

**Checklist and Guidelines for Nationwide Permit (NWP) 27
Aquatic Habitat Restoration, Establishment, & Enhancement Activities
In the State of Maryland, the Commonwealth of Pennsylvania, the District of Columbia,
and certain military installations of northern Virginia within the Corps of Engineers
Baltimore District**

Scope: NWP 27 includes activities in waters of the United States associated with the **restoration, enhancement, and establishment** of tidal and non-tidal wetlands and riparian areas, the restoration and enhancement of non-tidal streams and other non-tidal open waters, and the **rehabilitation** or enhancement of tidal streams, tidal wetlands, and tidal open waters, **provided** those activities result in **net increases in aquatic resource functions and services**. The Baltimore District has implemented regional conditions to NWP 27 in an effort to address potential agency concerns. A summary of the terms and conditions, general conditions, and Baltimore District regional conditions for NWP 27 are available at this link: <http://www.nab.usace.army.mil/Portals/63/docs/Regulatory/Permits/spn12-32.pdf> . In accordance with the Baltimore District regional conditions, a pre-construction notification (PCN) is required for all NWP 27 activities.

An applicant can reduce permitting delays by submitting a complete permit application. Providing the information requested within this checklist will improve the likelihood of having a complete application, which in turn should reduce permitting delays and surprises associated with incomplete submittals. This guidance applies to permit applications submitted for authorization under NWP 27 for aquatic habitat restoration, establishment, and enhancement activities. NWP 27 requires authorized activities to result in net increases in aquatic resource functions and services, which generally add acreage to the nation's aquatic habitat base. Any activity involving shellfish seeding, such as the placement of shell material or any other habitat development or enhancement, is restricted to shellfish species that are native to that waterbody.

NWP 27 Pre-Construction Notification (PCN) Package Checklist

The Corps review period shall commence with the receipt of a complete permit application at the Corps District Office. All PCNs must be completed using the established Corps of Engineers permit application procedures for that locality (see <http://www.nab.usace.army.mil/Missions/Regulatory/PermitTypesandProcess.aspx>). The prospective permittee shall not begin the activity until notified in writing by the District Engineer (normally within 60 days) that the activity may proceed under the nationwide permit with any special conditions imposed, if applicable.

The NWP 27 PCN must be in writing using the appropriate permit application and include the following narrative intended to clarify information specific to requests for authorization under NWP 27 and to help us determine the applicability of the NWP 27 to the project:

1. Name, address and telephone numbers of the prospective permittee.
2. Name, address, and telephone numbers of the current property owner. Identify all encumbrances, easements, and liens on the property (e.g., utility right-of-ways, easements, mineral rights, etc.), which interferes with or is in conflict with establishment of the proposed aquatic habitat restoration, establishment, and enhancement project.
3. **Location of the proposed project** - address, county, township, municipality, state, latitude, and longitude.
4. **A description of the proposed project.** Provide a detailed written work description of the proposed project and associated activities in waters of the U.S., including wetlands; the dimensions of all proposed activities; the name of the waterway; and the construction technique(s). Be sure to include how the construction site will be accessed, especially if clearing, grading or dredging will be required. Identify all permanent and temporary impacts to waters and/or wetlands. Describe the timeframe for temporary impacts and how the temporarily impacted areas will be restored. Specify if the proposed work is establishment, enhancement or restoration and provide the specific acreages for each type. Indicate the project elements that would be utilized for anything other than establishment, restoration or enhancement.
5. **Project purpose.** Clearly state the project purpose and objectives for aquatic restoration, establishment, and enhancement. The project purpose must be detailed enough for the reviewer to determine whether the terms and conditions of NWP 27 are satisfied. Describe how the project would meet the purpose and goals and indicate criteria that would be used to determine success. Discuss what net gains in functions and services are expected to occur as a result of the project, and what measures are proposed to ensure that the net gains are accomplished. This permit is designed for activities resulting in net increases in aquatic resource functions. All impacts to waters of the United States for NWP 27 should be beneficial and directly related to the project purpose. The objectives should support the project purpose and clearly articulate how the project will achieve a net increase in aquatic resource functions.
6. **General need.** Explain how the proposed project would contribute to the functional needs of the watershed. Describe the overall watershed where the proposed project is located (e.g., major tributaries, existing development trends, anticipated land use changes, surrounding land uses, watershed needs, etc.). Describe the factors considered during the site selection process such as aquatic habitat diversity, habitat connectivity, and ecological benefits. Describe potential conflicts and compatibility of the proposed project with conservation plans, watershed management plans, wetland management plans, special area management plans, watershed improvement plans, local or regional goals for the restoration or enhancement of particular habitat types or functions, water quality goals, floodplain management goals, or other land use plans, policies or regulations.
7. **Existing conditions.** Describe the baseline from which the proposed aquatic habitat restoration, establishment, and enhancement activities will be compared for a net functional

