

Tennessee Department of Environment and Conservation
General Aquatic Resource Alteration Permit for
Minor Stream Grade Stabilization



Effective Date: April 7, 2020
Expiration Date: April 7, 2025

Activities Covered by this Permit

This general permit is intended to authorize alterations associated with the repair and protection of actively degrading stream beds in destabilized, previously channelized watersheds located in the western third of the state bounded by the Mississippi River in the west and the Tennessee River in the east. Stream grade stabilization involves activities that result in the prevention, arresting or restoration of an active head cut within an aggressively degrading stream channel. Coverage under this general permit is limited to highly altered watersheds and channels of the Northern Mississippi Alluvial Plains; Bluff Hills; Loess Plains; and Southeastern Plains and Hills Ecoregions, where unconsolidated sediments prevalent in these ecoregions are not underlain by bedrock. The unstable character of the parent soil material and the influence of historical widespread channelization practices in the Mississippi River valley can result in rapidly moving headcuts which cause exacerbated channel degradation and over-widening.

Stream grade stabilization activities typically include installation of one or more transverse hard points to halt the headcut and allow the stream to resume the appropriate grade based on hydrology. Such activities involve cross channel structural elements (i.e. logs, rock, reno mattress, driven sheet pile), keyed into both left and right bank, including scour protection immediately downstream.

Certain activities due to size, location or potential water quality impacts are not covered under this general permit, as described in both the Special and General Conditions sections. Activities not qualifying for authorization under this general permit may be authorized by a standard (individual) permit provided that all requirements of the *Tennessee Water Quality Control Act of 1977* (the Act) are met.

Special Conditions

1. The length of stream grade stabilization treatment is limited to 500 linear feet. This footage includes the total length of channel, bed, or hydrologic alteration, including downstream scour protection, grade reestablishment, bank sloping and re-vegetation, and upstream flow alteration.
2. Written notification of the commencement of authorized work shall be provided to the local TDEC Environmental Field Office prior to, or within 24 hours after initiation.
3. In-stream structures must be keyed into both banks to prevent scouring around the structure. Placement of liners, matting, riprap or other hard armor for scour protection is limited to locations adjacent to and/or immediately downstream of the structure, not to exceed a total of 200 linear feet. Hard armor, riprap, matting or liners in other locations along the channel are prohibited.
4. Where practicable, all activities shall be accomplished in the dry. All surface water flowing towards this work shall be diverted using cofferdams and/or berms constructed of sandbags, clean rock (containing no fines or soils), steel sheeting, or other non-erodible, non-toxic material. All such diversion materials shall be removed upon completion of the work.
5. This activity must be designed to minimize any permanent disruption to the movement of fish or other aquatic life to the maximum extent practicable.

6. This permit does not authorize projects for which the primary purpose is stream relocation, compensatory mitigation, flood control or drainage improvement.
7. Activities located in State Scenic Rivers, National Wild and Scenic Rivers, or Outstanding National Resource Waters are not authorized.

