

STATE OF TENNESSEE TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION DIVISION OF WATER RESOURCES

Davy Crockett Tower 500 James Robertson Parkway Nashville, Tennessee 37243

Response to Comments

Aquatic Resource Alteration Permit / Section 401 Water Quality Certification NRS23.200; Campground Lane bridge replacement and relocation Old Stone Fort State Park

Permit applicant: Tennessee Department of Transportation (TDOT)

This notice responds to comments received on the application for Aquatic Resource Alteration Permit (ARAP) NRS23.200, for TDOT's unavoidable temporary impacts to 0.08 acres of wetland, permanent impacts to 80 feet of stream, and temporary impacts to 388.5 feet of stream associated with the replacement of a bridge on Campground Lane and relocation of existing bridge within Old Stone Fort State Park, Manchester, Coffee County, Tennessee.

Since July 2023, at the time of TDOT's initial permit application, documents and other records pertaining to the permit have been publicly available on the Division's website: https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:34051:13665015151060:::34051:P34051_PERMIT_NUMBER:NRS23.200

Context

The Division of Water Resources is a state government entity within TDEC. Part of the Division's responsibilities are to implement the state's water quality regulatory program, which issues state water quality permits (ARAPs). The ARAP program reviews permit applications for projects that propose impacts to state-jurisdictional waters, such as streams, rivers, and wetlands, and determines whether the project will or will not violate state water quality regulations and water quality standards. Where the project also requires a federal permit from a federal agency, the ARAP can also serve as a Section 401 Water Quality Certification. The Division of Water Resources seeks public input on its ARAP permitting decisions through the Public Notice and Public Hearing process. This particular state permit (ARAP NRS23.200) and concerns regarding water quality impacts associated with the project, is what the Public Hearing was for on May 6, 2024.

Importantly, a state Aquatic Resource Alteration Permit *only* certifies that the *aquatic* impacts associated with the *construction* of a project do not violate any state water quality regulations. An ARAP is often one of several types of authorizations required for a project. You can find Tennessee's state water quality regulations at the following links:

- TCA § 69-3-108: Tennessee Water Quality Control Act of 1977: http://www.lexisnexis.com/hottopics/tncode/
- Tennessee's Water Quality Standards: https://publications.tnsosfiles.com/rules/0400/0400-

40/0400-40-03.20240317.pdf

- Tennessee's Aquatic Resource Alteration Rules: https://publications.tnsosfiles.com/rules/0400/0400-40/0400-40-07.20190911.pdf

The Tennessee State Parks program, on the other hand, is a separate entity within TDEC, and is in a different bureau than the Division of Water Resources. Staff from the Division of Water Resources do not report to Tennessee State Parks leadership.

TDOT, the state's department of transportation, is a separate state government agency from TDEC. TDOT routinely obtains state permits, including ARAPs, from TDEC, for a variety of road projects throughout the state. TDOT is also required to comply with federal environmental regulations, and therefore also routinely obtains federal permits, such as Section 404 permits from the US Army Corps of Engineers (USACE).

The USACE is a federal agency within the US Department of Defense. One of the responsibilities of the USACE is to implement a water regulatory program over dredge and fill projects within federally-jurisdiction aquatic features. Often, when a project requires an ARAP permit from the state, a 404 permit is also required from the USACE.

Dates of ARAP permitting activities

TDOT submitted the ARAP application on July 14, 2023. The Division issued notices of deficiency to TDOT on August 2, October 19, and December 4, 2023, requesting additional information. After receiving supplemental materials from TDOT, the Division notified TDOT that the application was complete on March 11, 2024. Public notice of the draft permit was issued on March 26, 2024. A public hearing was held in Manchester on May 6, 2024. The public comment period closed May 16, 2024.

Public comments

The public hearing was attended by 51 people in person and 3 online. Approximately 13 people commented at the hearing. In addition, the Division has received written comments from numerous individuals in response to the Public Notice for this permit. The Division has reviewed all comments submitted at the hearing and in writing. Comments expressing the same substantive concerns have been grouped together for the purpose of clarity and organization. The original comments can be viewed on the Division's public DataViewer:

https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:34051:15778212636920:::34051:P34051_PERMIT_NUMBER:NRS23.200. Please search the file number "NRS23.200" to access the permit's web page.

Comment 1: Commenters indicated that the project was not in the public's interest, citing federal regulation C.F.R. 404(b)(1).

