey species and their habitat and NMFS reserves the right to include site specific conditions during agency review under the Fish and Wildlife Coordination Act.
25. **Coldwater Streams:** To the maximum extent practicable, no activity may increase water temperatures in coldwater streams (Use III and Use IV) that adversely affects aquatic species indigenous to the waterbody [see Code of Maryland Regulations (COMAR) Section 26.08.02.02].
26. **Wild and Scenic Rivers:** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study River (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, FWS).
27. **Federal Projects:** Authorized activities may not interfere with any existing or proposed Federal projects.
28. **Navigation:** (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the

permittee's expense on facilities in navigable waters of the U.S. (c)The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, 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 United States. (d) 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 United States. No claim shall be made against the United States on account of any such removal or alteration. (e) Prospective permittees must submit an application and a PCN form if the activity will occur along and/or within 150 feet of the horizontal limits of a Federal navigation project.

29. **Fills Within Floodplains**: The authorized activity must comply with applicable requirements of any Federal Emergency Management Agency-approved state or local floodplain management requirements.
30. **Safety of Impoundment Structures**: To ensure that all impoundment structures are safely designed, the Corps may require applicants to demonstrate that the structures comply with established State dam safety criteria or have been designed by qualified persons. The Corps may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
31. **Environmental Justice:** Activities authorized under this Bay TMDL RGP must comply with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations".
32. **Federal Liability:** In issuing this Bay TMDL RGP, 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 United States 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 Bay TMDL RGP; (d) design or construction deficiencies associated with the permitted work; or (e) damage claims associated with any future modification, suspension, or revocation of this permit.
33. **Wave Wash:** The permittee hereby acknowledges and recognizes the possibility that the structures permitted herein may be subject to damage by waves caused by wash from passing vessels. The issuance of this Bay TMDL RGP does not relieve the permittee from taking all proper steps to ensure the integrity of the structure permitted herein. The permittee hereby acknowledges that the United States has no responsibility or liability of any kind for any such damage and agrees that it shall not hold the United States liable or involve the United States in any actions or claims regarding any such damages.
34. **Avoidance and Minimization:** The activity must be designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the U.S. to the maximum extent practicable at the project site.

35. **Mitigation:** Compensatory mitigation will not be required for stream and wetland restoration and enhancement activities since only stream and wetland restoration and enhancement activities that result in net increases in aquatic resource functions and services are authorized by this Bay TMDL RGP. For all other authorized activities under this RGP, mitigation (avoiding, minimizing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
36. **Heavy Equipment in Wetlands:** Heavy equipment working in wetlands must be placed on mats or other measures must be taken to minimize soil disturbance. The use of mats is considered to be a discharge of fill material and must be included in the quantification of impact area authorized by the Bay TMDL RGP.
37. **Soil Erosion and Sediment Controls:** Appropriate soil erosion and sediment control measures, practices, and devices must be used and maintained in effective operating condition during construction, to reduce erosion and retain sediment on-site during and after construction. These devices and methods must be capable of: (a) preventing erosion, (b) collecting sediment and suspended and floating materials, and (c) filtering fine sediment. Erosion and sediment control devices shall be removed when the work is complete and the site has successfully stabilized. The sediment collected by these devices shall be removed and placed at an upland location, in a manner that will prevent its later erosion into a waterway or wetland. All exposed soil or other fills shall be permanently stabilized at the earliest practicable date. In-stream work shall be conducted “in the dry” whenever practicable. This should be accomplished using stream diversion devices. Permittees are encouraged to perform work within waters of the U.S. during periods of low flow or no flow. The stream length affected by stream diversion devices must be included in the quantification of impact area authorized by this Bay TMDL RGP.
38. **Removal of Temporary Fills:** Temporary fill and the use of mats are both considered to be a discharge of fill material and must be included in the quantification of impact area authorized by the Bay TMDL RGP. Temporary fill (e.g., access roads, cofferdams, etc.) in waters and wetlands authorized by this Bay TMDL RGP shall be properly stabilized during use to prevent erosion. Temporary fill in wetlands shall be placed on geotextile fabric and laid on the existing wetland grade. Upon completion of the work, all temporary fill must be removed in its entirety and the affected areas restored to pre-construction contours and elevations within 30 days following completion of the work. Temporarily disturbed wetlands and stream banks must be revegetated with native wetland species by the end of the first growing season following completion of the work.
39. **Aquatic Life Movements:** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through, or spawn/nursery within the area (e.g., anadromous/catadromous fish). A low-flow channel must be maintained through any discharges placed across the stream channel so as to maintain low flows to sustain the movement of aquatic species, including anadromous and resident fish.

40. **Water Crossings:** All temporary crossings of waterbodies shall be suitably bridged, culverted, or otherwise designed and constructed to withstand and prevent the restriction of high flows; to maintain low flows; and to sustain the movement of aquatic species indigenous to the waterbody. The permittee shall apply any appropriate time-of-year restrictions to protect aquatic resources present within the project area and downstream of the project site.
41. **Suitable material:** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, treated wood, petroleum products, waste concrete, tires, etc.). Material used for installation or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
42. **Management of Water Flows:** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or expected high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (i.e., stream restoration and enhancement activities).
43. **Spawning Areas:** Activities, including structures and work in waters of the U.S., or discharges of dredged or fill materials, must be avoided in fish spawning or nursery areas during spawning seasons. Impacts to these areas shall be avoided or minimized to the maximum extent practicable during all other times of year. Activities that result in the physical destruction (e.g., through excavation, dredging, fill or downstream smothering by substantial turbidity, etc.) of an important spawning/nursery habitat (as determined by National Marine Fisheries Service and/or FWS) are not authorized by this permit.
44. **Migratory Bird Breeding Areas:** Activities in waters of the U.S. that serve as breeding and wintering areas for migratory birds must be avoided to the maximum extent practicable.
45. **Water Supply Intakes:** No discharge of dredged or fill material may occur in the proximity of a public water supply intake.
46. **Adverse Effects from Impoundments:** Adverse effects on the aquatic system due to accelerating the passage of water and/or restricting its flow from the construction of an impoundment must be minimized to the maximum extent practicable.
47. **Hazardous Wildlife Attractants On or Near Airports:** Permittees must consider the activity's effects on aviation safety and design a project so it does not create a wildlife hazard. All authorized activities that may attract hazardous wildlife shall be consistent with the siting criteria and land use practice recommendations stated in Section 1-3 of the Federal Aviation Administration Advisory Circular 150/5200-33. This document can be found at: http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf
48. **Inspections:** A copy of this permit and any verification letter must be provided to any contractor and made available at the project site to any regulatory representative. The permittee shall permit the Corps or authorized representative(s) to make periodic inspections at any time deemed necessary to ensure that the work is being performed in accordance with the terms and conditions of this Bay TMDL RGP. The Corps reserves the right to require post-

construction engineering drawings and/or surveys of any work authorized by this Bay TMDL RGP, as deemed necessary on a case-by-case basis.

49. **Maintenance of Project:** The permittee must properly maintain the work authorized herein in good condition and in compliance with the terms and conditions of this permit, including maintenance to ensure public safety and integrity of the authorized work. The permittee must develop necessary contingency/adaptive management plans and implement appropriate remedial actions in consultation with the Corps and other appropriate regulatory agencies prior to any work within areas subject to federal jurisdiction. Changes to the original authorized scope or materials may require a new authorization or modification to the original project authorization under this Bay TMDL RGP.
50. **Property Rights:** This Bay TMDL RGP does not convey any property rights, either in real estate or material, or convey 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.
51. **Modification, Suspension, and Revocation:** This Bay TMDL RGP 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. The Corps will issue a public notice announcing any changes to the Bay TMDL RGP when they occur; however, it is incumbent upon you to remain informed of any changes to this Bay TMDL RGP.
52. **Special Conditions:** The Corps may impose special conditions on any project authorized under the Bay TMDL RGP that are determined necessary to avoid or minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all special and general conditions of this permit, including any additional project specific special conditions, constitutes a permit violation and may subject the permittee, or his/her contractor, to criminal, civil, or administrative penalties and/or restoration.
53. **False or Incomplete Information:** The Corps has relied upon information and data provided by the permittee in granting authorization pursuant to this permit. A permit verification may be revoked, in whole or in part, if the Corps discovers that it has relied on false, incomplete, or inaccurate information provided by the permittee. In addition, the United States may institute appropriate legal proceedings.
54. **Transfer of Authorization:** The transferee and permittee must supply the Corps with a written request in order to transfer authorization under this Bay TMDL RGP. Such transfer is effective upon written approval by the Baltimore District of a transfer document signed by both parties evidencing that the transferee commits to assuming all responsibilities of the original permittee under the permit. The provisions of the permit authorization shall be binding on any assignee or successor in interest of the original permittee.
55. **Changes to State Statutes, Regulations, or General Permits:** The Corps will review proposed changes to the State program statutes and regulations, including the development of State general permits, to determine whether, and to what extent, the proposed changes will affect this Bay TMDL RGP. The Corps will determine whether or not to continue use of the Bay TMDL RGP under the

modified State statutes, regulations, or general permits based on considerations outlined in 33 CFR 325.7(a). The Corps review may result in immediate suspension or revocation of this Bay TMDL RGP, in accordance with Department of the Army regulations.

56. **Duration of Authorization and Expiration Date:** Unless further modified, suspended, or revoked, this general permit will be in effect until five years from the effective date listed at the top of page 1. Upon expiration, it may be considered for renewal. Except as provided in General Condition #57 below, work authorized under this Bay TMDL RGP must be completed before the Bay TMDL RGP expires, is suspended, or revoked, whichever date occurs sooner. The Baltimore District will issue a public notice announcing any changes to the Regional General Permit when they occur; however, it is incumbent upon permittees to remain informed of any changes to this Bay TMDL RGP. If this Bay TMDL RGP is not modified or reissued within five years of its effective date, it automatically expires and becomes null and void. The Corps may re-evaluate the terms and conditions of this Bay TMDL RGP at any time it deems necessary to protect the public interest.
57. **Grandfather Provision for Expiring Bay TMDL RGP:** Activities authorized under this Bay TMDL RGP that have commenced or are under contract to commence the work in reliance upon this authorization, will have twelve months from the date of this Bay TMDL RGP's expiration, modification, or revocation to complete the activity under the terms and conditions of this Bay TMDL RGP. The permittee must be able to document to the Corps satisfaction that the project was under construction or contract by the appropriate date.

XIV. DEFINITIONS:

Certain terms that are referenced in the Bay TMDL RGP are defined in this section. Several definitions are excerpted from regulation and/or other sources and are so noted. The terms not defined herein shall have the meaning defined in the Corps' regulations at 33 CFR Parts 320-332 or in the Section 404(b)(1) regulations at 40 CFR Part 230.

Aquatic Habitat: An area used by aquatic organisms to fulfill their life cycle requirements. Aquatic habitats include saturated materials and spaces, which may include rocks, coral, gravel, interstices, sand, mud, woody debris, riffles, reefs, and burrows. The term can also be used to define an entire ecosystem (e.g., wetlands, floodplains, streams, estuaries, lakes, etc.).

Aquatic Resource Functions: *See Functions*

Bankfull Discharge: The flow that is most effective at moving sediment, forming or removing bars, forming or changing bends and meanders, and doing work that results in the average morphologic characteristics of stream channels (Dunne and Leopold 1978). The bankfull stage is the point at which water begins to overflow onto a floodplain (may not coincide with the top of the visible bank in incised streams).

Best Management Practices (BMPs): Policies, practices, procedures or structures implemented to mitigate adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural. [77 Fed. Reg. 10184 (February 21, 2012)]

Construction Mats: Construction, swamp, and timber mats (herein referred to as "construction mats") are generic terms used to describe sheets or mats made from a variety of materials in various sizes that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. Construction mats are considered as fill whether they are installed temporarily or permanently.

Conversion: For the purposes of this Bay TMDL RGP, conversion is defined as a change from one aquatic habitat type to another aquatic or upland habitat type.

The following are examples of activities that are not considered conversion under this Bay TMDL RGP:

- Changes in degraded wetland plant communities caused by filling, blocking, or reshaping excavated drainage ditches to restore hydrology determined to have previously existed at the project site would be considered a rehabilitation activity and not conversion provided the activity results in a gain in aquatic resource function. Historical evidence that the proposed habitat type previously existed at the site is required. Historical evidence collected from aerial photographs, prior delineations, historical maps, forensic soil analysis, and local nearby reference sites may provide details of the former extent and conditions of the aquatic habitat that previously existed on the site.
- Re-establishment of open water habitat and vegetated wetlands in a former aquatic resource where these shallow water habitat and wetland types can be determined to have previously existed at the project site would not be considered conversion provided the activity results in a gain in aquatic resource area and functions. See above for appropriate historical evidence that is required to document that the proposed habitat type previously existed at the site.
- Relocation of non-tidal waters and wetlands on a project site, including relocation activities that create open water impoundments where existing non-tidal wetlands are located and vice versa would generally not be considered conversion, provided there is a net increase in aquatic resource functions and services and the impacted resource is replaced in-kind within the project site.

