



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATERSHED MANAGEMENT

**GENERAL PERMIT
BWM-GP-11
MAINTENANCE, TESTING, REPAIR, REHABILITATION, OR REPLACEMENT OF WATER
OBSTRUCTIONS AND ENCROACHMENTS**

1. **GENERAL DESCRIPTION AND FEES** – In accordance with the following registration requirements and the standard general permit conditions, the Department of Environmental Protection hereby authorizes by General Permit the maintenance, testing, repair, rehabilitation or replacement of existing currently serviceable, water obstructions or encroachments, including bridges and culverts owned by railroad companies. Minor deviations in the structure's configuration or filled area including those due to changes in materials, construction techniques, current construction codes or safety standards which are necessary to repair, modify or replace the water obstruction or encroachment are permitted, provided the environmental impacts resulting from such repair, modification or replacement are minimal, those minimal impacts fall within the terms and conditions of this General Permit, and there is no adverse impact on public health and safety. There is no registration fee required for a project authorized under this General Permit.
2. **DAMS** – This General Permit may not be used for the maintenance, repair, modification, removal, or replacement of dams.
3. **DENIAL OF AUTHORIZATION** – The Department shall have the discretion, on a case-by-case basis, to deny, revoke or suspend the authorization to use this general permit for any project which the Department determines to have a significant adverse impact and would not adequately protect public health, safety or the environment or otherwise could not be adequately regulated by the provisions of this general permit.
4. **AUTHORITY AND CONTINUING AUTHORIZATION** – Authorization of this General Permit is under Section 7 of the Dam Safety and Encroachments Act (32 P.S. §§693.1-693.27) and the rules and regulations promulgated thereunder at 25 Pa. Code §§105.441-105.449 (relating to General Permits). This General Permit becomes effective August 10, 2004 and will remain in effect unless specifically modified, suspended, or revoked by the Department.
5. **NOTIFICATION OF PROPOSED USE OF GENERAL PERMIT** – Prior to the activity, the owner(s) shall submit the "Registration Form" along with the required attachments to the appropriate DEP Regional Office's [~~Soils and Waterways~~] **Permitting and Technical Services** Section (see exhibit B). The Department may require additional information necessary to determine that the proposed maintenance complies with the terms and conditions of this General Permit. A copy of the "Registration Form" shall also be sent to the municipality and county in which the work will be performed. **The owner may not begin work until he has received the acknowledged "Registration Form" from the Department.**
6. **DEFINITIONS** – The terms as used in this General Permit shall have the following meanings:

ALONG – Touching or contiguous; to be in contact with; to abut upon.

APPURTENANT WORKS – Structures or materials incident to water obstructions or encroachments which are built or maintained in connection with the water obstruction or encroachment and essential to their proper maintenance, function, operation and stability.

BODY OF WATER – Any natural or artificial lake, pond, reservoir, swamp, marsh or wetland.

DEPARTMENT – The Department of Environmental Protection.

EARTH DISTURBANCE – Any construction or other human activity which disturbs the surface of the land including, but not limited to clearing and grubbing, grading, excavations, embankments, land development, subdivision development, mineral extraction and the moving, depositing or storing of soil, rock or earth. This includes any excavation or fill within a stream channel.

EROSION AND SEDIMENT CONTROL PLAN – A plan which is designed to minimize accelerated erosion and sediment developed in accordance with the requirements of 25 Pa. Code Chapter 102.

ENCROACHMENT – A structure or activity which changes, expands or diminishes the course, current or cross section of a watercourse, floodway or body of water.

FLOODWAY – The channel of the watercourse and portions of the adjoining floodplains which are reasonably required to carry and discharge the 100-year frequency flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by the Federal Emergency Management Agency (FEMA). In an area where no FEMA maps or studies have defined the boundary of the 100-year frequency floodway, it is assumed, absent evidence to the contrary, that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

OWNER – A person who owns, controls, operates, maintains, or manages a reservoir, water obstruction or encroachment.

REGULATED WATER OF THIS COMMONWEALTH – Watercourses, streams or bodies of water and their floodways wholly or partly within or forming part of the boundary of this Commonwealth.

STOCKED TROUT STREAMS – Regulated waters of this Commonwealth classified by the Pennsylvania Fish and Boat Commission as waters approved for trout stocking. Stream classification shall be verified by contacting the Pennsylvania Fish and Boat Commission's Division of Fisheries Management (see Exhibit A).

STREAM – A watercourse.

STREAM ENCLOSURE – A bridge, culvert or other structure in excess of 100 feet in length upstream to downstream which encloses a regulated water of this Commonwealth.

