

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
FIRST CREEK DRAINAGE IMPROVEMENTS
KNOX COUNTY, TENNESSEE

The City of Knoxville (City) proposes to make improvements to a section of First Creek and adjacent areas in order to reduce flood damage. Some of the proposed activities require approval by the Tennessee Valley Authority (TVA) under Section 26a of the *TVA Act*. The potential impacts of the proposed activities are the subject of an environmental assessment (EA) prepared by TVA; this EA is incorporated by reference.

The City proposes to improve the First Creek drainage by altering the cross section of a 0.36-mile stretch of the creek between Chickamauga Avenue and Emoriland Boulevard along North Broadway. The specific activities requiring TVA approval are the construction of a high-flow bench (floodplain) above the normal flow channel at First Creek Mile 4.16, construction of a replacement bridge at Fairmont Boulevard and a new bridge at Emoriland Boulevard, construction of a 367-foot-long high-flow channel, and construction of sediment control structures. Associated activities not requiring TVA approval include detours and road closures; construction of sanitary sewers and storm drains; paving; construction of curbs, gutters, and a sidewalk; construction of new driveways and business entrances; removal of buildings; and landscaping.

The proposed high-flow bench and channel would create broad, gently sloped areas adjacent to First Creek to accommodate storm water flows within it. The bench and channel would not only slow the velocity of water through the creek but also provide a place for temporary storm water storage, lessening the likelihood of floodwaters reaching North Broadway.

The EA evaluates two alternatives: the No Action Alternative and the Action Alternative. Under the No Action Alternative, TVA would not issue Section 26a approval for the drainage improvements. Although the City could proceed with some of its proposed actions, the flood damage reduction objective would not be met, and flooding would likely continue to occur in the project area during heavy rainfall events. Under the Action Alternative, TVA would issue the requested Section 26a approval, and the City would implement the proposed drainage improvements. TVA prefers the Action Alternative.

Impacts Assessment

The EA concludes there would be no impacts to endangered and threatened species, wetlands, or archaeological resources. Impacts to air quality, vegetation, wildlife, transportation, socioeconomics, and environmental justice would be minor and insignificant. There would be a minor long-term beneficial effect on visual resources. Noise impacts would be temporary and insignificant, as long as the equipment and trucks have original equipment equivalent mufflers in good working condition and construction is limited to normal business hours. Although the project area contains one historic structure listed in the National Register of Historic Places and several structures potentially eligible for listing, the City designed the project to minimize impacts to these structures, and the resulting impacts would not be adverse. The Tennessee

State Historic Preservation Officer concurred with this determination in a letter dated April 8, 2009.

The project site is located within the 100-year floodplain. The City evaluated alternatives and, given the project objectives, concluded there were no practicable alternatives to construction in the floodplain. TVA concurs with this determination, and the EA concludes the project would result in beneficial effects in the form of flood damage reduction. Therefore, the project is consistent with Executive Order 11988. The water quality of the affected portion of First Creek is classified as impaired, and the project has been designed to minimize the potential for sedimentation and other water quality impacts. The project would result in long-term beneficial impacts on water quality and stream flow. The Tennessee Department of Environment and Conservation has issued the necessary Aquatic Resource Alteration Permit (ARAP) and associated Water Quality Certification for the proposed action.

Mitigation and Special Permit Conditions

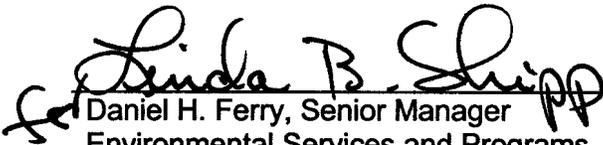
The project has been designed to minimize adverse environmental impacts, and the ARAP and Water Quality Certification contain additional conditions for minimizing impacts. TVA will require the following mitigation measures in addition to the Section 26a General and Standard Conditions:

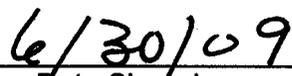
- The City will adhere to its own commitment that construction will be limited to the hours between 7:00 a.m. and 5:00 p.m., Monday through Friday, and Saturdays only when necessary due to inclement weather or other delays.
- The City will ensure that equipment and trucks have original equipment equivalent mufflers in good working condition.

These conditions and commitments are sufficient to ensure that the proposed project will not have a significant impact on the environment.

Conclusion and Findings

Based on the analyses in the EA, TVA has concluded that the issuance of Section 26a approval for the City's proposed drainage improvements along First Creek would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required. This determination is dependent on adherence to the mitigation measures described above.


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Date Signed