lift. Provide a detailed description of the existing ecological conditions at the project site, including a delineation of existing wetland and waterways prepared in accordance with current Corps requirements, the size (i.e., acreage, square feet, and/or linear feet) of each aquatic resource type (i.e., forested wetlands, scrub/shrub wetlands, emergent wetlands, streams, springs, ponds, etc.) located within the project area, water quality issues and any other relevant information. Include current conditions such as channel form and dimensions (e.g., typical channel cross-sections and longitudinal profile data), flow regime, waterway substrate composition, characteristics observed associated with the ordinary high water mark (e.g., bed and bank, wrack line or scour marks), riparian vegetated community description, watershed size and cumulative impacts description, floodplain condition and function, habitat types, stream substrate, and bed load. This discussion should also include a description of known impacts (e.g., excessive use by livestock, artificial structures or channelization, source of hydrology, road drainage, etc.) that may have contributed to a degraded condition at the project site. Describe whether any of these impacts would be retrofitted or repaired. Length of existing and proposed channel and the area of potential impact within waters of the United States, including jurisdictional wetlands, should also be included. Geo-referenced photographs of existing conditions are required to gauge level of success for restoration efforts. Numbered and dated pre-project color photographs showing all aquatic resources proposed to be impacted on the project site. The compass angle and position of each photograph should be documented on the plan view drawing or similar illustration. Baseline information should also include USDA/NRCS county soil map with soil types, USGS 7.5 minute topographic map, National wetland inventory map, and aerial photography with the project location and drainage area identified.

- 8. Proposed impacts.** Detailed description, including acreages, of the direct and indirect impacts to waters and/or wetlands, itemized by wetland and waters type that the project would cause, including the anticipated amount of loss of waters of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure.
- 9. Work methodology.** Describe the methods of work including types of equipment utilized, equipment access; staging and stockpile areas; maintenance, including preservation of structures and protection methods; restoration of pre-construction contours; waterway diversion; sequence of construction; how the project elements would be secured in place, anchored, or weighed down; stabilization of the substrate; disposal sites and method of disposal of excess fill or excavated material; amount of tree clearing in forested areas; and invasive plant species monitoring and restoration. Include the approximate timeline for project progress and completion.
- 10. Historic conditions.** Discuss the historic condition of the site and the approach for ensuring success of the proposed project (e.g., reference wetland or stream reach used to guide restoration purpose and goals). In many cases, a historical condition is the desired endpoint for restoration efforts. Reference sites and supporting data should typically be derived from a relatively undisturbed reach of the same waterway or desired wetland type within a short distance of the proposed project site. Data for the proposed project should be described in enough detail for the reviewer to understand how the proposed design was derived. Current

and historical photographs (on-site and aerial) provide supporting information used to develop the purpose and objectives of restoration.