Cumulative Effects: *see Cumulative Impacts*

Cumulative Impacts: The impact on the environment which results from the incremental impact of the [proposed] action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or

non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR 1508.7)

Direct Effects: Effects that are caused by the activity and occur at the same time and place [77 Fed. Reg. 10184 (February 21, 2012)]

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource functions, but may also lead to decline in other resource functions. Enhancement does not result in a gain in aquatic resource area. (33 CFR 332.2)

Ephemeral Stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow. [77 Fed. Reg. 10184 (February 21, 2012)]

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area and functions. (33 CFR 332.2)

Fill Material: Material placed in waters of the U.S. where the material has the effect of (i) replacing any portion of a water of the United States with dry land or (ii) changing the bottom elevation of any portion of water. Examples of such 'fill material' include, but are not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in waters of the U.S. The term fill material does not include trash or garbage. (33 CFR 323.2(e))

Floodplain: An area on a stream's valley floor which is inundated during stream surges (such as following rainfall or snowmelt events). Commonly the "floodplain" is referred to as the area of the valley floor which is inundated during flood events.

Floodplain Disconnection: For purposes of this Bay TMDL RGP, floodplain disconnection is present when all flows greater than or equal to a 2 year storm event return interval do not access or spread onto the adjacent floodplain. The channel forming flow (i.e., bankfull) may be used in place of the minimum 2 year storm event return interval and must be identified and validated using appropriate regional curves for this region (e.g., U.S. Fish and Wildlife, U.S. Geological Survey, Baltimore County).

Functions: The term functions means the physical, chemical, and biological processes that occur in ecosystems. (33 CFR 332.2)

Functional Lift (or "Functional Gain"): Measurable improvement of physical, chemical, and biological aquatic resource functions between existing and proposed conditions as a result of a restoration or enhancement activity at the project site.

High-tide line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm. (33 CFR 328.3(d))

Impact: See "Temporary Impact," "Permanent Impact," and "Cumulative Impact"

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 are not built can be considered as separate single and complete projects with independent utility (77 FR 34, pg 10289). A clear purpose and level of functionality is required for a project to have independent utility. For example, the construction of a single-family home with a driveway that connects to an existing road has independent utility and is considered a valid project. Conversely, construction of an access road with no beginning or end point in the middle of a jurisdictional wetland does not have independent utility because it does not have a clear purpose and is dependent on future development.

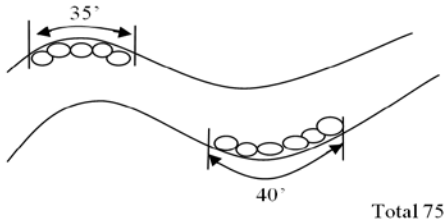
Indirect Effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable. [77 Fed. Reg. 10184 (February 21, 2012)]

Intermittent Stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow. [77 Fed. Reg. 10184 (February 21, 2012)]

Jurisdictional: Areas regulated by the Corps under authorities granted by Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act.

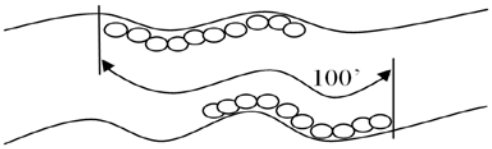
Linear Feet of Stream Impact: For categorical determinations (e.g., 200 linear feet or 500 linear feet) involving stream impacts in this RGP, the linear footage of stream impact should be measured as shown in the following plan view drawings (this is not used for calculating impacts to wetlands and open water impoundments which are based on square feet):

a. *For regulated work on one stream bank, the linear footage of a stream impact should be measured along the bank being impacted. When both stream banks are being impacted at separate locations, the linear footage of stream impact is also measured along the banks being impacted.*



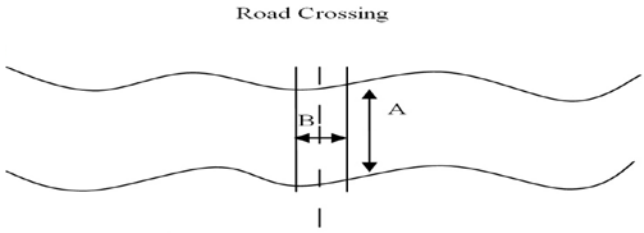
Total 75 Linear Feet

b. *For regulated work proposed along both stream banks, where at least a portion of the work on the opposing stream bank is overlapping, the linear footage of stream impact should be measured along the centerline of the stream*.



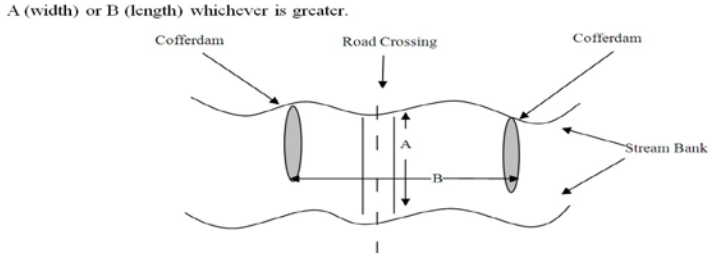
Total 100 Linear Feet

c. *For traverse impacts (perpendicular to the stream bank), the linear footage of stream impact should be measured from the top of the bank to the top of the opposite bank and from the upstream to downstream limits of work. The linear footage of stream impact, for categorical determination, is the greater of these two measurements*.



d. *Dewatering – if work involves dewatering of a stream channel, measure the centerline of the stream channel that is impacted through filling, dewatering, and/or flooding, and measure from top of stream bank to top of stream bank. The linear*

footage of stream impact, for categorical determination, is the greater of these two measurements.



Open Water Habitat: Open water habitats are aquatic systems or bodies of water that lack emergent vegetation, are permanently inundated under normal circumstances, and deeper in nature than an area defined as wetland. Open water habitats are not considered wetlands because they lack one or more of the required parameters as defined in the 1987 Corps of Engineers Wetland Delineation Manual and Regional Supplements. Water depths are often the limiting factor in the presence or absence of emergent vegetation and the underlying substrates are usually interpreted as 'non-soils.' (Environmental Laboratory 1987 and Cowardin et al 1989).

Outfall: See "Stormwater Management Outfall"

Perennial Stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow. [77 Fed. Reg. 10184 (February 21, 2012)]

Permanent Impact: The permanent alteration of an aquatic resource that is expected to remain after a permitted activity's construction activities are completed. For purposes of this Bay TMDL RGP, permanent impacts include those permanent effects from filling, flooding, excavation, or drainage because of the regulated activity. Permanent effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, change the use of the waterbody, or cause the conversion of an aquatic area. The acreage of permanent impacts to waters of the U.S. is not a net threshold that is calculated after considering relocation of an aquatic resource that may be used to move an aquatic resource from one place to another on the project site as part of a restoration project or after considering compensatory mitigation that may be used to offset permanent impacts to aquatic functions and services. For example, permanent impacts to a stream bed would include the linear feet and area of streams that are filled or excavated. When a discharge of dredged or fill material is placed to construct an in-stream weir, the permanent impact includes the footprint of the weir and the waters of the U.S. permanently flooded behind the weir. Permanent impacts include relocation of aquatic resources from one place to another on the project site. Waters of the U.S. that are temporarily filled, flooded, excavated, or drained but

restored to pre-construction conditions after construction are considered temporary impacts and are not considered in the measurement of permanent impacts.

Relocation: For the purpose of this RGP, relocation is defined as the in-kind replacement of any impacted resource within the project site provided there is a net increase in functions that support or enhance aquatic biological resources. Relocation of impacted resources within existing ecologically important aquatic or upland resources (e.g., riffle and pool complexes, mature forests) would not meet the terms of this Bay TMDL RGP when there is not a net gain in functions at the project site as compared to baseline values.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: *re-establishment* and *rehabilitation* (33 CFR 332.2)

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions. (33 CFR 332.2)

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area. (33 CFR 332.2)

Riparian Areas*:* Riparian areas are lands adjacent to streams, rivers, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. [77 Fed. Reg. 10184 (Feb. 21, 2012)]

Stormwater Management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment. [77 Fed. Reg. 10184 (Feb. 21, 2012)]

Stormwater Management Facilities: For the purposes of this RGP, stormwater management facilities are those conventional, structural measures including but not limited to, stormwater ponds, infiltration basins, and sand filters which retain water for the purpose of controlling runoff and/or improving the quality (i.e., by

reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stormwater Management Outfall: A point where a stormwater management facility or conveyance system discharges into waters of the U.S. (e.g., streams, rivers, lakes, and wetlands).

Stormwater Management Retrofit: For purposes of this RGP, stormwater management retrofit refers to those activities that modify an existing stormwater management facility for the purpose of improving nutrient and sediment removal by the existing structural stormwater management facility that currently has little or no treatment.

Stream Restoration and Enhancement: For purposes of this RGP, stream restoration and enhancement refers to any natural channel design, regenerative stormwater/stream conveyance, legacy sediment removal, or other stream restoration and enhancement activity that meets the terms and conditions of this Bay TMDL RGP, including the restoration of functions that support and/or enhance aquatic biological resources and that support reduction of sediment and/or nutrients at the project site in accordance with the Bay TMDL goals and acceptable watershed strategy.

Temporary Impact: The temporary alteration of an aquatic resource that is restored after a permitted activity's construction activities are completed. Temporary impacts include activities in which waters of the U.S. are restored to their preconstruction contours and elevations within 30 days following completion of construction and re-vegetated with native species by the end of the first growing season following completion of the work, such that previous functions and values are restored.

Total Maximum Daily Load (TMDL): A Total Maximum Daily Load, or TMDL, is a "pollution diet" that identifies the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards.

TMDL Activity: For the purpose of this RGP, a "TMDL Activity" is an activity that has been proposed to meet the Chesapeake Bay TMDL pollution reductions and includes structures or work in or affecting navigable waters of the U.S. and activities that discharge dredged or fill material into waters of the U.S.

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Cowardin, L.M., V. Carter V., F.C. Golet, E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Report No. FWS/OBS/-79/31.Washington, D.C.

Dunne, T. and L.B. Leopold. 1978. Water in Environmental Planning. W.H. Freeman and Company, New York.

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Final Rule for Regulatory Programs of the Corps of Engineers, 33 CFR Parts 320 through 330, as published in the November 13, 1986 Federal Register, Vol. 51, No. 219.

Final Notice of Issuance and Modification of Nationwide Permits, as published in the February 21, 2012 Federal Register, Vol. 77, No. 34 [77 Fed. Reg. 10184 (Feb. 21, 2012)]

Final Rule for "Compensatory Mitigation for Losses of Aquatic Resources" as published in the April 10, 2008 Federal Register, Vol. 73, No. 70. (33 CFR 332)

Harman, W., R. Starr, M. Carter, K. Tweedy, M. Clemmons, K. Suggs, C. Miller. 2012. *A Function-Based Framework for Stream Assessment and Restoration Projects.* U.S. Environmental Protection Agency, Office of Wetlands, Oceans, and Watersheds, Washington, D.C. EPA 843-K-12-006.