SUBMERGED LANDS OF THIS COMMONWEALTH – Waters and permanently or periodically inundated lands owned by the Commonwealth, including lands in the beds of navigable lakes and rivers and beds of streams declared public highways which are owned and held in trust by the Commonwealth.

TESTING – A procedure (internal or external to the structure) used as a means of analysis or diagnosis.

WATERCOURSE – A channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

WATER OBSTRUCTION – A dike, bridge, culvert, wall, wingwall, fill, pier, wharf, embankment, abutment or other structure located in, along or across or projecting into a watercourse, floodway or body of water. In the case of ponds, lakes and reservoirs, a water obstruction is considered to be in or along the body of water if, at normal pool elevation, the water obstruction is either in the water or adjacent to and abutting the water's edge.

WATERWAY OPENING – The cross-sectional area of a structure that is available to convey stream flow. This area is expressed in terms of span multiplied by underclearance.

WETLANDS – Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.

WILD TROUT STREAMS – A stream classified as supporting naturally reproducing trout populations by the Fish **and Boat** Commission. For a list of wild trout streams, the Fish and Boat Commission can be contacted at: Fish and Boat Commission, Bureau of Fisheries, Division of Fisheries Management, 450 Robinson Lane, Bellefonte, Pennsylvania 16823-9620.

7. **SPECIAL CONDITIONS**

A. Activities conducted under GP-11 authorization must protect and maintain water quality of waters of the Commonwealth in accordance with 25 Pa. Code Chapter 93. Projects located in High Quality/Exceptional Value (HQ/EV) waters must utilize cost effective and reasonable best management practices for non point source control.

- [A]B. No new stream relocation, stream enclosure or stream channel is authorized by this General Permit.
- [B]C. No stream realignments are permitted except for those incidental activities immediately adjacent to the upstream and downstream waterway opening of bridges and culverts that are necessary to support the structure.
- [C]D. All projects must be designed and constructed to protect or enhance existing aquatic habitat.
- [D]E. Wetlands must be identified in accordance with the 1987 U.S. Army Corps of Engineers Manual for Identifying and Delineating Wetlands and properly flagged or otherwise identified on the site to ensure they are protected. Impacts to wetland and other waters of the Commonwealth must be avoided or minimized to the maximum extent practicable at the project site. Wetland areas which cannot be avoided and which will be temporarily impacted during the maintenance activity must be identified on the plan and be stabilized and restored to original contours and grade at the conclusion of the activity. Wetland areas which cannot be avoided and which will be permanently impacted are limited to a cumulative total of 0.05 acres per project site.
- [E]F. Utilization of General Permit BDWM-GP-8, Temporary Road Crossing - Temporary road crossings of streams and causeways that are necessary to access the project must be constructed in accordance with BDWM-GP-8. The applicant shall indicate utilization of BDWM-GP-8 on the General Permit Registration form, and provide location and dimensions of the temporary crossing on the plan drawing or sketch plan that is required for General Permit 11 Registration.
- [F]G. Paving the metal bottom pipes, arches and culverts with concrete, grouting or the use of concrete for scour protection shall be done in dry conditions.
- [G]H. Bridge or culvert maintenance, replacement projects, or upgrades to existing facilities to meet current standards are subject to the following:
- **Bridge and culvert replacement for purposes of converting the existing structure to a new or differing use, e.g., converting a logging or forest road or a private access road to a residential, retail, or commercial subdivision access, is not authorized by this general permit.**
 - No significant reduction in existing waterway openings is permitted.
 - There will be no significant changes to grades of approach roadways or to overtopping characteristics.
 - [~~Increases in culvert length will be limited to a maximum of 12 feet perpendicular to the roadway on each side of the culvert as measured from the outer most portion of the structure (including wingwalls, headwalls, riprap, and other appurtenant structures).~~]
 - **Increases in culvert length are limited to a maximum of 12 feet perpendicular to the roadway on each end of the existing culvert. Appurtenant works beyond the maximum 12 feet increase on each end of the culvert, such as, but not limited to, wingwalls, headwalls, bank stabilization, and scour protection are also authorized under this general permit. The appurtenant works must be minimized and limited to the extent necessary to ensure the protection of the structure, public health and safety, and the environment.**
 - [~~Increases in bridge width will be limited to a maximum of 12 feet on each side of the bridge as measured from the outer most portion of the structure (including wingwalls, headwalls, riprap, and other appurtenant structures).~~]
 - **Increases in bridge width are limited to a maximum of 12 feet on each side of the bridge as measured from the upstream side of the bridge deck to the downstream side of the bridge deck. Appurtenant works beyond the maximum 12 feet increase on each side of the bridge deck, such as, but not limited to, wingwalls, headwalls, bank stabilization and scour protection are also authorized under this general permit. The appurtenant works must be minimized and limited to the extent necessary to ensure the protection of the structure, public health and safety and the environment.**