- 11. Approach for success.** Describe any experimental elements or techniques, including and background information detailing use elsewhere; success information; and lessons learned. Discuss the contingency plan in the event of ineffectiveness, instability or waterway degradation, including alternative replacement designs.
- 12. Authorizations.** Information about any other Federal or State approvals/denials used or intended to be used to authorize any part of the proposed project or any related activity. Provide a copy of any approvals/denials, including related plans.
- 13. Impact avoidance.** Provide a written statement describing measures taken to avoid impacts to aquatic resources and measures taken to minimize unavoidable impacts to aquatic resources, including, if applicable, justification for impacts that were not avoided.
- 14. Monitoring Plan.** A monitoring plan should be submitted to the Corps with the PCN. The monitoring plan should include a description of parameters used to ensure successful implementation of project objectives. The level of required monitoring may be commensurate with the scale of the proposed restoration project, as well as the risk to the functions and stability of the aquatic environment. Extensive landscape manipulation or reliance on engineered structures will require a more robust monitoring scheme (e.g., Rosgen level 2 monitoring procedures may be required for stream restoration projects).
- 15. Monitoring Reports.** Monitoring reports are documents intended to provide the Corps with information to determine if a project is successfully meeting its objectives. Monitoring shall include submittal of as-built plans, surveys, and photographs. An annual monitoring report shall be provided to the Corps by January 15 of each year for not less than 5 years. The Corps has the option to modify the required monitoring period based on site conditions and information provided in the annual monitoring reports. Items the Corps will evaluate include restoration of temporarily impacted areas, stabilization of the site, clear evidence of functional gain consistent with the project purpose and objectives, establishment of native vegetation, etc. Any remedial actions and/or changes to the monitoring period will be documented in writing by the Corps of Engineers. Remedial measures and adaptive management recommendations to correct deficiencies in project outcomes will be based on information gathered during site inspections and should be included in the monitoring reports. The monitoring report should follow RGL 08-03, a copy of which is attached.
- 16. Management plans.** Discuss any management plans proposed as part of the project to ensure project integrity and to maintain the site as a well-functioning aquatic resource.
- 17. Site protection.** Discussion concerning any proposed protection or preservation mechanisms to protect the project site in perpetuity.

Project Drawings

Clear and accurate project drawings are pertinent to the review of a proposed project in jurisdictional waters. The drawings must be submitted on 8.5-inch by 11-inch plan sheets, to scale or with dimensions clearly marked, and must include a vicinity map, top plan view, cross-section, and/or profile drawings. It would also be helpful to provide clear, legible larger plans, to scale, that accompanies the smaller drawings and identifies the limits of the waters of the U.S., including jurisdictional wetlands. Each drawing should identify the project, the applicant, and the type of illustration (vicinity map, plan view, cross-section, detail drawing). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, to an appropriate scale, and contain all necessary information. If a scale is not used, all dimensions must be clearly depicted in the drawings. If available, a plat of the property should be included, with the existing and proposed structures clearly indicated. Use heavy dark lines and dot shading, hatching or similar graphic symbols in place of color shading. Distances from the proposed structure(s) to fixed points of reference (benchmarks) and to adjacent property lines must be shown. The following list pertains to specific drawings/maps required for a complete permit application:

1. **Vicinity map** - An 8 ½” by 11” copy of a detailed plan such as a USGS topographic map or street map showing the site location and project boundary, so that it may be located for inspection. Include an arrow indicating the north direction.
2. **Jurisdictional waters.** Plan-view drawing showing the currently existing site conditions, including a delineation of the waters and wetlands for the entire project area, existing contours, existing water depths, existing mean high and low water lines, existing ordinary high and low water lines, location of other existing aquatic resources such as submerged aquatic vegetation, mud flats, riffle and pool complexes. The Corps may determine that a field verification of the wetland and/or waterway delineation is required.

In the Baltimore District, the applicant may refer to the Virginia Institute of Marine Science aerial surveys for obtaining information about submerged aquatic vegetation at this link: <http://web.vims.edu/bio/sav/index.html>.

3. **Plan-view drawing** showing the location, size, and dimensions of all proposed work. Include the area (square feet, acres, linear feet, and cubic yards) and dimensions of the proposed impacts areas within waters of the U.S., including jurisdictional wetlands. Identify all temporary and permanent structures and fills.
 - a. Depict all proposed work, including areas proposed for filling, grading, excavation, drainage, and/or inundation. Show the existing and proposed contours, proposed water depths, location of any berms, water control structures, proposed plantings, etc.
 - b. Depict and identify the areas of proposed wetland and waterway creation, enhancement, and/or restoration.