Chesapeake Bay TMDL. http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/index.html

The Council on Environmental Quality (CEQ). CEQ regulations for implementing NEPA as published in the November 28, 1978 Federal Register, Vol. 43, No.55990 (40 CFR Parts 1500-1508)

By Authority of the Secretary of the Army:

J. Richard Jordan, III
Colonel, Corps of Engineers
District Engineer

Appendix 1: Modified Environmental Protection Agency Rapid Bioassessment Habitat Assessment Field Data Sheet (High Gradient Ephemeral/Intermittent Streams)

RAPID HABITAT ASSESSMENT: STEEP Ephemeral/Intermittent >>							
Station ID/ Stream Name		Date		SLOPE (%)		CHANNEL TYPE	
Reach Length (m)		LAT (DD)		LONG (DD)		Step-Pool / Gradual	(Circle one)

HABITAT PARAMETER	CATEGORY			
	Optimal	Sub-optimal	Marginal	Poor
1. SUBSTRATE DIVERSITY/ AVAILABLE BENTHIC, SALAMANDER, CRAYFISH, AND LAND SNAIL COVER ***SCORE:***	*Greater than 70% of substrate consisting of mix of boulder slabs, boulders, cobble, snags, or other stable habitat providing cover for salamanders and aquatic or terrestrial invertebrates. LWD in moderate to advanced stage of decay and within- active channel; Substrate roughness capable of trapping lots of organic matter. If moss covered, rate high.*	*40 to 70% cover and mix of diverse stable habitat (boulder, cobble, LWD); well suited for full cover potential; adequate habitat for maintenance of populations; presence of additional LWD in the form of new fall. Substrate roughness still capable of trapping organic matter.*	*20 to 40% mix of stable cover; habitat availability less than desirable; substrate frequently disturbed or removed. LWD low in density and/or may be new fall or in early decay stage. Some areas suitable for trapping organic matter. If lg. boulders are absent, score low.*	*Less than 20% stable cover; lack of habitat is obvious; substrate unstable or lacking. Few areas suitable for trapping organic matter.*
	Rate in Channel and Toe of Banks			
	20 19 18 17 16	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**
2. EMBEDDED-NESS ***Examine at least 10 particles (e.g., 5 particles from 2 different steps)*** ***SCORE:***	*Lg. cobble, small boulder, or wood particles are between 0 and 25% surrounded by fine sediment; layering of cobble or boulders provides a diversity of niche space.*	*Lg. cobble, small boulder, or wood particles are between 25 and 50% surrounded by fine sediment.*	*Lg.cobble, small boulder, or wood particles are between 50 and 75% surrounded by fine sediment.*	*Cobble, small boulder, or wood particles are over 75% surrounded by fine sediment.*
	Rate in Steps			
	20 19 18 17 16	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**
3. CHANNEL ALTERATION ***SCORE:***	*Channelization, culverting, or other channel disturbance absent or minimal; stream with normal pattern. No crossings (fords) in assessment reach.*	*Minor channelization present, usually in areas of culverts, fords, or bridge abutments; evidence of past channel disturbance, i.e. dredging, or realignment (> than past 20 years)may be present, but no evidence of recent channel disturbance.*	*Channelization may be extensive; Embankments, berms or shoring structures present on both banks; and 40% to 80% of the stream reach channelized or disrupted.*	*Banks shored with gabion or cement; over 80% of the stream reach is channelized and disrupted. Instream habitat greatly altered or entirely removed. Stream channel may be used as a road or logging skid trail.*
	20 19 18 17 16	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**
4. FINE SEDIMENT DEPOSITION ***Consider non-natural sources of sediment*** ***SCORE:***	*Little or no enlargement of mid-channel bars or point bars (at bends) and less than 5% of the bottom is affected by fine sediment deposition (silt, sand, fine gravel). Pool rocks with minimal silt layering; leafpacks relatively clean.*	*Some new increase in bar formation, mostly from find gravel, sand, or silt; 5 to 30% of the bottom is affected; some deposition of fines in pools. Leafpacks moderately covered in silt.*	*Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of bottom is affected; sediment deposits at obstructions, constrictions, and bends; deposition of fines in pools prevalent; leafpacks may be heavily silted.*	*Heavy deposits of fine material; increased bar development; more than 50% of bottom is fines and changing frequently with flow; pools almost absent due to substantial sediment deposition.*
	Rate in Pools & Depositional Areas			
	20 19 18 17 16	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**

Appendix 1: Modified Environmental Protection Agency Rapid Bioassessment Habitat Assessment Field Data Sheet (High Gradient Ephemeral/Intermittent Streams)

***RAPID HABITAT ASSESSMENT*: STEEP Ephemeral/Intermittent >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>**

Reviewers Initials		Station ID/ Stream Name		Date	

HABITAT PARAMETER	CATEGORY			
	Optimal	**Sub-optimal**	**Marginal**	**Poor**
5. BANK STABILITY** (score each bank) determine left/ right by facing downstream	*Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems (<5% of bank affected).*	*Moderately stable; infrequent, small areas of erosion mostly healed over; 5-30% of bank in reach has areas of erosion.*	*Moderately unstable; 30-60% of bank in reach has areas of erosion; high potential during floods.*	*Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.*
LEFT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
RIGHT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
6. BANK** VEGETATIVE PROTECTION (rate from bottom of bank to crest-over at top of bank – large roots count) *****In very steep constrained channels with continuous bank-riparian zone (no distinct crest) score bank from toe to ~2 m.***	*More than 90% of the stream-bank surfaces and immediate riparian zones (crest-over) covered by vegetation including trees, understory shrubs, and non-woody plants (herbs, ferns, mosses); vegetative disruption through grazing or other encroachment minimal or not evident; almost all plants allowed to grow naturally. Branches overhanging channel important.*	*70-90% of the streambank surfaces are covered by vegetation, but one class of plants is not well represented; disruption evident, but not affecting plant growth potential to any great extent; more than one-half of the potential plant stubble remaining. In the case of non-native plants, score low.*	*50-70% of the streambank surfaces are covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining. In the case of non-native plants, score low.*	*Less than 50% of the streambank surfaces are covered by vegetation; disruption of streambank vegetation very high; vegetation has been removed to 2 inches or less in average stubble height.*
	If assessed in winter or early spring look for remnants of herbs, and saplings.			
LEFT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
RIGHT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
7. WIDTH OF UNDISTURBED VEG. ZONE (undisturbed veg. is trees, shrubs, and non-woody herbs)	*Width of undisturbed vegetative zone is >18 meters; human activities (roadbeds, clearcuts, mining, pasture) have not impacted this zone. Tree and shrub layers present*	*Zone width is between 12 and 18 meters; human activities have only minimally impacted this zone. Some selective logging may be present but not clearcuts. Tree and shrub layers still present.*	*Zone width is between 6 and 12 meters; human activities have impacted the zone a great deal. Trees or shrubs sparse in zone.*	*Width of zone is less than 6 meters; little or no undisturbed vegetation due to man-induced activities. Trees typically absent or in narrow row at top of bank.*
LEFT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
RIGHT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**

TOTAL: (max=140)	**Max Pool Depth (if water is present; otherwise "NA") ______cm** **Average Channel Width (Toe of Banks) _________m**	**Total from front _____+ Total from back______=________** **Score Percentage= Total Score /140 X 100________%**

Average Width Intact Rip Vegetative Zone (m)	**Left m**	**Right m**

→ What is the dominant vegetation type in the reach? ☐ **Deciduous** ☐ **Coniferous (spruce, pine, hemlock)** ☐ **Mixed (>10%)**	**Estimated age of forest: ____*>50 yrs* ____*25-50 yrs* ____*5-25 yrs* ____*<5 yrs*** **Number of strata *(e.g, canopy, subcanopy, shrub, herb (4 max))*________**

Stream Surface Shading (%) (average of lower, middle, upper reach)	**Indicate % based on cloudless day in summer at noon. Fill in square that applies.**		
☐ **Fully exposed (0-25%)**	☐ **Partly shaded (25-50%)**	☐ **Partly exposed (50-75%)**	☐ **Fully shaded (75-100%)**
% Canopy (Densiometer)		**Compass Bearing (facing downstream) (0-360°)**	

Appendix 1: Modified Environmental Protection Agency Rapid Bioassessment Protocol (EPA RBP)
Habitat Assessment Field Data Sheet (Low Gradient Ephemeral/Intermittent Streams)

RAPID HABITAT ASSESSMENT: LOW GRADIENT Ephemeral/Intermittent >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
Station ID/ Stream Name				**LAT (DD)**	
Reach Length (m)		Date		**LONG (DD)**	

HABITAT PARAMETER	**CATEGORY**			
	Optimal	**Sub-optimal**	**Marginal**	**Poor**
1. SUBSTRATE/ DIVERSITY **AVAILBLE COVER FOR AMPHIBIANS CRAYFISH** **SCORE:**	*Greater than 50% of substrate consisting of mix of snags, tree roots or other stable habitat providing cover for amphibians and aquatic or terrestrial invertebrates. LWD in moderate to advanced stage of decay and within- active channel; Substrate roughness capable of trapping lots of organic matter. If moss covered, rate high.*	*30 to 50% cover and mix of diverse stable habitat; well suited for full cover potential; adequate habitat for maintenance of populations; presence of additional LWD in the form of new fall. Substrate roughness still capable of trapping organic matter.*	*10 to 30% mix of stable cover; habitat availability less than desirable; substrate frequently disturbed or removed. LWD low in density and/or may be new fall or in early decay stage. Some areas suitable for trapping organic matter. If lg. wood is absent, score low.*	*Less than 10% stable cover; lack of habitat is obvious; substrate unstable or lacking. Few areas suitable for trapping organic matter.*
	Rate in Channel and Toe of Banks			
	20 19 18 17 16	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**
2. POOL SUBSTRATE CHARACTER-IZATION **In dry channels, pool areas should still be observable** **SCORE:**	Mixture of substrate materials, with gravel and firm sand prevalent; root mats and submerged (or remnant) aquatic vegetation are common.	Mixture of soft sand, mud, or clay; mud may be dominant; some root mats and submerged (or remnant) vegetation are present.	All mud or clay or sand bottom; little or no root mat; no submerged (or remnant) vegetation.	Hard-pan clay or bedrock; no root mat or vegetation.
	20 19 18 17 16	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**
3. CHANNEL ALTERATION **SCORE:**	Channelization or dredging absent of minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging (>than past 20 years) may be present, but no evidence of recent channelization.	Channelization may be extensive; embankments or shoring structures present on both banks; 40 to 80% of the stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
	20 19 18 17 16	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**
4. SEDIMENT DEPOSITION **SCORE:**	Little or no enlargement of "islands" or point bars and less than 20% of the bottom affected by fine sediment deposition. Leaf packs and woody debris with minimal silt covering.	Some new increase in bar formation, mostly from sand, or fine sediment; 20 to 50% of the bottom is affected; slight deposition in pools. Leaf packs with moderate silt covering.	Moderate deposition of new sand, or fine sediment on old and new bars; 50 to 80% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent. Leaf packs with heavier silt covering.	Heavy deposits of fine material, increased bar development; more than 80% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
	20 19 18 17 16	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**
5. CHANNEL SINUOSITY **SCORE:**	The bends in the stream increase the stream length 3 to 4 times longer than if it was in a straight line.	The bends in the stream increase the stream length 2 to 3 times longer than if it was in a straight line.	the bends in the stream increase the stream length up to 2 times longer than if it was in a straight line.	Channel is straight; waterway has been channelized for a long distance.
	20 19 18 17 16	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1 0**

Appendix 1: Modified Environmental Protection Agency Rapid Bioassessment Protocol (EPA RBP)
Habitat Assessment Field Data Sheet (Low Gradient Ephemeral/Intermittent Streams)

RAPID HABITAT ASSESSMENT: LOW GRADIENT >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	**Reviewers Initials**	

	Optimal	**Sub-optimal**	**Marginal**	**Poor**
6. BANK STABILITY (score each bank) *determine left/ right by facing downstream	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems (<5% of bank affected).	Moderately stable; infrequent, small areas of erosion mostly healed over; 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
LEFT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
RIGHT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
7. BANK VEGETATIVE PROTECTION **SCORE:**	More than 90% of the streambank surfaces and immediate riparian zones covered by vegetation including trees, understory shrubs, and non-woody plants (herbs, grasses, ferns, mosses); vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces are covered by vegetation, but one class of plants is not well represented; disruption evident, but not affecting plant growth potential to extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces are covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less that one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces are covered by vegetation; disruption of streambank vegetation very high; vegetation has been removed to 2 inches or less in average stubble height.
	If assessed in winter or early spring look for remnants of herbs, and saplings.			
LEFT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
RIGHT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
8. WIDTH OF UNDISTURBED VEG. ZONE (undisturbed veg. Is trees, shrubs, and non-woody macro-phytes)	Width of undisturbed vegetative zone is >18 meters; human activities (parking lots, roadbeds, clearcuts, lawns, or crops) have not impacted this zone.	Zone width is between 12 and 18 meters; human activities have only minimally impacted this zone.	Zone width is between 6 and 12 meters; human activities have impacted the zone a great deal.	Width of zone is less than 6 meters; little or no undisturbed vegetation due to man-induced activities.
LEFT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**
RIGHT:	**10 9**	**8 7 6**	**5 4 3**	**2 1 0**

TOTAL: (max=160)	**Max Pool Depth (if water is present; otherwise "NA") _____cm** **Average Channel Width (Toe of Banks) _____m**	**Total from front _____+ Total from back_____=_____** **Score Percentage= Total Score /160 X 100_____%**

Average Width Intact Rip Vegetative Zone (m)	**Left** **m**	**Right** **m**

→ What is the dominant vegetation type in the reach? **□ Deciduous □ Coniferous (pine/cypress) □ Mixed (>10%)**	**Estimated age of forest: ____*>50 yrs* ____*25-50 yrs* ____*5-25 yrs* ____*<5 yrs*** **Number of strata *(e.g, canopy, subcanopy, shrub, herb (4 max))*_____**

Stream Surface Shading (%) (average of lower, middle, upper reach)	**Indicate % based on cloudless day in summer at noon. Fill in square that applies.**		
□ Fully exposed (0-25%)	**□ Partly shaded (25-50%)**	**□ Partly exposed (50-75%)**	**□ Fully shaded (75-100%)**
-or- % Canopy (Densiometer)	**Compass Bearing (facing downstream) (0-360°)**		

APPENDIX 2: SELF-VERIFICATION NOTIFICATION FORM FOR CATEGORY I AND II ACTIVITIES AUTHORIZED BY THE CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD REGIONAL GENERAL PERMIT (Bay TMDL RGP)

The Bay TMDL RGP is applicable in nontidal waters and nontidal wetlands in the Chesapeake Bay watershed within the State of Maryland, District of Columbia, and military installations in northern Virginia within the regulatory jurisdiction of the Baltimore District (i.e., Fort Belvoir, Fort Myer, and the Pentagon). A single and complete project under the terms of the Bay TMDL RGP, including all attendant features, both temporary and permanent, cannot result in more than one acre of impact, both direct and indirect, to waters of the U.S. including wetlands. Of this, no more than 2,000 linear feet of streams, rivers, and other open water, or a combination thereof may be impacted. In addition, the overall project may not exceed the conversion thresholds set forth in the Bay TMDL RGP (See Section IV of the Bay TMDL RGP).