General Conditions

1. The amount of fill, stream channel and bank modifications, or other impacts associated with the activity shall be limited to the minimum necessary to accomplish the project purpose. The permittee shall utilize the least impactful practicable method of construction.
2. All activities must be accomplished in conformance with the approved plans, specifications, data, and other information submitted in support of the application (form CN-1091) and the limitations, requirements, and conditions set forth herein. Failure to comply with the terms and conditions of this permit is a violation of the Act.
3. Activities, either individually or cumulatively, that may result in appreciable permanent loss of resource values to streams or wetlands are not covered. This general permit shall not be used incrementally to combine with other activities resulting in a net loss of water resource values.
4. Clearing, grubbing, and other disturbance to riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary native riparian vegetation removal, including tree removal, is prohibited. Native riparian vegetation must be reestablished in all areas of disturbance outside of any permanent authorized structures after work is completed. Coverage under this permit does not serve to waive any local riparian buffer protection requirement, and permittees are responsible for obtaining any necessary local approval.
5. The stream channel must not be over-widened as a result of this activity.
6. Blasting within 50 feet of any jurisdictional stream or wetland is prohibited.
7. Activities that directly impact wetlands, or impair surface water flow into or out of any wetland areas are prohibited.
8. Activities occurring in known or likely habitat of state or federally listed threatened, endangered, deemed in need of management, or species of concern may not be authorized without prior coordination with the Tennessee Wildlife Resources Agency (TWRA) and TDEC Division of Natural Areas (DNA) to determine if any special conditions are required to avoid and/or minimize harm to the listed species or their habitat. Adverse effects to federally listed threatened and endangered species are not authorized by this permit. Permittee is responsible for obtaining prior authorization from the United States Fish and Wildlife Service (USFWS) as required by Section 7 or Section 10 under the Endangered Species Act.
9. Work shall not commence until the permittee has obtained all necessary authorizations pursuant to applicable provisions of section 10 of The Rivers and Harbors Act of 1899, section 404 of the Clean Water Act, section 26a of The Tennessee Valley Authority Act, section 402 of the Clean Water Act (including, but not limited to, an NPDES permit for construction stormwater), or any other federal, state or local laws.
10. This permit does not authorize impacts to cultural, historic or archaeological features or sites.
11. This permit does not authorize access to public or private property. Arrangements concerning the use of public or private property shall be made with the landowner. The permittee is responsible

for obtaining any additional permitting or maintenance agreements with other government or public agencies or lands.

12. The use of monofilament-type erosion control netting or blanket is prohibited in the stream channel, stream banks, or any disturbed riparian areas within 30 feet of top of bank.
13. Where practicable, all activities shall be accomplished in the dry. All surface water flowing towards this work shall be diverted using cofferdams and/or berms constructed of sandbags, clean rock (containing no fines or soils), steel sheeting, or other non-erodible, non-toxic material. All such diversion materials shall be removed upon completion of the work. Any temporary disturbance to the stream bed or banks must be restored to its original condition. As approved after Division review, activities may be conducted in the flowing water if working in the dry will likely cause additional degradation. Any work conducted in the flowing water must be for a short duration and with minimal impact, and conform to the Division-approved methodology.
14. All activities must be carried out in such a manner as will prevent violations of water quality criteria as stated in TDEC Rule Chapter 0400-40-03, or impairment of the uses of waters of the state as designated by Rule Chapter 0400-40-04.
15. Erosion prevention and sediment control measures must be in place and functional before any earth moving operations begin, and shall be designed according to the department's *Erosion and Sediment Control Handbook* (www.tn.gov/environment/wpc/sed_ero_controlhandbook/). Permanent vegetative stabilization using native species of all disturbed areas in or near the stream channel must be initiated within 14 days of project completion (see also *Landscaping with Natives* at tneppc.org). Non-native, non-invasive annuals may be used as cover crops until native species can be established.
16. Temporary stream crossings shall be limited to one point in the construction area and erosion control measures shall be utilized where stream bank vegetation is disturbed. Stream beds shall not be used as linear transportation routes for mechanized equipment, rather, the stream channel may be crossed perpendicularly with equipment provided no additional fill or excavation is necessary.

Obtaining Permit Coverage

Proposed stream grade stabilization activities may obtain coverage by submitting a signed and completed ARAP application (form CN-1091), along with any other required information, to the division. Work shall not commence until a written Notice of Coverage (NOC) from the division is received. As noted above, not all activities may be eligible for coverage under this general permit and coverage may be denied when appropriate.

Each Notice of Coverage under this general permit is valid until the expiration date specified on the NOC. If the General Permit is modified, reissued, or revoked, and the permittee has commenced or is under contract to commence this activity before the expiration date, the permittee may have up to twelve (12) months from the date of the modification, reissuance, or revocation of the General Permit to complete the activity under the present terms and conditions of the general permit.

An application fee as established in Rule 0400-40-11-.02 will be assessed to applicants intending to receive an NOC to conduct activities under this general permit. An annual maintenance fee will be assessed to those individuals holding general permit coverage unless a Notice of Termination (NOT) form is received prior to the one-year anniversary of the issuance date of the NOC. An NOT form can be downloaded from the division's ARAP webpage (<https://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-.html>).

APPROVED: 
Jennifer Dodd
Director, Division of Water Resources

DATE: 04/07/2020