- The removal of debris and accumulated sediment to ensure adequate hydraulic capacity for bridges or culverts is limited to 50 feet upstream and downstream of the bridge or culvert and shall be conducted in accordance with the Department's Standards for Channel Cleaning at Bridges and Culverts.
- Bridges and culverts with paved bottoms shall provide for fish passage by constructing a low flow channel.
- Bridge and culvert replacement projects may not increase water surface elevations for the 100-year flood event.
- Backfill material may not be stored in the floodway and/or wetlands.

Hydraulic capacity.

- Bridge and culvert maintenance or replacement projects shall be designed and constructed in accordance with the following criteria:
 - The structure shall pass flood flows without loss of stability.
 - The structure may not create or constitute a hazard to life or property, or both.
 - The structure may not materially alter the natural regimen of the stream.
 - The structure may not increase velocity or direct flow in a manner which results in accelerated erosion of streambeds and banks.

Multiple pipes and spans.

- Multi-culvert groups and multiple span bridges which may tend to collect debris, contribute to the formation of ice jams, and cause excessive increases in head losses shall be avoided to the maximum extent practicable. Spans of less than 15 feet shall be by single-opening structure, except where conditions make it impractical to design the crossing with a single span.

Bridge piers.

- Bridge piers shall be kept to a minimum in number and cross-sectional area and shall be designed to offer the least obstruction to the passage of water and ice, consistent with safety and current engineering practice.
- Bridge piers in channels subject to unstable or super critical flow shall require special investigation and shall be so designed as to minimize backwater and avoid standing waves downstream of the pier.

Bridge abutments.

- Bridge abutments shall be aligned with the flow of the stream for the design flood. The Department may require the construction of wingwalls on either side of the bridge to assist in directing flood flows through the bridge opening.

Culverts.

- Culverts shall be aligned with the stream flow.
- Culverts shall be of sufficient width to minimize narrowing of the stream channel.
- The ends of culverts shall be protected by wingwalls, or with other structures sufficient to assist in directing flood flows to and through the culvert opening.
- Culverts with a drainage area of 640 acres or less shall be installed with the invert a minimum of 6 inches below natural streambed and in such a manner that the average gradient of the invert shall not deviate from that of the natural streambed.

- Culverts with a drainage area of greater than 640 acres shall be installed with the invert a minimum of 12 inches below natural streambed and in such a manner that the average gradient of the invert shall not deviate from that of the natural streambed.
- The flow velocities of water discharging from culverts must not cause erosion of the downstream channel.

Professional Engineer Certification

Plans, specifications and reports for bridges and culverts across a stream which are to be used by the general public such as an access to an industrial, commercial or residential development, etc., shall be prepared by a registered professional engineer and shall be affixed with their seal and certification which shall read as follows:

“I (name) do hereby certify pursuant to the penalties of 18 Pa. C.S.A. Sec. 4904 to the best of my knowledge, information and belief, that the information contained in the accompanying plans, specifications, and reports has been prepared in accordance with accepted engineering practice, is true and correct, and is in conformance with Chapter 105 of the rules and regulations of the Department of Environmental Protection.”

[H]. Pipelines and utilities:

- Trenches excavated for the maintenance and replacement of utility lines shall be the minimum width necessary.
- Trenches excavated for the maintenance and replacement of utility lines shall be backfilled with suitable material, stabilized and restored to pre-existing elevation and condition.
- Construction material such as pipes, rock and bedding materials may not be stored in the floodway and/or wetlands.
- Excavated material to be used as backfill may be temporarily stored adjacent to the trench, but for no more than 72 hours.
- Trench plugs must be installed within the trench on both sides of the stream channel. In wetlands, trench plugs, must be used to prevent the trench from draining the wetland.

[I]. A copy of this General Permit along with the Erosion and Sediment Control Plan must be provided to all contracting and construction entities involved with the project and must be available on-site during all phases of the project.

8. **EROSION AND SEDIMENT CONTROLS** – Activities conducted under this General Permit which involve an earth disturbance must be done in compliance with Chapter 102 of the Department's Rules and Regulations (relating to Erosion Control). The Erosion and Sediment Control Plan shall be submitted with the General Permit registration, for review by the DEP Regional Office. The Erosion and Sediment Control Plan must be available at the site at all times, and all BMP's on the plan must be implemented and maintained prior to, during and after construction.