Activities authorized by the Bay TMDL RGP that are self-verifying (i.e., Category I and Category II) may commence without written notification from the Corps after the permittee has:

- Confirmed that the activity will be conducted in compliance with the terms and conditions of the Bay TMDL RGP, which may include consultation with the Corps and/or outside relevant Federal and State agencies. Prospective permittees must refer to the terms and conditions of the Bay TMDL RGP to determine if the activity may be eligible for authorization under this Bay TMDL RGP. In addition, the applicant must make a determination whether the proposed activity is eligible for self-verification or whether a pre-construction notification (PCN) (see Appendix 3) is required. All terms and conditions of the Bay TMDL RGP still apply to self-verification activities authorized by this Bay TMDL RGP, and
- Submitted this Self-Verification Form and a permit application using the established Corps of Engineers permit application procedures. Please note: This form may be edited or updated during implementation of the Bay TMDL RGP to provide additional clarification or guidance. Before completing this form, please ensure that you are using the most current version posted on the Corps of Engineers, Baltimore District's website (see **http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcesses.aspx**,
- Obtained all required State and local authorizations.

1. Applicant:_____
   Project Coordinates should be entered in decimal degrees to at least three decimal points
   Project Latitude: _____ Project Longitude:_____

2. If you answer **No** any of the questions below your project does not qualify for the Bay TMDL RGP. Skip this form and you must submit an application for processing under another permit type in accordance with the established Corps of Engineers permit application procedures for Maryland, Virginia, and the District of Columbia.:
   a. Are the activities in waters of the U.S. part of an acceptable watershed strategy, such as a Chesapeake Bay Watershed Implementation Plan (WIP), whose purpose is to identify implementation activities needed to meet nutrient and sediment load reduction targets under the Chesapeake Bay TMDL? Y☐ N☐
      Provide a statement identifying the watershed strategy, attach additional sheets if necessary:
      _____
      _____
   b. For stream and wetland restoration and enhancement projects, was a function-based assessment used to assess current site and watershed conditions and to select and design the proposed stream and wetland restoration or enhancement project? Y☐ N☐
      Please see Section X of the Bay TMDL RGP for when as-built and post construction reporting, including documentation of the function-based assessment, is required for self-verified activities authorized by the Bay TMDL RGP.

c. If you are proposing a stream and wetland restoration and enhancement project, does the project result in restoration of functions that support and/or enhance aquatic biological resources AND sediment and nutrient reduction at the project site? Y☐N☐
d. Does the project protect riparian and wetland vegetation from unnecessary clearing and disturbance to the maximum extent practicable? Y☐ N☐

3. If you answer **Yes** to any question below your project does not qualify for the Bay TMDL RGP and you must submit an application for review and processing under another permit type:
   a. Will the project result in any stream channelization or stream piping? Y☐N☐
   b. Does your project impact tidal waters or wetlands? Y☐ N☐
   c. Does the activity result in total temporary and permanent impacts greater than 1 acre of waters of the U.S.? Y☐N☐
   d. Does the activity result in total temporary and permanent impacts greater than 2,000 linear feet of stream, rivers, and other open waters? Y☐N☐
   e. Does the activity involve the construction of a new stormwater management facility or an earthen or stone cofferdam or causeway in aquatic resources, including streams or wetlands? Y☐N☐
   f. Does the activity convert a stream to a permanent impoundment and block aquatic life movements? Y☐N☐
   g. Is the project designed primarily to protect public infrastructure using bank armoring or riprap or to primarily improve aquatic habitat functions and services? Y☐N☐
   h. Is the activity proposed for the purpose of restoring streams damaged by acid mine drainage or to compensate or mitigate for an impact to waters of the U.S.? Y☐N☐
   i. Are any existing or proposed activities associated with an ongoing Corps or EPA enforcement action? Y☐N☐

4. Self-Verification is only valid for the following Bay TMDL activities. If your project is not identified in one of the following activities, then your project is not eligible for self-verification under the Bay TMDL RGP. You must submit a Pre-Construction Notification Form and an application in lieu of this self-verification form as well as all required application documentation. Check all activities below that apply to your project:
   ☐ Retrofit of an existing stormwater management facility
   ☐ Retrofit of an existing concrete-lined stormwater management outfall
   ☐ Restoration & enhancement of an existing concrete-lined stream channel
   ☐ Restoration & enhancement of an existing piped stream channel
   ☐ Projects with total temporary and permanent impacts not exceeding 10,000 square feet of nontidal waters of the U.S., including no more than 500 linear feet of streams, rivers, and other open waters and no more than 5,000 square feet of nontidal wetlands

5. If you answer **Yes** to any of the questions below your proposed project does not qualify for Self-Verification under the Bay TMDL RGP. A Pre-Construction Notification and an application is required to be submitted in accordance with the permit application submittal procedures **(http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcess.aspx)**:
   a. Does the Bay TMDL activity cause total temporary and permanent impact to more than 500 linear feet of streams, rivers, or other open waters? Y☐N☐
   b. Does the Bay TMDL activity cause the total temporary and permanent impacts to more than 10,000 square feet of nontidal waters of the U.S.? Y☐N☐
   c. Does the activity cause the total temporary and permanent impacts greater than 5,000 square feet of nontidal wetlands? Y☐ N☐
   d. Does the U.S. Fish and Wildlife Service documentation indicate that Federally listed Threatened or Endangered species may be affected by the proposed activity? Y☐ N☐

e. Does the State Historic Preservation Office documentation indicate that historic and cultural resources may be affected by the proposed activity? Y☐ N☐
f. Is your project located in or adjacent to a proposed or existing Federally authorized civil works project or within 150 feet of the horizontal limits of a Federal navigation project? Y☐ N☐

6. For stream restoration and enhancement projects, the following stream degradation criteria must be met. If they are not met your project does not qualify for the Bay TMDL RGP and you must submit an application for review and processing under another permit type. Please provide the documentation indicating scores, attach additional sheets if necessary.
   a. The following biological condition criteria must be met based on stream type:
      1. Perennial Streams: The Benthic Index of Biotic Integrity scores less than or equal to 50%? Y☐N☐.
         Indicate measured score: Reach 1 _____; Reach 2 _____;
         Reach 3 _____; Reach 4 _____
      2. Intermittent and Ephemeral Streams: Is the overall modified Environmental Protection Agency Rapid Bioassessment Protocol Habitat Assessment (EPA RBP) score in the "marginal to poor" range? Y☐ N☐ Indicate measured score for each Reach: _____
   b. At least one of the following geomorphic/hydrologic criteria must be met:
      1. The Bank Erosion Hazard Index/ Near Bank Stress scores a minimum of moderate/moderate or higher or is there an annual bank erosion rate of greater than 0.1 ft/yr? Y☐N☐ Indicate measured score or rate: _____
      2. Is there evidence of floodplain disconnection throughout the majority of the reaches? Y☐N☐ Describe the measurement to validate why it was determined that there was floodplain disconnection on the majority of the reach:
         _____
         _____
      3. Other measurement demonstrated water quality impairment and stream degradation at the project reach? Y☐N☐ Provide description and information to validate your determination:
         _____

7. The Bay TMDL RGP may be used to authorize relocation of aquatic resources onsite. Relocation is defined as the in-kind replacement of any impacted resource within the project site provided there is a net increase in functions that support or enhance aquatic biological resources. Does the activity involve the relocation of nontidal waters, including nontidal wetlands and streams on the project site? Y☐N☐ Plans must clearly show the location of existing, impacted aquatic resources and where they will be relocated to onsite. If resources are not relocated onsite, the impact is considered a conversion.

8. Does the activity involve the conversion of a stream or wetland to another aquatic habitat (e.g., stream to wetland or vice versa, stream to flooded state), or from an aquatic habitat to an upland habitat, or from one wetland plant community type to another wetland plant community type? Y☐N☐ Plans must clearly show the location of existing, impacted aquatic resources to be converted.

9. If you answered "yes" to question #8 above, does the project exceed any of the conversion thresholds in Table 1 below? Y☐N☐ Projects that exceed the conversion thresholds in Table 1 below do not qualify for the Bay TMDL RGP. You must submit an application for processing under another permit type in accordance with the established Corps of Engineers permit application procedures for Maryland, Virginia, and the District of Columbia.

Table 1: Conversion Thresholds under the Bay TMDL RGP[1]

The Bay TMDL RGP may be used to authorize multiple conversion types for an overall project provided ALL the following conversion thresholds are not exceeded.

	Total Conversion Limit for Overall Project	**Conversion to Uplands Limit**	**Limit to Conversion Among Aquatic Habitat Types[2]**
Wetlands (square feet)	5,000 sqft	5,000 sqft	5,000 sqft
Streams, rivers, and other open waters (square feet/linear feet)	10, 000 sqft/500 lf	5,000 sqft/200 lf	10,000 sqft/500 lf
All Waters of the U.S. (square feet)	10,000 sqft	5,000 sqft	10,000 sqft

[1] *Impacted aquatic resources that are replaced in-kind and onsite (i.e., relocated) do not count against conversion thresholds provided there is a net increase in aquatic resource functions and services at the project site.*

[2] *Re-establishment or rehabilitation of aquatic habitat types in areas where these habitat types can be determined to have previously existed at the project site do not count against conversion thresholds. Historical evidence and documentation that the proposed habitat type previously existed at the site is required. Historical evidence collected from aerial photographs, prior delineations, historical maps, forensic soil analysis, and local nearby reference sites may provide details of the former extent and conditions of the aquatic habitat that previously existed on the site.*

10. Does the activity meet the terms and conditions of the Category I ☐ or Category II☐ as outlined in the Bay TMDL RGP Table 2?

11. Does the activity comply with all of the Bay TMDL RGP terms and conditions, including avoidance and minimization, aquatic life movements, endangered species, single and complete project, and cultural resources? Y☐N☐

- I certify that the information on this form and on the attached plans and specifications is true and accurate to the best of my knowledge and belief.
- I certify that I will provide to the Corps an As Built Report including a copy of the function-based assessment within 90 Days of project completion (Category II projects only). The As Built Report and assessment information will be provided for all Category II projects in accordance with the application submittal thresholds outlined in the Bay TMDL RGP.
- The activities proposed in waters of the U.S. are part of an appropriate watershed strategy such as a Chesapeake Bay Watershed Implementation Plan for the purpose of meeting nutrient and sediment load reduction targets in accordance with the Chesapeake Bay TMDL.
- The activity complies with the siting criteria and land use practice recommendations stated in Sections 1-3 of the Federal Aviation Administration Advisory Circular 150/5200-33? This document can be found at: **http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf**

Your name and signature below, as permittee, confirms that your project: a) meets the self-verification criteria and b) that you accept and agree to comply with the appl**icable terms and conditions in the Chesapeake Bay Total Maximum Daily Load Regional Gene**ral Permit.

Permittee Printed Name:_____

Permittee Signature:_____ Date:_____

APPENDIX 3: PRE-CONSTRUCTION NOTIFICATION (PCN) FORM FOR CATEGORY III ACTIVITIES AUTHORIZED BY THE CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD REGIONAL GENERAL PERMIT (Bay TMDL RGP)

The Bay TMDL RGP is applicable in nontidal waters and nontidal wetlands in the Chesapeake Bay watershed within the State of Maryland, District of Columbia, and military installations in northern Virginia within the regulatory jurisdiction of the Baltimore District (i.e., Fort Belvoir, Fort Myer, and the Pentagon). A single and complete project under the terms of the Bay TMDL RGP, including all attendant features, both temporary and permanent, cannot result in more than one acre of impact, both direct and indirect, to waters of the United States including wetlands. Of this, no more than 2,000 linear feet of streams, rivers, and other open water, or a combination thereof may be impacted. In addition, the overall project may not exceed the conversion thresholds set forth in the Bay TMDL RGP (See Section IV of the Bay TMDL RGP).