- c. Identify and indicate the approximate ordinary high water mark and water depths in nontidal areas.
 - d. In tidal areas, identify and indicate high tide line, mean high and mean low water shorelines, waterway width, water depths, elevation/depth above/below mean high water level, and channelward extent of proposed fill and/or structures beyond mean high water, distances from navigational fairway and Federal Navigation Channels, and location of natural resources, including submerged aquatic vegetation or oyster beds, for tidal areas of the waterway proposed to be impacted.
 - e. Indicate locations and dimensions of all structures and/or fill, including type of fill material and grading, relative to current elevation.
 - f. Indicate temporary and permanent impact areas, including dewatering practices and the total area below the ordinary high water mark to be dewatered.
 - g. Indicate location, area, and dimensions for proposed construction access pathways and roads. Be sure to also include temporary construction access mats.
 - h. Provide latitude and longitude coordinates at several locations along the length and corners of the project area.
4. **Site disposal.** Provide a plan showing the disposal site location for excavated material; show how the material will be contained and provide the approximate amount of material to be excavated (cubic yards).

Additional PCN Requirements (as necessary)

1. **Essential Fish Habitat Consultation** (Applicable to the Delaware River in Pennsylvania):
For any activity on the Delaware River in Pennsylvania, a complete copy of any PCN submitted to the Corps of Engineers must also be forwarded directly to the National Marine Fisheries Service Habitat Conservation Division, 74 Magruder Road, Sandy Hook, Highlands, New Jersey 07732. The applicant must provide evidence that this has been accomplished. The Corps of Engineers will coordinate review of the PCN with the National Marine Fisheries Service pursuant to the requirements of the Magnuson Stevens Fishery Conservation and Management Act.
2. **Essential Fish Habitat Consultation** (Applicable to the District of Columbia, Maryland, activities affecting the Potomac River watershed within military installations of Northern Virginia in the regulatory geographic boundaries of the Baltimore District):
 - a. For activities in all tidal and nontidal coastal plain streams within the areas referenced above, or nontidal Piedmont streams in Harford and Cecil Counties, Maryland, the Corps of Engineers will coordinate review of the PCN with the National Marine Fisheries Service pursuant to the requirements of the Magnuson Stevens Fishery Conservation and Management Act.

- b. For activities involving the restoration and/or establishment of tidal marsh in mesohaline waters (i.e., salinity of 5-18 ppt) of the mid and upper Chesapeake Bay, the PCN should include information concerning the distribution of horned pondweed (*Zannichellia palustris*) within the project site. Distribution information of horned pondweed may require recent ground-truth survey of the area by the applicant (i.e., employing a survey crew with relevant experience) during the period of May 1 through June 15, of any year.

3. Section 7 Compliance:

- a. Evidence that the prospective permittee has already contacted and received a response from the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service concerning any Federally listed Threatened and Endangered Species that may be affected by the proposed activity. (see “List of Agencies”, numbers 2 & 4 for contact information in Pennsylvania; numbers 3, & 5 for contact information in Maryland and Washington, DC; and Numbers 5, 19 & 20 for contact information in Virginia).
- b. In Pennsylvania, a PNDI receipt or U.S. Fish and Wildlife Service letter (issued pursuant to the ESA) serves as evidence that the prospective permittee has contacted and received a response from the U.S. Fish and Wildlife Service. For a PCN required in Pennsylvania under Regional Nationwide Permit General Condition 18a, a copy of the PCN must also be concurrently forwarded to the U.S. Fish and Wildlife Service if the PNDI receipt identifies a “Potential Impact” related to the U.S. Fish and Wildlife Service, or if the applicant cannot implement, or does not agree to implement one or more U. S. Fish and Wildlife Service issued “Avoidance Measures” detailed on the PNDI receipt.

4. **Section 106 Compliance:** Evidence that the prospective permittee has already contacted and received a response from the State Historic Preservation Office concerning historic properties that may be affected by the proposed activity. (see “List of Agencies”, number 6 for contact information in Pennsylvania; number 11 for contact information in Maryland; number 14 for contact information in Washington, DC; and number 16 for contact information in Virginia).