Response 3: That regulation is part of Section 404 of the Clean Water Act, which is a federal regulation, and is not enforced by TDEC Division of Water Resources, which is a state agency that enforces state regulations. While CWA 404(b)(1) may apply to the Section 404 federal permit that TDOT applied for from USACE (federal permit number LRN-2008-01461), it is outside of the scope of the state's water quality permitting program.

ARAP permitting decisions are and must be based on whether the proposed activity complies with state law, statute, and rule: Tennessee Water Quality Control Act, the ARAP rules, and Tennessee's Water Quality Criteria.

Comment 4: A commenter indicated that there was no Environmental Impact Statement (EIS) for the project and was concerned that TDOT had been granted an exclusion by the USACE.

Response 4: The compliance of the project with federal environmental regulations such as NEPA is outside of the scope of the state's ARAP permitting program. Such comments should be directed to USACE or to TDOT.

Comment 5: Commenters noted that they had hired a private engineering service to do analysis of feasibility and cost of in-place bridge repairs.

Response 5: TDEC's water quality permitting program does not govern TDOT's engineering or safety standards. Such comments should be directed to TDOT.

Comment 6: Commenters were concerned about the cost to taxpayers, and that the project would go over budget.

Response 6: TDEC's water quality permitting program does not govern the state's budget priorities, including TDOT's project budget. Such comments should be directed to TDOT.

Comment 7: Commenters were concerned about the loss of cultural and historic values.

Response 7: The compliance of the project with state and federal historic preservation regulations is outside the scope of the state's ARAP permitting program. Nevertheless, TDOT has coordinated with multiple agencies regarding the cultural and historic aspects of the project, which resulted in a multi-agency memo signed in 2022. The following are statements from this memo, which has been publicly available, including on the permit page on the Division's website, since the time of permit application: https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:34051:13665015151060:::34051:P34051_PERMIT_NUMBER:NRS23.200

"Based on a review of the 11/15/2022 Right of Way Field Review Plans, the SHPO Letter dated 06/10/2022 remains valid. The project APE contains one resource listed in the National Register of Historic Places: the Old Stone Fort State Archaeological Park. The Campground Lane Bridge is a contributing feature of that resource, and its removal is an adverse effect. TDOT resolved the adverse effects to the park in consultation with the TN-SHPO, FHWA, the Advisory Council for Historic Preservation, and the Tennessee Department of Environment and Conservation through a Memorandum of Agreement executed on 09/14/2022. If project plans are changed, the project may require additional study."

"TDOT commits to relocating the historic Campground Lane Bridge from its current location to a hiking trail that is a non-contributing feature of the National Register listed Old Stone Fort State Archaeological Park, at the request of TDEC and Park staff. TDOT has agreed to cover the cost of the bridge's relocation and will have it moved as part of the construction of the new structure. TDEC has agreed to take responsibility for the preservation of the bridge in its new location.

In order to fulfill the conditions under Section 4(f), any work completed within the boundary of the National Register listed Old Stone Fort State Archaeological Park will have the following conditions met:

- 1. The duration of the occupancy will be less than the time needed for construction of the project and there will be no change in ownership.
- 2. The scope of work would be minor resulting in minimal changes to the property.
- 3. No significant features of the property would be adversely affected.
- 4. The occupied segments of the property would be returned to their as-found conditions or better."

Comment 8: A commenter expressed concern that the Public Notice period was insufficient.

Response 8: The Public Notice complied with all applicable legal requirements, and resulted in significant public participation, including by local residents. The Public Notice was published in a local newspaper. Signs were posted in visible locations near aquatic impact locations. The Public Notice was emailed to everyone on the ARAP notice list, and was also posted to TDEC's website. All relevant documents, including maps, were available on the Division's permit Data Viewer prior to the notice period, and were also available upon request to the permit writer. A Public Hearing was scheduled by TDEC in anticipation of local interest, and notice of the hearing was published in a local newspaper, on the public notice signage near proposed impact locations, and was also posted to TDEC's website more than 30 days in advance of the hearing date.

Comment 9: Commenters asserted that TDOT had failed to demonstrate a lack of practicable alternatives to the bridge replacement.