Activities requiring individual authorization by the Bay TMDL RGP (Category III) cannot commence without written notification from the Corps. An application must be submitted with this PCN form and information listed within the Bay TMDL RGP using the established Corps of Engineers permit application procedures. Please note: This PCN form may be edited or updated during implementation of the Bay TMDL RGP to provide additional clarification or guidance. Before completing this form, please ensure that you are using the most current version posted on the Baltimore District Regulatory website at:
http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcesses.aspx

1. Applicant:_____
   Project Coordinates should be entered in decimal degrees to at least three decimal points
   Project Latitude: _____ Project Longitude:_____

2. If you answer **No** to the questions below your project does not qualify for the Bay TMDL RGP. Skip this form and you must submit an application for processing under another permit type in accordance with the established Corps of Engineers permit application procedures for Maryland, Virginia, and the District of Columbia.:
   a. Are the activities in waters of the U.S. part of an approved watershed strategy, such as a Chesapeake Bay Watershed Implementation Plan (WIP), whose purpose is to identify implementation activities needed to meet nutrient and sediment load reduction targets under the Chesapeake Bay TMDL? Y☐ N☐
      Provide a statement identifying the watershed strategy, attached additional sheets if necessary:
      _____
      _____
   b. For stream and wetland restoration and enhancement projects, was a function-based assessment used to project the restoration potential for functional lift at the project site? Y☐ N☐ Please see Section X of the Bay TMDL RGP for when as-built and post construction reporting, including documentation of the function-based assessment, is required for activities authorized by the Bay TMDL RGP.
   c. If you are proposing a stream and wetland restoration and enhancement project, does the project result in restoration of functions that support and/or enhance aquatic biological resources AND sediment and nutrient reduction at the project site? Y☐N☐
   d. Does the project protect riparian and wetland vegetation from unnecessary clearing and disturbance to the maximum extent practicable? Y☐ N☐

3. If you answer **Yes** to any question below your project does not qualify for the Bay TMDL RGP and you must submit an application for review and processing under another permit type:
   a. Will the project result in any stream channelization or stream piping? Y☐N☐

b. Does your project impact tidal waters or wetlands? Y☐ N☐
c. Does the activity result in total temporary and permanent impacts greater than 1 acre of waters of the U.S.? Y☐N☐
d. Does the activity result in total temporary and permanent impacts greater than 2,000 linear feet of stream, rivers, and other open waters? Y☐N☐
e. Does the activity involve the construction of a new stormwater management facility or an earthen or stone cofferdam or causeway in aquatic resources, including streams or wetlands? Y☐N☐
f. Does the activity convert a stream to a permanent impoundment and block aquatic life movements? Y☐N☐
g. Is the project designed primarily to protect public infrastructure using bank armoring or riprap or to primarily improve aquatic habitat functions and services? Y☐N☐
h. Is the activity proposed for the purpose of restoring streams damaged by acid mine drainage or to compensate or mitigate for an impact to waters of the U.S.? Y☐N☐
i. Are any existing or proposed activities associated with an ongoing Corps or EPA enforcement action? Y☐N☐

4. For stream restoration and enhancement projects, the following stream degradation criteria must be met. If they are not met your project does not qualify for the Bay TMDL RGP and you must submit an application for review and processing under another permit type. Please provide the documentation indicating scores, attach additional sheets if necessary.
   a. The following biological condition criteria must be met based on stream type:
      1. Perennial Streams: The Benthic Index of Biological Integrity scores less than or equal to 50%? Y☐N☐.
         Indicate measured score: Reach 1 _____; Reach 2 _____;
         Reach 3 _____; Reach 4 _____
      2. Intermittent and Ephemeral Streams: Is the overall modified EPA RBP Habitat Assessment score in the "marginal to poor" range? Y☐N☐.
         Indicate measured score for each Reach:
         _____
   b. At least one of the following geomorphic/hydrologic criteria must be met:
      1. The Bank Erosion Hazard Index/ Near Bank Stress scores at minimum of moderate/moderate or higher or is there an annual bank erosion rate of greater than 0.1 ft/yr? Y☐N☐. Indicate measured score or rate: _____
      2. Is there evidence of floodplain disconnection throughout the majority of the reaches? Y☐N☐. Describe the measurement to validate why it was determined that there was floodplain disconnection on the majority of the reach:
         _____
         _____
      3. Other measurement demonstrated water quality impairment and stream degradation at the project reach? Y☐N☐. Provide description and information to validate your determination: _____
         _____

5. The Bay TMDL RGP may be used to authorize relocation of aquatic resources onsite. Relocation is defined as the in-kind replacement of any impacted resource within the project site provided there is a net increase in functions that support or enhance aquatic biological resources. Does the activity involve the relocation of nontidal waters, including nontidal wetlands and streams on the project site? Y☐N☐ Plans must clearly show the impacted

aquatic resources and where they will be relocated to onsite. If resources are not relocated onsite, the impact is considered a conversion.

6. Does the activity involve the conversion of a stream or wetland to another aquatic habitat (e.g., stream to wetland or vice versa, stream to flooded state), or from an aquatic habitat to an upland habitat, or from one wetland plant community type to another wetland plant community type? Y☐N☐ See Table 1 below.

7. If you answered "yes" to question #7 above, does the project exceed any of the conversion thresholds in Table 1 below? Y☐N☐ Projects that exceed the conversion thresholds in Table 1 below do not qualify for the Bay TMDL RGP. You must submit an application for processing under another permit type in accordance with the established Corps of Engineers permit application procedures for Maryland, Virginia, and the District of Columbia.

Table 1: Conversion Thresholds under the Bay TMDL RGP[1]

The Bay TMDL RGP may be used to authorize multiple conversion types for an overall project provided ALL the following conversion thresholds are not exceeded.

	Total Conversion Limit for Overall Project	**Conversion to Uplands Limit**	**Limit to Conversion Among Aquatic Habitat Types[2]**
Wetlands (square feet)	5,000 sqft	5,000 sqft	5,000 sqft
Streams, rivers, and other open waters (square feet/linear feet)	10, 000 sqft/500 lf	5,000 sqft/200 lf	10,000 sqft/500 lf
All Waters of the U.S. (square feet)	10,000 sqft	5,000 sqft	10,000 sqft

[1] *Impacted aquatic resources that are replaced in-kind and onsite (i.e., relocated) do not count against conversion thresholds provided there is a net increase in aquatic resource functions and services at the project site.*

[2] *Re-establishment or rehabilitation of aquatic habitat types in areas where these habitat types can be determined to have previously existed at the project site do not count against conversion thresholds. Historical evidence and documentation that the proposed habitat type previously existed at the site is required. Historical evidence collected from aerial photographs, prior delineations, historical maps, forensic soil analysis, and local nearby reference sites may provide details of the former extent and conditions of the aquatic habitat that previously existed on the site.*

8. Are federally protected endangered or threatened species or their critical habitat in the project area? Y☐ N☐
   Provide the correspondence from the U.S. Fish and Wildlife Service regarding any Federally-listed threatened or endangered species that may be affected by the proposed activity.

9. Are cultural or historic resources located on or near your project area? Y☐ N☐
   Provide the correspondence from State Historic Preservation Office regarding cultural and historic resources that may be affected by the proposed project.

10. Does the activity comply with all of the Bay TMDL RGP terms and conditions, including avoidance and minimization, aquatic life movements, endangered species, single and complete project, and cultural resources? Y☐N☐

- I certify that the information on this form and on the attached plans and specifications is true and accurate to the best of my knowledge and belief.
- I certify that I will provide to the Corps an As Built Report including a copy of the function-based assessment within 90 Days of project completion. The As Built Report and assessment information will be provided for all Category III projects in accordance with the application submittal thresholds outlined in the Bay TMDL RGP.
- The activities proposed in waters of the U.S. are part of an appropriate watershed strategy such as a Chesapeake Bay Watershed Implementation Plan for the purpose of meeting nutrient and sediment load reduction targets in accordance with the Chesapeake Bay TMDL.
- The activity complies with the siting criteria and land use practice recommendations stated in Sections 1-3 of the Federal Aviation Administration Advisory Circular 150/5200-33? This document can be found at: **http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf**

Your name and signature below, as permittee, confirms that your project: a) meets the Bay TMDL RGP and PCN criteria and b) that you accept and agree to comply with the applicable terms and conditions in the Chesapeake Bay Total Maximum Daily Load Regional General Permit.

Permittee Printed Name:_____
Permittee Signature:_____ Date:_____

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

APPENDIX 4 – CERTIFICATE OF COMPLIANCE

SUBJECT: **Chesapeake Bay Total Maximum Daily Load Regional General Permit**

Corps Permit Number:

Name of Permittee:

Date of Issuance:

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US Army Corps of Engineers
Baltimore District
CENAB-OP-R
P.O. Box 1715
Baltimore, Maryland 21203-1715

Please note that your permitted activity is subject to compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation, or enforcement action.

Please complete the following information:

1. Date authorized work commenced: _____ 2. Date authorized work completed: _____

3. Was all work and any required mitigation, completed in accordance with your permit authorization, including all general and/or specific conditions? YES___ NO ___

4. Explain in detail any deviations to the authorized work and/or mitigation (use additional sheets if necessary)
_____
_____

5. Wetland Mitigation: Required? YES_____ NO_____ Required Completion Date _____
Completed? YES_____ NO_____ Mitigation Monitoring Reports Required? YES_____ NO_____

6. Attach labeled photographs showing completed work including mitigation area(s).

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and any required mitigation was completed in accordance with the permit conditions.

_____ _____
Signature of Permittee Date

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101 • www.mde.maryland.gov

Lawrence J. Hogan, Jr.
Governor

Boyd K. Rutherford
Lieutenant Governor

Ben Grumbles
Acting Secretary

February 27, 2015

William P. Seib, Chief
Regulatory Branch
Baltimore District
U.S. Army Corps of Engineers
P.O. Box 1715
Baltimore, Maryland 21203-1715

RE: Final Draft Regional General Permit No. NAB-2014-00602
Chesapeake Bay Total Maximum Daily Load (TMDL) Activities

Dear Mr. Seib:

The Maryland Department of the Environment ("MDE" or "the Department") has completed its review of the referenced Chesapeake Bay TMDL Regional General Permit (RGP) for proposed activities in waters of the U.S., including jurisdictional wetlands. The purpose of this letter is to transmit the State's Water Quality Certification, pursuant to Section 401 of the Clean Water Act, and Federal Consistency, pursuant to Section 307 of the Federal Coastal Zone Management Act of 1972, as amended (CZMA), decisions on the TMDL RGP.

Activities authorized by the TMDL RGP will include, but not be limited to, the retrofit of existing stormwater management facilities, the retrofit of existing stormwater management outfalls, and the restoration and enhancement of nontidal streams and nontidal wetlands. The purpose of proposed stream and wetland restoration/enhancement projects must be to meet nutrient and sediment load reduction targets under the Chesapeake Bay TMDL and to restore/enhance aquatic resource functions at the project site.

By letter dated July 17, 2014, MDE provided comments to the Corps of Engineers (Corps) on the Draft TMDL RGP No. NAB-2014-00602. The Department recommended that the maximum thresholds of one acre of discharges and 2,000 linear feet of stream for proposed stream restoration activities in perennial stream systems be reduced to one-half acre and 1,000 linear feet of stream. Although the Corps chose not to incorporate this recommendation in the Final Draft RGP, MDE recognizes that all proposed stream restoration projects in perennial streams require authorization from the Department's Wetlands and Waterways Program.

Accordingly, Maryland hereby issues Water Quality Certification for the Chesapeake Bay TMDL RGP, subject to the condition that the applicant obtain all necessary State permits and approvals. This condition provides assurance that the activities authorized by this RGP will comply with applicable State water quality standards and be carried out in a manner consistent with the Maryland Coastal Zone Management Program, as required by Section 307 of the CZMA.

In closing, we look forward to continuing our work with your office to improve and expedite the regulatory process so that we may better serve the citizens of Maryland. If you have any questions, please contact me at 410-537-3744, or Elder Ghigiarelli, Jr. of my staff at 410-537-3763.

