

**Tennessee Department of Environment and Conservation**  
**General Aquatic Resource Alteration Permit for**  
**Construction or Removal of Minor Road Crossings**

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

**Activities Covered by this Permit**

This general permit authorizes the construction and/or removal of minor road crossings of streams, via bridge, culvert, pipe, or fords, for both linear and non-linear projects. Linear transportation projects include public roads, highways, and railways. Road crossings considered attendant features of non-linear projects include infrastructure associated with residential, commercial, industrial, or institutional developments, whether public or private.

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. Road crossings for linear transportation projects, including transition channels, endwalls, aprons or rip rap, that either individually or cumulatively exceed 200 feet of impact, including temporary impacts, on an individual stream (entire reach of a single tributary) for the entire project are not covered.
2. Road crossings for non-linear projects, including transition channels, endwalls, aprons, or rip rap, that either individually or cumulatively exceed a total length of 200 feet of impact, including temporary impacts, in the same Stream Catalog Unit (Waterbody) for the entire project are not covered.
3. Encapsulations associated with non-road features such as vehicle maintenance or storage buildings, parking lots, culs-de-sac and turn-arounds are not covered.
4. 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.
5. All riprap associated with the road crossings shall be placed as to mimic the existing/proposed contours of the stream channel. Riprap shall be countersunk and placed at the grade with the existing stream substrate. Voids within the riprap shall be filled with suitable bedload substrate to prevent stream flow loss within the riprap areas. Suitable substrate does not include soil. Over-excavation or grouting for placement of riprap is not covered.
6. Road crossings that may significantly alter the hydraulics of the stream (e.g., under-sizing or over widening the channel) are not covered.

7. Slight changes in the channel alignment for proper flow into, or out of the installed culvert or bridge for short distances (25 feet or less) located directly upstream and downstream of culverts maybe authorized if they replicate the natural existing dimensions.
8. The bottom of culverts shall be constructed below the stream bed elevation, in a manner that allows natural substrate to reestablish. All box culverts with more than one barrel shall be constructed in a manner which will concentrate baseflow into one barrel and not result in channel over widening.
9. The crossing shall be culverted, bridged or otherwise designed to prevent the impoundment of normal or base flows on the upstream side, and not result in a disruption or barrier to the movement of fish or other aquatic life on the downstream side. Base flow is the usual or normal flow of the stream that is supplied primarily by groundwater from springs and seeps, but not affected by rapid runoff during and after rainfall.
10. The width of the fill, stream channel and bank modifications, or other impacts associated with the crossing shall be limited to the minimum necessary for the actual crossing.
11. Where a crossing is removed, natural channel characteristics (dimensions, shape, substrate, etc.) shall be replicated and stabilized using clean rock, riprap, anchored trees or other non-erodible materials found in the natural environment.
12. Road crossings that result in more than 10 feet of permanent stream length loss are not covered.
13. Activities located in a component of the National Wild and Scenic River System or waters designated as Outstanding National Resource Waters are not covered, except those projects specifically designed to improve aquatic organism passage at existing road crossings.

### **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 ARAP 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 an 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. This activity may not result in the permanent disruption to the movement of fish or other aquatic life upon project completion.
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 not covered.
8. Activities occurring in known or likely habitat of state or federally listed threatened, endangered, deemed in need of management, or species of special 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. Backfill activities must be accomplished in the least impactful manner possible that stabilizes the streambed and banks to prevent erosion. The completed activities may not disrupt or impound stream flow.
11. 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.
12. This permit does not authorize impacts to cultural, historic, or archaeological features or sites.
13. 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.
14. 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 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.

15. 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 in TDEC Rule Chapter 0400-40-04.
16. 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 (<http://tnepsc.org/handbook.asp>). 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 [tnepsc.org](http://tnepsc.org)). Non-native, non-invasive annuals may be used as cover crops until native species can be established.
17. 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**

A temporary road crossing associated with ongoing construction activities where the total length of disturbance along the stream channel needed to temporarily install, and remove any fill or structure associated with the crossing is less than 25 feet may be done without submittal of an application or written authorization from the division prior to the commencement of work, provided the work is performed in accordance with this permit's terms and conditions. Following construction, all materials used for the temporary crossing shall be removed and disturbed stream bed and banks shall be restored and stabilized with native vegetation.

Proposed minor road crossing activities may obtain coverage by submitting a signed and completed 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