9. **SPECIES OF SPECIAL CONCERN**

- A. No regulated activity is authorized under this General Permit which is likely to directly or indirectly adversely affect a State or Federal species of special concern or a species proposed for such designation, or which is likely to destroy or adversely modify the critical habitat of such a species, as identified under the Federal Endangered Species Act of 1973; Title 30, Chapter 75 of the PA Fish and Boat Code; Title 17, Chapter 25, Conservation of Wild Plants; and Title 31 Chapter 133 Game Wildlife Code.
- B. Permit registrations shall include a Pennsylvania Natural Diversity Inventory (PNDI) search receipt. Activities conducted under this General Permit beyond one year of the date acknowledged will require the submission of an updated PNDI search to the DEP Regional Office. Information on PNDI searches is

available through the PA Department of Conservation and Natural Resources, Bureau of Forestry, Ecological Services Section, P.O. Box 8552, Harrisburg, PA 17105-8852, telephone 717-787-3444.

Complete the Pennsylvania Natural Diversity Inventory (PNDI) Form and submit it to the person conducting the online PNDI Project Planning and Environmental Review Tool search. This person performing the search could be someone from DEP, the County Conservation Districts, or a consultant. Alternatively, if you plan to conduct the PNDI online search yourself-a search form is not needed prior to the PNDI online search.

After conducting the PNDI online search, if your PNDI Project Environmental Review Receipt has "Potential Impacts," DEP and the jurisdictional agencies require that you submit additional information to the agencies noted on the Receipt for further review. Please send a copy of the PNDI Receipt, a completed PNDI Form, and a USGS 7.5 minute quadrangle map with project boundaries delineated on the map to the agencies referenced on your PNDI Receipt.

C. Applicants must comply with special bog turtle screening requirements. See Section H of the Registration Form.

10. **BEACH NOURISHMENT** – Sand used for beach nourishment shall be free from zebra mussels.
11. **EQUIPMENT** – Use of motorized vehicles or equipment in a watercourse, stream or body of water is limited to the minimum necessary to complete the project. Motorized vehicles or equipment working in wetlands must be placed on mats or other measures must be taken to minimize disturbance.
12. **PROPER MAINTENANCE** – Facilities and activities authorized under this General Permit must be operated and maintained to protect public health, safety and the environment.
13. **AQUATIC LIFE MOVEMENTS** – No regulated activity may substantially disrupt the movement of those species of aquatic life indigenous to the watercourse, stream or body of water, including those species which normally migrate through the area.
14. **WILD AND STOCKED TROUT WATERS** – Activities authorized by this General Permit in regulated waters of this Commonwealth are prohibited in the following streams for the specified time period unless written approval is obtained from the PA Fish and Boat Commission's Division of Environmental Services at 459 Robinson Lane, Bellefonte, PA 16823-9616 or the local DEP Regional Office. Stocked and wild trout stream locations are compiled and available through the Commission's Division of Fishery Management.

Stocked trout streams	March 1 through June 15
Wild trout streams	October 1 through December 31
Lake Erie tributaries	September 1 through April 30

15. **WATERFOWL BREEDING AREAS** – Breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.
16. **HISTORICAL RESOURCES**
 - A. No regulated activity is authorized which ~~is likely to~~ **will adversely** impact:
 - Historical, cultural or archaeological sites as identified in the latest published version of the Pennsylvania Inventory of Historic Places or the National Register of Historic Places.
 - Local historical sites officially approved or recognized by a municipality.
 - B. Any archaeological artifacts discovered during the performance of work authorized under this General Permit must be adequately protected and their discovery promptly reported to the Bureau for Historic Preservation, Pennsylvania Historic and Museum Commission, Commonwealth Keystone Building, 400 North Street, 2nd Floor, Harrisburg, PA 17120-0093.
17. **FILL** – Fill material must be uncontaminated, nonwater-soluble, nondecomposable inert solid material and must be free of asphalt, trash, construction debris, tires, toxic pollutants and never been subject to a spill or release of a contaminated substance. Temporary fills for construction purposes (e.g. road embankments, equipment

staging, cofferdams and causeways). shall consist of only clean nonwater-soluble rock material (without fine particles or small-grained materials) to prevent the introduction of sediment to water resources.