Sincerely,

Gary T. Setzer, Program Administrator
Wetlands and Waterways Program

cc: Elder Ghigiarelli, Jr., Deputy Program Administrator

AUG 2 1 2014

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of the Environment

Natural Resources Administration
Water Quality Division

Mr. William P. Seib, Chief
Regulatory Branch
Department of the Army
Baltimore District, U.S. Army Corps of Engineers
PO Box 1715
Baltimore, MD 21203-1715

Ref: Section 401 Water Quality Certification of the Draft Regional General Permit for Chesapeake Bay Total Maximum Daily Load (TMDL) Activities

Dear Mr. Seib:

The District Department of the Environment (DDOE) has received your request for the State's Section 401 Water Quality Certification on the Baltimore District, U.S. Army Corps of Engineers (Corps) proposed issuance of a Total Maximum Daily Load Regional General Permit (TMDL RGP) authorizing activities in waters of the United States, including jurisdictional wetlands that are part of an overall watershed strategy (e.g. Chesapeake Bay TMDL Watershed Implementation Plan (WIP) for a five year period. DDOE has completed its review of the proposed permit as published in Special Public Notice # 14-28 on May 16 2014.

DDOE hereby certifies under Section 401 of the Clean Water Act, subject to the conditions listed below, that the activities authorized by the proposed TMDL RGP, which may result in a discharge into waters of the United States in the District of Columbia will comply with the District of Columbia Water Pollution Control Act of 1984, D.C. Official Code § 8-103.01 *et seq.*, and will meet the Surface Water Quality Standards of the District of Columbia in Title 21 of the District of Columbia Municipal Regulations (DCMR) Chapter 11.

District of Columbia Conditions

1. All activities permitted by this TMDL RGP shall comply with the District of Columbia Water Pollution Control Act of 1984, D.C. Official Code § 8-103.01 *et seq.*, Surface Water Quality Standards of the District of Columbia in Title 21 of the District of Columbia Municipal Regulations (DCMR) Chapter 11, and the Water Quality Monitoring Regulations in DCMR Chapter 19.

2. Permit application forms and all supporting documents must be submitted to DDOE prior to commencing any work for all activities authorized by this TMDL RGP regardless of the impact area thresholds requiring a permit application.

3. Projects that are excluded from the Corps Application Submittal Thresholds [Section 2.(a) and 2.(b) of the permit], must submit a project notification to DDOE at least seven (7) business days before commencing the work.

4. Copies of application forms, notifications documents, monitoring reports, post construction reports, and any document submitted to the Corps as required by this permit, must also be submitted to DDOE.

5. If the Corps issues an individual permit for a project, an individual Section 401 Water Quality Certification will be required from DDOE.

6. All drill cuttings, drilling mud, excavated and dredged materials, sampling sediments, and wastes (both solid and liquid) shall be containerized and analyzed for disposal at appropriate disposal sites. The wastes shall not be used as backfill material in the river or on land.

7. For activities which impact on wetlands, identification and delineation of jurisdictional waters of the United States, including wetlands, must be performed using a multi-parameter approach defined in Technical Report Y-87-1, Corps of Engineers Wetlands Delineation Manual, dated January 1987, and applicable supplemental guidance and DDOE's procedures.

8. Control of turbidity, sediments, waste and work materials in the river:
   (a) Weighted turbidity curtains must be used if the permittee uses anchored barges or boats, or any anchored equipment.
   (b) Weighted turbidity curtains must be used in all activity, sampling, soil boring, work areas and around equipment or coffer dams.
   (c) The turbidity curtains must be properly anchored, must touch the river bottom, and encompass the entire area of activity - coffer dams, barge, boat, plus any equipment in the water. Where possible, the turbidity curtain must be able to withstand normal tidal or stream flow fluctuations.
   (d) The turbidity curtains must be in place after the equipment is brought into the work area, but before it is anchored. This is necessary to prevent any sediments, contaminants, and waste materials from escaping the work area and reintroduced into the water column during the work activity.
   (e) To minimize sediments from escaping the work area, adequate space must be provided between the work area and the turbidity curtains.

9. To monitor turbidity in the river; the permittee shall:
   (a) Continuously observe and measure turbidity at not more than 20 feet upstream and 20 feet downstream of the work area to ensure that there is no generation of sediment plumes and no sediment plumes escape the work area. Depending on the water

depth, turbidity monitoring must be conducted at different depths, for example, near the bottom, ¼ depth from the bottom, ¾ depth from the bottom, and near the surface.

(b) Establish background turbidity and measure turbidity by using U.S. Environmental Protection Agency (EPA) approved methods in accordance with 40 CFR Part 136 procedures and manufacturer's specifications. Background turbidity must be established before starting any work in the water; and

(c) If a sediment plume is observed coming out of the sediment-disturbing activity, work area, sampling location or if the turbidity exceeds the District of Columbia surface water quality standard, the permittee shall:

(i) Immediately stop all activities/operations and notify DDOE WQD at (202) 671-3033;

(ii) Adjust all activities and implement best management practices until there is no more sediment escaping the sediment-disturbing activity/sampling/soil boring location; and

(iii) If and when the measured turbidity is less than or equal to the background turbidity, the permittee may resume the work.

10. The permittee shall submit written notification to DDOE WQD at least seven (7) business days before work commences.

11. All documents associated with this permit must be submitted to the following address:

The Associate Director
Water Quality Division
District Department of the Environment
1200 First Street, NE., 5th Floor
Washington, DC 20002

12. DDOE retains the right, on an individual activity basis, to withdraw or modify Section 401 Water Quality Certification for an activity subject to TMDL RGP which it determines may adversely impact water quality.

13. DDOE reserves the right to conduct inspections at any time during the construction process to determine if a permitted activity complies with the terms and conditions authorized by the TMDL RGP and Section 401 Water Quality Certification.

If you have any questions or need additional information, please contact Mary Searing by email at mary.searing@dc.gov or by telephone at (202) 535-2990.

Sincerely,

Collin R. Burrell
Associate Director

AUG 2 1 2014

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

August 14, 2014

Mr. William P. Seib
Chief, Regulatory Branch
U.S. Army Corps of Engineers
P.O. Box 1715
Baltimore, MD 21203-1715

RE: Final Section 401 Certification; Total Maximum Daily Load Regional General Permit (TMDL RGP) for Certain Activities on Military Installations in Northern Virginia

Dear Mr. Seib,

Provided herein is the Commonwealth of Virginia's decision with regard to Section 401 Water Quality Certification for activities authorized by the U.S. Army Corps of Engineers (the Corps) Baltimore District in waters of the U.S., including jurisdictional wetlands on military installations in Northern Virginia that are part of an overall watershed strategy (e.g., Chesapeake Bay TMDL Watershed Implementation Plan (WIP)), and whose purpose is to meet nutrient and sediment load reduction targets under the Chesapeake Bay TMDL mandates. The four military installations in Northern Virginia are: The Pentagon, Fort Belvoir, Cameron Station, and Fort Myer.

Pursuant to Virginia Water Protection (VWP) Permit Regulation 9 VAC 25-210-130.H., the State Water Control Board is issuing this final Section 401 Water Quality Certification as meeting the requirements of the VWP regulation, after advertising its intention and accepting public comment for 30 days. The public comment period began on July 01, 2014 and ended on August 01, 2014. No comments were received in direct response to this public notice. However, the State Water Control Board was copied on a July 7, 2014 letter from the Chesapeake Bay Foundation's (CBF's) Maryland Executive Director to the Corps-Baltimore District, which outlined several of CBF's concerns with the TMDL general permit. Even though the comments were submitted to the Corps, the comments have been evaluated and do not affect our decision to provide certification.

The State Water Control Board hereby provides unconditional Section 401 Water Quality Certification for Total Maximum Daily Load Regional General Permit (TMDL RGP) for Certain Activities on Military Installations in Northern Virginia. Please be aware that this unconditional Section 401 Water Quality Certification does not obviate the requirement to obtain other state or local environmental permits, including Virginia Stormwater Management Program (VSMP) permits.

Please do not hesitate to contact me at (804) 698-4105 or dave.davis@deq.virginia.gov if you have any questions regarding this Section 401 Water Quality Certification.

Sincerely,

David L. Davis
Director, Office of Wetlands and Stream Protection

cc: Mr. Tom Walker, Norfolk District Army Corps of Engineers
Mr. Tony Watkinson, Habitat Division, Virginia Marine Resources Commission
Ms. Trisha Beasley, DEQ-Northern Regional Office

JUL 28 2014

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

July 24, 2014

District Engineer
U.S. Army Corps of Engineers
Baltimore District
ATTN: CENAB-OP-R
Baltimore, Maryland 21203-1715

RE: Federal Consistency Determination for the Draft Regional General Permit, Chesapeake Bay Total Maximum Daily Load Activities, U.S. Army Corps of Engineers, DEQ 14-088F.

Dear Sir or Madam:

The Commonwealth of Virginia has completed its review of the Draft Regional General Permit for Chesapeake Bay Total Maximum Daily Load Activities submitted by the U.S. Army Corps of Engineers (Corps) Baltimore District for the Commonwealth's review and concurrence under the federal consistency regulations of the Coastal Zone Management Act (CZMA). The Department of Environmental Quality (DEQ) is responsible for coordinating Virginia's review of consistency determinations submitted under the CZMA and responding to appropriate officials on behalf of the Commonwealth. This letter is in response to the Draft Regional General Permit dated May 16, 2014 (received May 30, 2014) submitted by the Corps Baltimore District. The following agencies participated in this review:

Department of Environmental Quality
Department of Conservation and Recreation
Department of Health
Department of Game and Inland Fisheries
Department of Historic Resources

In addition, the Virginia Marine Resources Commission, Virginia Institute of Marine Science, and Northern Virginia Regional Commission were invited to comment on the proposed action.

DESCRIPTION OF THE PROPOSED ACTION

The Baltimore District of the U.S. Army Corps of Engineers is proposing to issue a Total Maximum Daily Load Regional General Permit (TMDL RGP) for activities in waters of the U.S., including jurisdictional wetlands, that are part of an overall watershed strategy (e.g., Chesapeake Bay TMDL Watershed Implementation Plan (WIP)) whose purpose is to meet nutrient and sediment load reduction targets under the Chesapeake Bay TMDL mandates. Activities authorized by this TMDL RGP include, but are not limited to:

- the retrofit of existing stormwater management facilities;
- the retrofit of existing stormwater management outfalls; and
- the restoration and enhancement of non-tidal streams and non-tidal wetlands.

The purpose of stream and wetland restoration and enhancement projects must be to meet nutrient and sediment load reduction targets under the Chesapeake Bay TMDL and to restore and/or enhance aquatic resource functions at the project site. Applicable waters under the Baltimore District Corps' jurisdiction in Virginia include the following military installations in northern Virginia:

- Pentagon
- Cameron Station
- Fort Myer
- Fort Belvoir

The Corps' May 16, 2014 public notice serves as its finding that the TMDL RGP is consistency, to the maximum extent practicable, with the enforceable policies of the Virginia Coastal Zone Management Program.

FEDERAL CONSISTENCY PUBLIC PARTICIPATION

In accordance with 15 CFR §930.2, the public was invited to participate in the review of the Corps' submission under federal consistency. Public notice of this proposed action was published on the DEQ website from June 11, 2014 through July 1, 2014. No public comments were received in response to the notice.

FEDERAL CONSISTENCY UNDER THE COASTAL ZONE MANAGEMENT ACT

Pursuant to the Coastal Zone Management Act of 1972 (§ 1456(c)), as amended, and the federal consistency regulations implementing the CZMA (15 CFR Part 930, Subpart C, § 930.30 *et seq.*) federal actions that can have reasonably foreseeable effects on Virginia's coastal uses or resources must be conducted in a manner which is consistent, to the maximum extent practicable, with the Virginia Coastal Zone Management Program (VCP). The VCP is comprised of a network of programs administered by several agencies. In order to be consistent with the VCP, the federal agency action

must be consistent with all the applicable enforceable policies of the VCP prior to commencing the action.

FEDERAL CONSISTENCY CONDITIONAL CONCURRENCE

Based on the comments submitted by the agencies administering the enforceable policies of the VCP, DEQ concurs that the Draft RGP for Chesapeake Bay TMDL activities, is consistent with the VCP provided that the following conditions, discussed below, are satisfied:

1) Prior to construction, applicants shall obtain all required permits and approvals not yet secured for the activities to be performed that are applicable to the VCP's enforceable policies and that applicants also adhere to all the conditions contained therein.

   - The DEQ Office of Air Division concurs that the proposed action is consistent with the air pollution control enforceable policy provided projects are designed and constructed in a manner consistent with the Air Pollution Control Law (Virginia Code §10.1-1300 *et seq.*) and the Regulations for the Control and Abatement of Air Pollution.

   - The DEQ Office of Stormwater Management concurs that the proposed action is consistent with the coastal lands management enforceable policy provided projects are designed and constructed in a manner consistent with the Chesapeake Bay Preservation Act (Virginia Code §62.1-44.15:67 *et seq.*) and the Chesapeake Bay Preservation Area Designation and Management Regulations (9 VAC 25-830-10 *et seq.*).