Response 9: TDEC has determined that the applicant has demonstrated that the alterations represent the least environmentally damaging practicable alternative *to accomplish the project's purpose as stated by the applicant*, in accordance with requirements of Individual Permits per Tenn. Comp. R. & Regs. 0400-40-07. Please refer to the Alternatives Analysis section in the Rationale found in the permit's Appendices.

Comment 10: Commenters expressed concerns over the project causing hydraulic changes in the river such as flooding or loss of in-stream flow and elimination of the river.

Response 10: Temporary stream culverts are required on several smaller tributaries to the Duck River during this project to protect flowing waters from work areas, which helps to prevent erosion and sedimentation. In addition, TDOT is required to only have one haul road in place at a time from the banks of the Duck River. Moreover, all of these measures are required to be removed once the project is complete.

Importantly, the ARAP expressly forbids the project to impound baseflow, disrupt baseflow, or serve as a barrier to the movement of aquatic life:

- Special Condition n: "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."
- General Condition d: "This activity may not result in a disruption or barrier to the movement of fish or other aquatic life and wetland dependent species upon project completion."

In response to this comment, the Division has also added the following permit conditions that expressly forbid the project to impound baseflow or over-widen the stream channel as follows:

- Special Condition v: "The authorized structures shall not impound normal or base flows on the upstream side, and shall not result in a permanent 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."

- Special Condition w: "The stream channels shall not be over-widened as a result of the installation of the bridge access roads, workspaces, or staging areas."

Comment 11: Commenters expressed concerns that the project would lead to erosion and sedimentation.

Response 11: This permit includes the following to protect the waters from sedimentation:

TDOT and its contractors will implement a variety of standard construction "Best Management Practices" to reduce the risk of sedimentation. TDOT has provided plans that show details of how streamflow will be diverted during construction to minimize sedimentation.

- Special Condition f: "Temporary stream crossings for haul roads shall be limited to one point in the construction area at a time and EPSC measures shall be utilized where stream banks are 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. 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."
- Special Condition m: "All dewatering activities shall be conducted in a manner that prevents the discharge of sediment-laden water into waters of the state."
- Special Condition o: "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 https://www.tnipc.org/wpcontent/uploads/2017/10/landscaping_2016_forweb.pdf). Non-native, non-invasive annuals may be used as cover crops until native species can be established."
- Special Condition t: "Where practicable, all activities shall be accomplished during drier times of year or when recent conditions have been dry at the impact location. All surface water flowing towards or from the construction activity shall be diverted using cofferdams and/or berms constructed of sandbags, steel sheeting, or other non-erodible, non-toxic material. All such diversion materials shall be located outside of the wetlands and streams and removed upon completion of the work. Activities may be conducted in the water if working in the dry will likely cause additional degradation. If work is conducted in the water it must be of a short duration and with minimal impact"

The temporary work pads that TDOT has proposed are to be constructed using Class B rip rap, which is typically 2.5 feet in diameter, and not constructed of gravel as has been asserted by a commenter. Special condition "t" of the permit specifically requires diversion materials be non-erodible.

In addition, the Division reminds commenters that in addition to the ARAP, TDOT must also comply with the terms of the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Stormwater Associated with Construction Activities ("CGP"), TNR100000, for its disturbance activities. The NPDES construction stormwater discharge permit (CGP) is fully protective of Tennessee's water quality criteria. TDOT received a Notice of Coverage under the CGP on March 13, 2024.

Comment 12: Commenters expressed concern that the project will lead to fuel and chemical spills into the Duck River.

Response 12: Release of hazardous chemicals or is not authorized by this permit. The permit contains

conditions which expressly forbid release of these materials, as follows:

- Special condition q: "Best Management Practices (BMP's) shall be stringently implemented throughout the construction period to prevent sediments, oils, or other project-related pollutants from being discharged into waters of the state. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the state, including groundwater, should a spill occur."
- Special condition r: "Equipment staging and maintenance areas shall be developed a sufficient distance from any water to ensure that oil, gas, other petroleum products, and other hazardous materials do not enter the waters.
- Special condition s: "Work within streams and wetlands by heavy equipment shall be kept to a minimum. Equipment shall be free of noticeable leaks of fluids and oils; e.g., hydraulic, transmission, crankcase, and engine coolant, fluids, and oils."

If violations of state water quality criteria occur, they will be addressed as permit violations through enforcement actions.

Comment 13: Commenters expressed skepticism that TDOT's restoration plans would minimize adverse impacts.