18. **REMOVAL OF TEMPORARY FILLS** – Temporary fills must be removed in their entirety, and the affected areas stabilized and returned to their pre-existing elevations.
19. **NAVIGATION** – No authorized activity shall permanently hinder commercial or recreational navigation.
20. **EFFECTIVE TIME PERIOD** – This General Permit will remain in effect indefinitely unless specifically modified, suspended or revised by the Department.
21. **SUBMERGED LANDS OF THIS COMMONWEALTH** – This General Permit shall not be effective to authorize any project over, across or occupying submerged lands of this Commonwealth until the owner has obtained a license from the Department authorizing the occupation of such submerged lands issued under Section 15 of the Dam Safety and Encroachments Act (32 P.S. §693.15), Section 514 of the Administrative Code of 1929 (71 P.S. §194), or other applicable laws. Upon receipt of notification from the owner, the Department will review the project, determine if its location is over, across or occupies submerged lands of the Commonwealth. If applicable, the Department will prepare a Submerged Lands License Agreement and forward same to the owner for execution prior to acknowledgement of registration to use the General Permit. No annual charge is required for facilities constructed, owned or operated by a Political Subdivision of the Commonwealth.
22. **USE OF EXPLOSIVES** – Prior to the use of explosives in a watercourse or body of water, the permittee shall secure a written permit from the Pennsylvania Fish and Boat Commission, under the Fish and Boat Code, Act 1980-175 Title 30 Pennsylvania Consolidated Statutes, Section 2906. Requests should be directed to the Pennsylvania Fish and Boat Commission, Division of Environmental Services (see Exhibit A).
23. **SUSPENSION, MODIFICATION OR REVOCATION** – The Department may suspend, modify or revoke this General Permit at any time upon notice in the Pennsylvania Bulletin.
24. **PROJECT INTERFERENCE** – This General Permit does not authorize any interference with any existing or proposed local, State, Federal or Federally licensed project, and permittee shall not be entitled to compensation for damage or injury to the work authorized herein which may be caused by or a result of existing or future operations undertaken by the United States or the Commonwealth of Pennsylvania or its Political Subdivisions in the public interest.
25. **INSPECTION** – As a condition of use of this General Permit, and of the owner's authority to conduct the activities authorized by this General Permit, the owner hereby authorizes and consents to allow authorized employees or agents of the Department, including the County Conservation District, without advance notice or a search warrant, at any reasonable time and upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas where the project is being constructed, operated or maintained. The authorization and consent shall include consent to conduct tests or sampling, to take photographs, to perform measurements, survey and other tests, to inspect the methods of construction, operation or maintenance, to examine and copy books, papers and records pertinent to any matter under investigation, and to take any other action necessary to assure that the project is constructed, operated or maintained in accordance with the terms and criteria of the General Permit. This General Permit condition is referenced in accordance with Section 16 of the Dam Safety and Encroachments Act, 32 P.S. §693.16, and in no way limits any other powers granted under the Dam Safety and Encroachments Act.
26. **FISH AND BOAT COMMISSION NOTIFICATION** – The owner(s) shall notify the Pennsylvania Fish and Boat Commission's Regional Field Office Manager (see "Exhibit A") responsible for the County where the activities are proposed ten (10) days prior to start of construction. Written notification is suggested. The project site shall at all times be available for inspection by authorized officers and employees of the Pennsylvania Fish and Boat Commission.

27. **ACTIVITIES NOT IN ACCORDANCE WITH THE TERMS OR CONDITIONS** – If the Department determines, upon inspection, that the construction, operation or maintenance of a project has violated the terms or criteria of this General Permit or of the Chapter 105 Rules and Regulations, the Department may take such actions, legal or administrative, that it may deem to be appropriate.
28. **STRUCTURE REMOVAL** – The owner shall remove all or any portion of the water obstruction upon written notification to the owner by the Department in the event the water obstruction is causing an adverse impact on public health, safety, or the environment, or in any other manner violates the conditions of this General Permit or Chapter 105 Rules and Regulations. The removal of railroad bridges and culverts is not subject to this condition. The removal of railroad bridges and culverts is regulated exclusively by the Federal Surface Transportation Board under the Interstate Commerce Commission Termination Act of 1995, 49 U.S.C. Sections 10501(b), 10903.
29. **PROPERTY RIGHTS** – This General Permit does not convey any property rights, either in real estate or material, or in 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.
30. **WATER QUALITY CERTIFICATION** – The issuance of this General Permit also constitutes approval of Water Quality Certification under Section 401 of the Federal Clean Water Act (33 U.S.C.A. §1341).
31. **OTHER PERMITS** – Nothing in this General Permit relieves the owner(s) of the obligation of complying with all Interstate Compacts, Federal, State and local laws, and regulations.
32. **SIGNATURE** – The General Permit Registration Form shall be signed by the person responsible for installation, operation and maintenance of the authorized activity.