2) The State Water Control Board is currently conducting a Section 401 Clean Water Act Water Quality Certification for the RGP which is anticipated to be complete in August 2014. Accordingly, the activities that qualify for the proposed RGP must meet the requirements of DEQ's *Virginia Water Protection Permit Regulation* and the permittee must abide by the conditions of the RGP as certified under Section 401.

In accordance with the *Federal Consistency Regulations* at 15 CFR Part 930, section 930.4, this conditional concurrence is based on the applicants demonstrating to the Corps that they have obtained, or will obtain, all necessary authorizations prior to implementing a project which qualifies for a RGP. If the requirements of section 930.4, sub-paragraphs (a)(1) through (a)(3) are not met, this conditional concurrence becomes an objection under 15 CFR Part 930, section 940.43.

Other state approvals which may apply to this project are not included in this consistency concurrence. Therefore, applicants must ensure that all actions are

administered in accordance with all applicable federal, state, and local laws and regulations.

FEDERAL CONSISTENCY ANALYSIS

According to information in the TMDL RGP, the proposed action would have no effect on the following enforceable policies: dunes management; point source pollution control; shoreline sanitation; air pollution control; and coastal lands management. The resource agencies that are responsible for the administration of the enforceable policies of the VCP generally agree with the findings. The Corps must ensure that the proposed action is consistent with the aforementioned policies. In addition, DEQ encourages the Corps to consider potential project impacts on the advisory policies of the VCP (Attachment 2). The analysis which follows responds to the discussion of the enforceable policies of the VCP that apply to this project.

1. Fisheries Management. According to the TMDL RGP (page 12), Essential Fish Habitat (EFH) consultation with the National Marine Fisheries Service (NMFS) shall be fully in accordance with required legal procedures under Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-297; 11 October 1996). The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. If further EFH consultation is needed based on evaluation and consultation with NMFS, the applicant shall not begin work until the Corps has provided notification that the EFH consultation has concluded. The TMDL RGP (page 14) states that no activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through, or spawn/nursery within the area (e.g., anadromous/catadromous fish); unless the activity's primary purpose is to impound water. In addition, activities, including structures and work in navigable waters of the U.S., or discharges of dredged or fill materials, in fish spawning or nursery areas during spawning seasons, must be avoided (TMDL RGP, page 15).

1(a) Agency Jurisdiction. The Department of Game and Inland Fisheries (Virginia Code 29.1-100 to 29.1-570) and Virginia Marine Resources Commission (Virginia Code 28.2-200 to 28.2-713) have management authority for the conservation and enhancement of finfish and shellfish resources in the Commonwealth. In addition, The Virginia Department of Health's (VDH) Division of Shellfish Sanitation (DSS) is responsible for protecting the health of the consumers of molluscan shellfish and crustacea by ensuring that shellfish growing waters are properly classified for harvesting, and that molluscan shellfish and crustacea processing facilities meet sanitation standards.

1(b) Agency Findings.

(i) Department of Game and Inland Fisheries

DGIF did not indicate any concerns with the TMDL RGP.

(ii) Virginia Marine Resources Commission

VMRC did not respond to DEQ's request for comments on the TMDL RGP.

(iii) Virginia Department of Health

VDH-DSS has no comments on the proposed action.

1(c) Conclusion. DGIF concludes that the proposed issuance of the TMDL RGP is consistent with the fisheries management enforceable policy under its jurisdiction.

For additional information, contact DGIF, Amy Ewing at (804) 367-2211; VRMC, Tony Watkinson at (757) 247-2250; and/or VDH-DSS, Robert Croonenberghs at (804) 864-7480.

2. Subaqueous Lands Management. The TMDL RGP (page 2) states that the total temporary and permanent impacts to nontidal waters of the U.S. (wetlands, streams, etc.) for the overall project must not exceed 1.0 acre (43,560 square feet). Of this, no more than 2,000 linear feet of streams, rivers, open waters, and/or a combination thereof may be impacted.

2(a) Agency Jurisdiction. Pursuant to Section 28.2-1204 of the Code of Virginia the Virginia Marine Resources Commission has jurisdiction over any encroachments in, on, or over any state-owned rivers, streams, or creeks in the Commonwealth. Accordingly, any portion of the project involving encroachments channelward of mean low water below the fall line may require a permit.

VMRC serves as the clearinghouse for the Joint Permit Application (JPA) used by:

- VMRC for encroachments on or over state-owned subaqueous beds as well as tidal wetlands;
- U.S. Army Corps of Engineers (Corps) for issuing permits pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act;
- DEQ for issuance of a Virginia Water Protection Permit; and
- local wetlands board for impacts to wetlands.

2(b) Agency Findings. VMRC did not respond to DEQ's request for comments on the TMDL RGP.

2(c) Conclusion. The TMDL RGP is consistent with the subaqueous lands management enforceable policy of the VCP.

For additional information, contact VMRC, Tony Watkinson at (757) 247-2250.

3. Wetlands Management. As stated in the TMDL RPG (page 1), stream and wetland restoration and enhancement projects, designed to meet nutrient and sediment load reduction targets under the Chesapeake Bay TMDL and to restore and/or enhance aquatic resource functions at the project site, are the primary activities subject to the permit.

3(a) Agency Jurisdiction. The wetlands management enforceable policy is administered by the Virginia Marine Resources Commission for tidal wetlands (Virginia Code 28.2-1301 through 28.2-1320) and the Department of Environmental Quality through the Virginia Water Protection Permit program for tidal and non-tidal wetlands (Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act).

3(b) Agency Findings.

(i) Department of Environmental Quality

The VWPP program staff at DEQ is proposing to issue an unconditional certification of the TMDL RGP. The proposal is currently undergoing a public interest review seeking public comment. The public comment period ends August 1, 2014 and a final decision will be made after the VWPP program evaluates any comments received. Final Section 401 certification will constitute consistency with the wetlands management enforceable policy of the VCP.

(ii) Virginia Marine Resources Commission

VMRC did not respond to DEQ's request for comments on the TMDL RGP.

3(c) Conclusion. Provided that the Corps administers the TMDL RGP in accordance with DEQ's final Section 401 CWA certification, the RGP will be consistent with the wetlands management enforceable policy of the VCP.

For additional information, contact the DEQ Office of Wetlands and Stream Protection, Dave Davis at (804) 698-4105 and/or VMRC, Tony Watkinson at (757) 247-2250.

4. Nonpoint Source Pollution Control. According to the TMDL RGP (page 14), appropriate soil erosion and sediment control measures, practices, and devices must be used and maintained in effective operating condition during construction, to reduce erosion and retain sediment on-site during and after construction. These devices and methods must be capable of: (a) preventing erosion, (b) collecting sediment and suspended and floating materials, and (c) filtering fine sediment. Erosion and sediment

control devices shall be removed when the work is complete and the site has successfully stabilized. The sediment collected by these devices shall be removed and placed at an upland location, in a manner that will prevent its later erosion into a waterway or wetland. All exposed soil or other fills shall be permanently stabilized at the earliest practicable date.

4(a) Agency Jurisdiction. Effective July 1, 2013, the Department of Environmental Quality administers the *Virginia Erosion and Sediment Control Law and Regulations* (*VESCL&R*) and *Virginia Stormwater Management Law and Regulations* (*VSWML&R*). In addition, DEQ is responsible for the issuance, denial, revocation, termination and enforcement of the Virginia Stormwater Management Program (VSMP) General Permit for Stormwater Discharges from Construction Activities related to municipal separate storm sewer systems (MS4s) and construction activities for the control of stormwater discharges from MS4s and land-disturbing activities under the Virginia Stormwater Management Program. Note that these programs were previously administered by the Department of Conservation and Recreation.

4(b) Agency Requirements.

(i) Erosion and Sediment Control, and Stormwater Management

The applicant and its authorized agents conducting regulated land-disturbing activities on private and public lands in the state must comply with *VESCL&R* and *VSWML&R*, including coverage under the general permit for stormwater discharge from construction activities, and other applicable federal nonpoint source pollution mandates (e.g. Clean Water Act-Section 313, federal consistency under the Coastal Zone Management Act). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, borrow areas, soil stockpiles, and related land-disturbing activities that result in the total land disturbance of equal to or greater than 10,000 square feet (2,500 square feet in areas analogous to a Chesapeake Bay Preservation Area) would be regulated by *VESCL&R*. Accordingly, the applicant must prepare and implement an erosion and sediment control (ESC) plan to ensure compliance with state law and regulations. The ESC plan is submitted to the DEQ Northern Regional Office for review for compliance. The applicant is ultimately responsible for achieving project compliance through oversight of on-site contractors, regular field inspection, prompt action against non-compliant sites, and other mechanisms consistent with agency policy. [Reference: VESCL 62.1-44.15 *et seq.*]

(ii) Virginia Stormwater Management Program General Permit for Stormwater Discharges from Construction Activities

The operator or owner of a construction project involving land-disturbing activities equal to or greater than one acre is required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project specific stormwater pollution prevention plan (SWPPP). The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the

SWPPP must address water quality and quantity in accordance with the VSMP Permit Regulations. General information and registration forms for the General Permit are available on DEQ's website at http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits/ConstructionGeneralPermit.aspx. [Reference: Virginia Stormwater Management *Act* 62.1-44.15 *et seq.*] VSMP Permit Regulations 9 VAC 25-870-10 *et seq.*].

4(c) Conclusion. The proposed TMDL RGP is consistent with the nonpoint source pollution control enforceable policy of the VCP, provided the activities comply with applicable ESC and SWM requirements.

For additional information, contact DCR-OSWM, Larry Gavan at (804) 698-4040,

5. Air Pollution Control.

5(a) Agency Jurisdiction. DEQ's Air Quality Division, on behalf of the State Air Pollution Control Board, is responsible to develop regulations that become Virginia's *Air Pollution Control Law*. DEQ is charged to carry out mandates of the state law and related regulations as well as Virginia's federal obligations under the *Clean Air Act* as amended in 1990. The objective is to protect and enhance public health and quality of life through control and mitigation of air pollution. The division ensures the safety and quality of air in Virginia by monitoring and analyzing air quality data, regulating sources of air pollution, and working with local, state and federal agencies to plan and implement strategies to protect Virginia's air quality. The appropriate regional office is directly responsible for the issue of necessary permits to construct and operate all stationary sources in the region as well as to monitor emissions from these sources for compliance. As a part of this mandate, the environmental documents of new projects to be undertaken in the state are also reviewed. In the case of certain projects, additional evaluation and demonstration must be made under the general conformity provisions of state and federal law.

5(b) Agency Findings. According to the DEQ Air Division, TMDL RGPs may be issued for projects located in a designated ozone nonattainment areas and emission control area for volatile organic compounds (VOCs) and oxides of nitrogen (NO_x). Precursors to ozone (O_3) pollution include VOCs and NO_x.

5(c) Recommendation. The applicant should take all reasonable precautions to limit emissions of VOCs and NO_x, principally by controlling or limiting the burning of fossil fuels.

5(d) Requirements. The project applicant must comply with the following requirements as applicable.

(i) Fugitive Dust

During land-disturbing activities, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 *et seq.* of the *Regulations for the Control and Abatement of Air Pollution.* These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

(ii) Open Burning

If project activities include open burning, this activity must meet the requirements of 9 VAC 5-130-10 through 9 VAC 5-130-60 and 9 VAC 5-130-100 of the *Regulations* for open burning, and it may require a permit. The *Regulations* provide for, but do not require, the local adoption of a model ordinance concerning open burning. The applicant should contact the appropriate local officials to determine what local requirements, if any, exist.

5(e) Conclusion. The TMDL RGP, as proposed, is consistent with the air pollution control enforceable policy of the VCP provided the applicants obtain any applicable approvals prior to implementation of the project.

For additional information, contact the DEQ Air Division, Kotur Narasimhan at (804) 698-4415.

6. Coastal Lands Management.

6(a) Agency Jurisdiction. Effective July 1, 2013, the DEQ Office of Stormwater Management (OSWM) administers the Chesapeake Bay Preservation Act (Bay Act) (Virginia Code §62.1-44.15 *et seq.*) and *Chesapeake Bay Preservation Area Designation and Management Regulations* (*Regulations*) (9 VAC 25-830-10 *et seq.*). Note that this enforceable policy was previously administered by the Department of Conservation and Recreation.

6(b) Agency Findings. In Fairfax and Arlington Counties, the areas protected by the Chesapeake Bay Preservation Act, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by the local government. RPAs include:

- tidal wetlands;
- certain non-tidal wetlands;
- tidal shores; and
- a 100-foot vegetated buffer area located adjacent to and landward of these features and along both sides of any water body with perennial flow.