Response 13: The information TDOT has submitted to the Division on post-construction restoration is typical of ARAP applications and sufficient to ensure appropriate restoration. Detailed information on post-construction restoration techniques and requirements can be found in the right-of-way construction drawings in the .pdf document entitled "110324-01-ROWPlanPermitApplication11x17.pdf" submitted to the Division on September 19, 2023. The permit conditions that require TDOT to return temporarily impacted streams and wetlands to their original contours using materials native to the stream bed or wetland, and re-establishing native vegetation, are similar to conditions in TDEC General and Individual ARAPs under which temporary impacts are routinely authorized. A post-construction monitoring report must be submitted after project completion (per Special Condition f) to document evidence of the successful restoration within all temporarily impacted streams and wetlands.

Noncompliance with these permit requirements for adequate restoration would be addressed through enforcement actions. TDOT as the applicant must, by law, comply with the permit, including compliance with all monitoring and reporting requirements. Any permit violation potentially subjects TDOT to corrective action requirements, if applicable. TDEC Division of Water Resources staff will review compliance with the permit.

In addition, citizens who observe permit violations may submit complaints to TDEC, including formal complaints pursuant to Section 118(a) of the Tennessee Water Quality Control Act. Citizen water quality complaints may be submitted according to the instructions at:

 $\frac{https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/citizen-water-quality-complaints.html#:\sim:text=Citizens%20may%20submit%20complaints%20about,as%20possible%20in%20your%20request}$

Comment 14: A commenter was concerned about impacts to bats resulting from the project.

Response 14: Impacts to non-aquatic species are beyond the scope of this permit and the ARAP program. TDOT may indeed be subject to regulations regarding the protection of bats, but these regulations are outside of the jurisdiction of the TDEC Division of Water Resources. Such comments should be directed

to agencies such as the Tennessee Wildlife Resources Agency (TWRA), or the US Fish & Wildlife Service (USFWS).

Comment 15: Commenters expressed concern over habitat loss for aquatic and semi-aquatic species, including fish, mussels, and plants.

Response 15: The Division of Water Resources appreciates the concerns raised over state-listed aquatic and semi-aquatic species. To address potential impacts to state-listed aquatic and semi-aquatic species, TDOT has been required to coordinate with biologists from multiple agencies, as follows. Please note that all of the coordination records referred to below have been available on the Division's public DataViewer since the time of permit application in July of 2023.

First, TDOT coordinated with the Tennessee Wildlife Resources Agency on potential impacts to protected aquatic species of fish and wildlife. After reviewing the project, on October 12, 2020, TWRA indicated requirements for the protection of multiple species known to occur in the vicinity of the work area. As a result, the following permit conditions have been included in the ARAP. TDOT is responsible for adherence to these conditions to the satisfaction of the TWRA.

"Per the Tennessee Wildlife Resources Agency, the permittee must adhere to the following project commitments pertaining to aquatic species in the project area:

- 1. Species sweeps must be conducted immediately prior to any in-stream work for the Hellbender (*Cryptobranchus alleganiensis*).
- 2. In-stream work is prohibited between April 1 and June 15th in order to protect the spawning season for the Barrens Topminnow (*Fundulus julisia*), Longhead Darter (*Percina macrocephala*), Blotchside Logperch (*Percina burtoni*), and Coppercheek Darter (*Etheostoma aquali*)."

In addition, TDOT coordinated with TDEC's Division of Natural Areas on potential impacts to protected plant species. After reviewing the project, on March 25, 2021, the Division of Natural Areas provided the following comment:

"The Division of Natural Areas - Natural Heritage Program has reviewed the location of the proposed project workspace with respect to rare plant species. Based on the habitat within the project area and the type of project, we do not anticipate any impacts to occurrences of rare, threatened, or endangered plant species from this project."

USFWS, which also has jurisdiction over terrestrial species, has concurred that the project is not likely to adversely affect threatened or endangered species. After reviewing the project, on January 7, 2021, USFWS provided the following comment:

"Upon review of our database, we would not anticipate impacts to any federally listed or proposed species as a result of the project. Therefore, based on the best information available at this time, we believe that the requirements of section 7 of the Endangered Species Act (Act) of 1973, as amended, are fulfilled for all species that currently receive protection under the Act."

Finally, the ARAP expressly prohibits adverse impact to formally listed state or federal endangered species or their critical habitat in General Condition e.