5. **401 WQC:** Where the Commonwealth, State or the District of Columbia (District) has denied 401 WQC and/or not concurred with the Corps' CZM consistency determination for a NWP authorization, the prospective permittee should contact the Commonwealth/State/District to obtain an activity specific review and approval by the Commonwealth/State/District prior to submitting any required pre-construction notification (PCN) to the Corps of Engineers.

6. **Historic features:** Documentation from the appropriate State agency indicating whether the proposed project is located within a State Natural Heritage site, Outstanding National Resource Water, or National Estuarine Research Reserve. For further information, reference NWP general condition 22. (see “List of Agencies”,

numbers 2, 4, & 7 for contact information in Pennsylvania; numbers 3, 5, 10, 12, & 13 for contact information in Maryland; numbers 3, 5, 15, & 21 for contact information in Washington, DC; and numbers 17, 18, 19, & 20 for contact information in Virginia).

7. **Contact information.** The attached addresses should be used for notification to those agencies required by regional conditions.

List of Agencies:

(1) Environmental Protection Agency
1650 Arch Street - 3ES42
Philadelphia, Pennsylvania 19103-2029

(2) U.S. Department of the Interior
Fish and Wildlife Service
315 South Allen Street, Suite 322
State College, Pennsylvania 16801-4850

(3) U.S. Department of the Interior
Fish and Wildlife Service
177 Admiral Cochrane Drive
Annapolis, Maryland 21401

(4) National Marine Fisheries Service
Habitat Conservation Division
74 Magruder Road, Sandy Hook
Highlands, New Jersey 07732

(5) National Marine Fisheries Service
Chesapeake Bay Office
410 Severn Ave., Suite 107A
Annapolis, Maryland 21403

(6) Pennsylvania Historical & Museum
Commission
Bureau of Historic Trust
P.O. Box 1026
Harrisburg, Pennsylvania 17110

(7) Pennsylvania Fish & Boat Commission
Bureau of Fisheries & Engineering
450 Robinson Lane
Bellefonte, Pennsylvania 16823-9616

(8) Pennsylvania Department of
Environmental Protection
Bureau of Watershed Management
Division of Waterways, Wetlands &
Stormwater Management
Rachel Carson State Office Building
P.O. Box 8460
Harrisburg, Pennsylvania 17105-8775

(9) Pennsylvania Game Commission
2001 Elmerton Avenue
Harrisburg, Pennsylvania 17110-9797

(10) Maryland Department of Natural Resources
Environmental Review, B-3
Tawes State Office Building
580 Taylor Avenue
Annapolis, Maryland 21401

(11) Maryland Historical Trust
Division of Historical & Cultural Programs
100 Community Place
Crownsville, Maryland 21032-2023

(12) Maryland Department of the Environment
Water Resources Administration
Tidal Wetlands Division
Montgomery Park Business Center
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230-1708

(13) Maryland Department of the
Environment
Non-tidal Wetlands and Waterways
Division/CZC Unit
Montgomery Park Business Center, Suite 430
Baltimore, Maryland 21230-1708

(14) District of Columbia Office of Planning
Historic Preservation Office
1100 4th Street, SW
Suite E 650
Washington, DC 20024

(15) District Department of Environment
Water Quality Division
51 N Street, NE, 6th Floor
Washington, DC 20002

(16) Virginia Department of Historic Resources
Attn: Project Review
2801 Kensington Avenue
Richmond, Virginia 23221

(17) Virginia Department of Game and
Inland Fisheries
4010 West Broad Street
P.O. Box 11104
Richmond, Virginia 23230

(18) Northern Regional Office
Virginia Department of Environmental
Quality
13901 Crown Court
Woodbridge, Virginia 22193

(19) Virginia Marine Resources
Commission
Habitat Management Division
2600 Washington Avenue, 3rd Floor
Newport News, Virginia 23607-0756

(20) U.S. Fish and Wildlife Service
Division of Habitat and Resource Conservation
4401 N. Fairfax Drive, Suite 840
Arlington, Virginia 22203

(21) U.S. Fish & Wildlife Service
District of Columbia
1849 C Street NW, Room 3331
Washington, DC 20240-0001