RMAs, which require less stringent performance criteria, include those areas of Fairfax and Arlington Counties not included in the RPAs.

6(c) Requirements. Federal actions on installations located within Tidewater Virginia are required to be consistent with the performance criteria of the *Regulations* on lands analogous to locally designated RPAs and RMAs, as provided in 9 VAC 25-830-130 and 140, including the requirement to:

- minimize land disturbance (including access and staging areas);
- retain existing vegetation;
- minimize impervious cover;
- comply with the requirements of the *Virginia Erosion and Sediment Control Handbook;* and
- comply with stormwater management criteria consistent with water quality protection provisions of the *Virginia Stormwater Management Regulations.*

6(d) Conclusion. DEQ-OSWM concludes that, the proposed TMDL RGP is consistent with the coastal lands management enforceable policy as administered through the Bay Act and *Regulations*, provided applicants adhere to the above requirements.

For additional information, contact DEQ-OSWM, Daniel Moore at (804) 698-4520.

ADDITIONAL ENVIRONMENTAL CONSIDERATIONS

In addition to the enforceable policies of the VCP, comments were also provided with respect to other applicable requirements and recommendations. The applicant must ensure that this project is constructed and operated in accordance with all applicable federal, state, and local laws and regulations.

1. Solid and Hazardous Wastes.

1(a) Agency Jurisdiction. Solid and hazardous wastes in Virginia are regulated by the Virginia Department of Environmental Quality, the Virginia Waste Management Board (VWMB) and the U.S. Environmental Protection Agency. They administer programs created by the federal Resource Conservation and Recovery Act, Comprehensive Environmental Response Compensation and Liability Act, commonly called Superfund, and the Virginia Waste Management Act. DEQ administers regulations established by the VWMB and reviews permit applications for completeness and conformance with facility standards and financial assurance requirements. All Virginia localities are

required, under the Solid Waste Management Planning Regulations, to identify the strategies they will follow on the management of their solid wastes to include items such as facility siting, long-term (20-year) use, and alternative programs such as materials recycling and composting.

1(b) Requirements.

(i) Waste Management

Any soil that is suspected of contamination or wastes that are generated during construction-related activities must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations. Some of the applicable state laws and regulations are:

- Virginia Waste Management Act (Code of Virginia Section 10.1-1400 *et seq.*);
- Virginia Hazardous Waste Management Regulations (VHWMR) (9 VAC 20-60);
- Virginia Solid Waste Management Regulations (VSWMR) (9 VAC 20-80);
- Virginia Regulations for the Transportation of Hazardous Materials (9 VAC 20-110).

Some of the applicable federal laws and regulations are:

- Resource Conservation and Recovery Act (RCRA) (42 U.S.C. Section 6901 *et seq.*);
- Title 40 of the Code of Federal Regulations; and
- U.S. Department of Transportation Rules for Transportation of Hazardous materials (49 CFR Part 107).

(ii) Asbestos-containing Material and Lead-based Paint

Any existing structures to be demolished or otherwise impacted by construction should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to construction. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, state regulations 9 VAC 20-80-640 for ACM and 9 VAC 20-60-261 for LBP must be followed.

1(c) Recommendations. DEQ recommends the implementation of pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.

Contact DEQ Division of Land Protection and Revitalization (DLPR), Steve Coe at (804) 698-4229, for additional information.

2. Natural Heritage Resources.

2(a) Agency Jurisdiction.

(i) Department of Conservation and Recreation

The mission of the Virginia Department of Conservation and Recreation (DCR) is to conserve Virginia's natural and recreational resources. The DCR-Natural Heritage Program's (DCR-DNH) mission is conserving Virginia's biodiversity through inventory, protection, and stewardship. The Virginia Natural Area Preserves Act, 10.1-209 through 217 of the Code of Virginia, was passed in 1989 and codified DCR's powers and duties related to statewide biological inventory: maintaining a statewide database for conservation planning and project review, land protection for the conservation of biodiversity, and the protection and ecological management of natural heritage resources (the habitats of rare, threatened, and endangered species, significant natural communities, geologic sites, and other natural features).

(ii) Department of Agriculture and Consumer Services

The Endangered Plant and Insect Species Act of 1979, Chapter 39, §3.1-102- through 1030 of the *Code of Virginia*, as amended, authorizes the Virginia Department of Agriculture and Consumer Services (VDACS) to conserve, protect and manage endangered species of plants and insects. The VDACS Virginia Endangered Plant and Insect Species Program personnel cooperates with the U.S. Fish and Wildlife Service, DCR-DNH and other agencies and organizations on the recovery, protection or conservation of listed threatened or endangered species and designated plant and insect species that are rare throughout their worldwide ranges. In those instances where recovery plans, developed by the U.S. Fish and Wildlife Service, are available, adherence to the order and tasks outlines in the plans are followed to the extent possible.

2(b) Agency Findings. DCR documents natural heritage resources within military bases in Northern Virginia including Fort Belvoir for which TMDL RGP may be applied. DCR has reviewed the TMDL RGP and supports the following:

- Activities that reduce nutrient and sediment loading into waters of the U.S, including jurisdictional wetlands as part of the Chesapeake Bay TMDL mandates.
- The required coordination with the United States Fish and Wildlife Service with regard to impacts to federally endangered and threatened species as a part of the application process.
- Revegetation of the project area with native plant species.

2(c) Agency Recommendations. DCR-DNH offers the following recommendations:

- If results of the coordination with the USFWS indicate potential impacts to federal

listed species, DCR recommends that the TMDL RGP with a 15-day agency review period be denied and that the applicant apply for an individual permit with a longer 45-day agency review period to determine ways to avoid, minimize and mitigate for impacts to resources.

- Inclusion of all state-listed and rare resources including significant wetland communities as defined by the Virginia Natural Heritage program in "The Classification of Ecological Community Groups" document.
- Activities with potential to impact significant communities as defined by "The Classification of Ecological Community Groups" document should not be authorized by the regional permit (http://www.dcr.virginia.gov/natural_heritage/natural_communities/ncintro.shtml).
- Clarify the aquatic resource "function lift" or "gain" definition by providing more examples and determining finite ways to measure the restoration and/or enhancement of these functions during the five year monitoring period.
- Require the development and implementation of an invasive species monitoring plan.
- Under the definition for "Conversion", the changing of a wetland plant type community to another wetland plant type community as wetland type is defined in "The Classification of Ecological Community Groups" document and should be considered a conversion and not rehabilitation. This conversion should be counted as part of the overall conversion threshold for qualifying for the TMDL RGP.

Contact DCR-DNH, Rene Hypes at (804) 371-2807, for additional information regarding these comments.

3. Historic Resources.

3(a) Agency Jurisdiction. The Department of Historic Resources (DHR) conducts reviews of projects to determine their effect on historic structures or cultural resources under its jurisdiction. DHR, as the designated State's Historic Preservation Office, ensures that federal actions comply with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, and its implementing regulation at 36 CFR Part 800. The NHPA requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places. Section 106 also applies if there are any federal involvements, such as licenses, permits, approvals or funding.

3(b) Agency Findings. DHR finds that Item 1(d) under the section titled Application Submittal may be interpreted to mean that the applicant need only conduct a search of our cultural resource database to determine the presence or absence of known historic properties without consideration of previously unidentified properties. A search of DHR's database does not constitute consultation with the State Historic Preservation Officer (SHPO) and DHR suggest adding "known and/or previously unidentified" before "historic properties" to clarify this requirement of the application.

Projects impacting less than 200 linear feet of stream channel or 5,000 square feet of nontidal waters should not be excluded from consultation with the SHPO. While cultural resource studies of actions of this small size are unusual, they may be warranted in areas of high archaeological sensitivity. Additionally, "post-construction reporting" for projects that do not meet the application submittal thresholds is not consistent with the regulations implementing Section 106 of the National Historic Preservation Act at 36 CFR Part 800.

3(c) Recommendations. DHR recommends that, for projects within Virginia, all applicants without exclusions be required to submit all projects authorized under the TMDL RGP to DHR for review using DHR's *Project Review Application Form* or Electronic Project Information Exchange (ePIX) system. DHR is willing to waive the standard 30-day review period pursuant to 36 CFR 800.3 and expedite the review of TMDL RGP applications within 15 days. The Applicant should specify that the proposed activity would be authorized under a TMDL RGP so that DHR can process the review accordingly.

3(d) Requirement. The Corps must continue to consult directly with DHR, as necessary, pursuant to Section 106 NHPA and its implementing regulations codified at 36 CFR Part 800 which require federal agencies to consider the effects of their undertakings on historic properties.

For additional information and coordination, contact DHR, Greg LaBudde at (804) 482-6103.

Thank you for the opportunity to review and respond to the issuance of the Draft Regional General Permit for Chesapeake Bay Total Maximum Daily Load Activities. The detailed comments of reviewing agencies are attached for your review. If you have questions, please call me at (804) 698-4325 or John Fisher at (804) 698-4339.

Sincerely,

Ellie Irons, Program Manager
Environmental Impact Review

Enclosures

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Attachment 2

Advisory Policies for Geographic Areas of Particular Concern

a. Coastal Natural Resource Areas - These areas are vital to estuarine and marine ecosystems and/or are of great importance to areas immediately inland of the shoreline. Such areas receive special attention from the Commonwealth because of their conservation, recreational, ecological, and aesthetic values. These areas are worthy of special consideration in any planning or resources management process and include the following resources:

a) Wetlands
b) Aquatic Spawning, Nursery, and Feeding Grounds
c) Coastal Primary Sand Dunes
d) Barrier Islands
e) Significant Wildlife Habitat Areas
f) Public Recreation Areas
g) Sand and Gravel Resources
h) Underwater Historic Sites.

b. Coastal Natural Hazard Areas - This policy covers areas vulnerable to continuing and severe erosion and areas susceptible to potential damage from wind, tidal, and storm related events including flooding. New buildings and other structures should be designed and sited to minimize the potential for property damage due to storms or shoreline erosion. The areas of concern are as follows:

i) Highly Erodible Areas
ii) Coastal High Hazard Areas, including flood plains.

c. Waterfront Development Areas - These areas are vital to the Commonwealth because of the limited number of areas suitable for waterfront activities. The areas of concern are as follows:

i) Commercial Ports
ii) Commercial Fishing Piers
iii) Community Waterfronts

Although the management of such areas is the responsibility of local government and some regional authorities, designation of these areas as Waterfront Development Areas of Particular Concern (APC) under the VCP is encouraged.

Designation will allow the use of federal CZMA funds to be used to assist planning for such areas and the implementation of such plans. The VCP recognizes two broad classes of priority uses for waterfront development APC:

i) water access dependent activities;
ii) activities significantly enhanced by the waterfront location and complementary to other existing and/or planned activities in a given waterfront area.

Advisory Policies for Shorefront Access Planning and Protection

a. Virginia Public Beaches - Approximately 25 miles of public beaches are located in the cities, counties, and towns of Virginia exclusive of public beaches on state and federal land. These public shoreline areas will be maintained to allow public access to recreational resources.

b. Virginia Outdoors Plan - Planning for coastal access is provided by the Department of Conservation and Recreation in cooperation with other state and local government agencies. The Virginia Outdoors Plan (VOP), which is published by the Department, identifies recreational facilities in the Commonwealth that provide recreational access. The VOP also serves to identify future needs of the Commonwealth in relation to the provision of recreational opportunities and shoreline access. Prior to initiating any project, consideration should be given to the proximity of the project site to recreational resources identified in the VOP.

c. Parks, Natural Areas, and Wildlife Management Areas - Parks, Wildlife Management Areas, and Natural Areas are provided for the recreational pleasure of the citizens of the Commonwealth and the nation by local, state, and federal agencies. The recreational values of these areas should be protected and maintained.

d. Waterfront Recreational Land Acquisition - It is the policy of the Commonwealth to protect areas, properties, lands, or any estate or interest therein, of scenic beauty, recreational utility, historical interest, or unusual features which may be acquired, preserved, and maintained for the citizens of the Commonwealth.

e. Waterfront Recreational Facilities - This policy applies to the provision of boat ramps, public landings, and bridges which provide water access to the citizens of the Commonwealth. These facilities shall be designed, constructed, and maintained to provide points of water access when and where practicable.

f. Waterfront Historic Properties - The Commonwealth has a long history of settlement and development, and much of that history has involved both shorelines and near-shore areas. The protection and preservation of historic shorefront properties is primarily the responsibility of the Department of Historic Resources. Buildings, structures, and sites of historical, architectural, and/or archaeological interest are significant resources for the citizens of the Commonwealth. It is the policy of the Commonwealth and the VCP to enhance the protection of buildings, structures, and sites of historical, architectural, and archaeological significance from damage or destruction when practicable.